Games, Copyright, Piracy:

South African Gamers' Perspectives

by

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Acknowledgements

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Abstract

This thesis examines video games, copyright law and gamers' attitudes to copyright infringement, with particular reference to South Africa. The work provides an overview of the debates about copyright law and digital media, and offers an analysis of attitudes expressed by South African gamers about copyright infringement, popularly termed 'piracy'. The thesis reveals that, while about 70% of the gamers in this study share content illegally, they express complex and varying motivations for doing so, and have various and conflicting means of understanding the supposed illegality of the act. Some of the issues raised by participants in this study relate to contested perspectives on Digital Rights Management (DRM). In this work, I argue that DRM erodes civil liberties and does not necessarily extend the interests of gaming corporations. In this regard, the thesis explores alternative strategies to the restrictive approaches adopted by advocates of DRM as well as prohibitive copyright laws and multilateral agreements on intellectual property. In essence, this work intends to establish middle ground between gamers, who place a high premium on usability and affordability of gaming products, and the gaming corporations, who are interested in extending market share as well as protecting what they deem to be their intellectual property.

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Glossary

Demo: an official demonstration version of a game, released by the developers to introduce the game's features and/or story. Often contains limited gameplay and few of the final features, serving as an interactive trailer.

Emulator: a computer programme that emulates (pretends to be) another – usually obsolete – programme, type of hardware or operating system.

FPS: First Person Shooter game, which involved the player taking the role as a gun-wielding character (usually in a war or conflict zone).

Jailbreaking: illegally modifying the hardware of a gaming console to enable it to play pirated game discs.

LAN party/event: organised events where users connect their computers through a LAN (local area network) in order to play games cooperatively and often to share data and files. The connection relies on physical proximity, and can involve anything from two to several thousand computers.

MUD: Multi-User Dungeon, a type on online game involving large groups of players, the precursor to the MMOG.

Rootkit: a malicious type of software that, once installed, prevents unlawful access to or activity on the computer from being detected by antivirus programmes. In essence, it acts as a firewall against the computer's own protection mechanisms.

RPG: role-playing game, which involves the player creating a persona of a character who interacts with the game world according to his or her character traits and skills.

Introduction

Introduction

The rapid advancement of internet and communications technology today allows for unprecedented human contact on a global scale. Slowly but surely, all corners of the world are being touched by the proliferation of information and communications technologies, which bring with them both the potential to develop and enlighten but also to disrupt and interfere. As different peoples, cultures and societies become connected, great care must be taken that all who participate in the new online community are given equal rights and capabilities. It is especially important that the laws and regulations that govern this new communication arena – the internet – are balanced, fair and account for different cultural perspectives. These laws are integral to the spread of cultures, information and knowledge and dictate the relationship between content producers and consumers. Unfortunately, in the realm of copyright and intellectual property law, this balance has been skewed heavily in favour of the wealthy content producers of the global north who control the development of the law in their favour (Halbert, 2005: 63). In essence, the direction of the law ensures that intellectual property is protected at the expense of fair use, free speech and the free spread of knowledge. Content is locked down behind impassable legal barriers. But counter-hegemonic movements, such as advocates of open access policies or Creative Commons licenses, are attempting to relax the exclusionary grip on intellectual property by making it more widely, freely and cheaply available.

This thesis aims to explore the nexus of games and copyright in the South African context, studying the uncertain ground underlying video games, their relationship to copyright, infringement and culture and the particular situation in South Africa. It will address, and challenge, the perception of copyright infringement – 'piracy' in common parlance – and will suggest alternatives for both game developers and customers. South Africa is in the unique position of being the most technologically advanced country in Africa, with what is generally considered the best access to information and communications technology on the continent (Zachary, 2004). The only type of content that has existed exclusively in the digital sphere is the video game (Coleman and Dyer-Witheford, 2007: 947). Games were first created in the 1950s and have evolved concurrently with computer technology ever since, growing ever more complex, detailed and resource-hungry. They are immensely popular throughout Western and Far Eastern cultures, and come in an almost infinite variety of genres, formats and styles. Games can at once be entertainment media, expressions of culture, mediums for education and works of art. However, their unique digital nature makes them particularly susceptible to digital copyright infringement, as they do not exist outside of the digital sphere. While other media may attain increased value in the non-digital context – music when recorded on an LP or other high-

fidelity medium, a book in hardcover or limited edition, a movie reel projected at the cinema – games in physical form have no real value. Their value is purely in their digital form and content.

Thesis statement

The central goals of this thesis are three-fold: first, to analyse, explain and compare the way that copyright regimes function across all media, with a focus on video games; second, to uncover the reasons behind the practice of computer game piracy as perceived by gamers themselves; and third, to suggest solutions to the conflict between the game-creation industry and gamers themselves. This conflict generally revolves around the use of Digital Rights Management (DRM) measures. The assumption made and explored in this work is that piracy has a much deeper and more intrinsic cause than the simple desire to obtain free game software. For example, gamers may pirate because it is more convenient to do so, to protest against a company's policies or use of DRM, or because they have no other legal recourse (if, for example, the DRM prevents play of a legitimately bought game). The goal is to indicate that piracy should not be perceived as a negative process, but rather as an indicator of consumer desires and a flawed distribution and marketing strategy. In addition, it is held that all DRM systems are ultimately ineffective, harmful to the consumer and laden with functionality and fair-use concerns; through presentation of theoretical and empirical evidence, this essay seeks to demonstrate that the presence of DRM results in negative effects for both the company and the customer, and that its removal is a necessary and desirable step in promoting fair use and customer satisfaction. Game producers can learn much from changing their perception of games distribution, piracy and the use of DRM; this will be explored by outlining several already-successful alternative strategies that result from such a change. The thesis will focus on the local South African context specifically, not only to limit the scope of the work, but also to discover if the local context has any nuances or particularities of its own that relate to gaming habits and piracy, in comparison to behaviours in the media-rich global north. Ultimately, this thesis will suggest that protecting intellectual property is best done by avoiding DRM entirely, and rather using open, convenient and gamer-friendly business models that benefit both the consumer and the bottom line.

Thesis structure

Following this introductory section, the thesis will open in Chapter 1 with a summary and discussion of copyright law, its underlying ideals and its historical progression. It will examine how certain corporate interests seek to steer and shape copyright into a form that benefits them, and will look at arguments for and against the existence of copyright. Furthermore, this chapter will present an overview and definition of piracy, and will present the technological 'arms race' between copyright holders and infringers, as well as the social conflict over the framing and definition of 'piracy' and 'pirates'. Copyright issues that relate specifically to digital media will also be addressed.

Chapter 2 will present a comparative study of other media industries, and how they have struggled with, fought and sometimes overcome the crisis of content protection and profit making in the digital era. The key focus will be on music, as its industry has seen a much-publicised revolution on this front, but this chapter will also consider issues in movies and television, ebooks, and software. It is hoped that the lessons learned in these industries will suggest solutions that can be applied to games production.

Chapter 3 will present an overview of gaming history, the role of gaming in contemporary society and cultural life, and its unique nature, myriad forms and avid following. Subsequently, this chapter will examine why piracy of games is so different to other forms of copyright infringement, due to the specific nature of the product. It will also present the concept of Digital Rights Management (DRM) as it relates to games, and will argue for its ineffectiveness in curbing infringement.

The following two Chapters, 4 and 5, will revolve around a questionnaire placed online and targeted at South African gamers, and form the core of the original, empirical study of this thesis. Chapter 4 will explain the structure, methods and degree of success of the questionnaire. Chapter 5 will propose certain hypotheses that will be proved or rejected by the data, and examine the participants' answers in detail – looking at the actual quantitive and qualitative results, and using a mix of content analysis and participant-observation ethnography. By analysing the data garnered, the thesis will propose several conclusions, and discuss them based on the available literature and other evidence, such as that sourced from forum discussions.

Chapter 6 will examine the lessons learned from experiences with content and copyright, and will discuss the alternatives to DRM and copyright enforcement that are available to games developers. It will consider methods that ensure that their work is rewarded and protected, and strategies that appeal to gamers and are not hostile to the customers. The alternatives discussed are focused on the use of new media technologies in a positive light – rather than limiting access to the software online, the internet can be used as a valuable tool to disseminate and promote games. Here, also, the thesis will argue that games have a widely different form and function to other types of media, such as music and books, and that this consideration may warrant a different copyright regime or structure.

Methodology

The data gleaned from the participant questionnaire consists both of quantitive information and qualitative insight. This thesis will analyse the data using a complementary scheme of both content analysis and participant ethnography, recognising how quantitive and qualitative data supplement each other. Studied together, this data provides a uniquely comprehensive view of the behaviours and thoughts of local gamers. David Phillips (1981: 598) highlights the complementary nature of

qualitative and quantitative research by demonstrating that the former emphasises a depth of data gathered from few sources while the latter seeks a breadth of information from many sources. By combining the two – as done here – the most rigorous and reliable conclusions can be drawn. The survey conducted as part of this thesis has revealed a substantial amount of quantitative research that can closely and directly be tied to qualitative responses given by participants. The powerful analytical tools available through the survey's host website allow statistical data to be interpreted in light of readily available and similarly catalogued qualitative responses. The final data is strengthened both by its broad quantitative generalisation and its deeper, contextualised explanation.

The quantitive data gathered from the online survey will be analysed, by means of the available software, to provide statistical and numerical bases for the substantial amount of qualitative data that follows. It will function as an anchoring point that defines, in broad strokes, the shape and proclivities of the community studied. The qualitative questionnaire data will be analysed according to discourse and content analysis. Content analysis looks closely at how we use language to frame the world around us: the ways we use certain words and expressions can indicate an underlying world view or perception. This can be expressed as understanding 'who says what, to whom, why, to what extent and with what effect?' as per Harold Lasswell's (1948) famous formulation; essentially, it is to study human communication and its multitude of meanings and biases in a structured and objective way (Deacon et al, 2007: 118-19). This thesis which will focus on the ways terms, phrases and concepts are expressed by the participants, and will search for patterns and clues that help to better understand how they understand and perceive certain key issues surrounding the topic at hand. Additionally, using discourse analysis, this thesis will look at how several key concepts (such as piracy) are defined in mass media and legal texts, to see whether there is a correlation between how the participants understand these terms and how the terms are framed by corporations, legal bodies and media outlets.

In addition, the results of this analysis will be filtered through a process of informal, personal participant observation, which is an 'intentionally oxymoronic' term that denotes the process by which the researcher immerses herself in the culture in question, and gleans valuable insights that reach above what a participant may proclaim in a survey response (Boellstorff, 2006: 32). Participant observation is used widely in many gaming studies (see, e.g., Steinkuehler and Williams, 2006; Wright et al, 2002; Kolo and Baur, 2004). It is extremely useful for the field because so much of the culture of gaming relies on participation, interaction and shared experience and knowledge. In this respect, online participant observation (coupled with personal interaction with the hobby and the participants) is vital because so much of this interaction occurs in the online sphere (boyd, 2008). In addition, it is useful to have an understanding of the jargon or terminology of the hobby, and to know how gamers structure their interactions. William Sims Bainbridge (2007) emphasises the validity of online ethnography by discussing studies that treat virtual gaming worlds as coherent social spaces,

especially where studies combine 'quantitative approaches [with] rigorous statistical and computational techniques'. For the purpose of this research, no specific and intentional participant observation study was undertaken; however, I have been heavily involved in the gaming culture for many years and have a wealth of first-hand experience to draw on. I have attended LAN events (both public and private), spoken to many gamers in person, interacted in online discussions and communities, and have played a variety of games and genres – all especially in the lead-up to this work. I intend that this wide-ranging experience will inform my study and allow me to highlight, dismiss or explain any interesting questions that arise. All quotes used below are extracted verbatim from responses typed up in the questionnaire, though some have been shortened, clarified or corrected for ease of reading. None of them are considered to be fully factual and unbiased; in fact, they are assumed to be personal commentary and opinion, and are analysed as such through discourse and content analysis. It is understood that the participants express a popular, lay-person's perspective and are not considered experts on the gaming industry, copyright or any other specialised issues; they are, however, considered to be relatively competent and experienced gamers who can contribute a wealth of anecdotal material and grounded opinion.

Why research gaming?

My interest in this topic comes from my personal, long-standing devotion to computer and console gaming. I feel that to a large extent it is a misunderstood activity that spawns unfortunate and derogatory stereotypes,[1] and remains largely mysterious and even deviant to non-gamers. Also, despite its growing popularity in society, comparatively little research seems to be done on games and gaming as a social phenomenon; gaming studies usually focus on testing media effects on users, usually children (see, e.g., Seiter, 2005) and analysing the content of games, usually in terms of narrative elements or socio-cultural stereotyping (see e.g., Kirkland, 2005). I believe this stems from the notion that gaming is seen as a non-serious leisure activity that can easily be understood through other channels, such as studies of online behaviour, media effects models, and sports. Slowly, however, a change in perception is being observed. I agree that 'the study of gaming is moving from the periphery of scholarly inquiry to take a central position in how we study and theorize social life' (Boellstorff, 2006: 29). Luckily, this field is now receiving renewed interest and new, innovative research is becoming available (Boellstorff, 2006: 29); the number of recent, relevant articles cited in this thesis serves as evidence of this. A further interest in this topic is that comparatively little research has been done on the illegal sharing and piracy of computer games. While other media – notably music – have received wide-ranging, high-profile attention, games have been largely ignored in academic studies as an independent medium, or are arbitrarily categorised together with software (see, e.g., Moores and Chang, 2006). I believe that this overlooks the significance of games in society

[1] These tropes generally position gamers as unhealthy, socially-inept men who shun the 'real world' in favour of excessive escapist behaviour and identification with fictional digital worlds.

at large, and it misrepresents the nature of gaming piracy; as I will argue later, piracy has a vastly different effect on the games industry and game production than it has on other media, such as music and film.

Notes on terminology

Throughout this text, certain terms and expressions will be used in a general, non-specific way for ease of reading and understanding. For example, instances of digital copyright infringement (as per the thorough definition provided in section 1.5 below) will be referred to as 'piracy', and those who perform such infringements as 'pirates'. The reason for this is elucidated fully in section 1.2.1 below. In brief, 'piracy' is a useful catch-all term for a wide range of related infringing practices, and it carries connotations of youth, colloquial appropriation and rebelliousness that are appropriate to this paper. 'Games' refer to any genre or platform of video game – whether played on a personal computer (PC), a video game console or a portable gaming device – and a 'gamer' is any person who plays these games; 'gaming', therefore, is this activity. In addition, a glossary has been included to clarify field-related terminology and jargon; this eliminates the necessity of cumbersome definitions that interrupt the sense and flow of the text, and allows for easier later reference.

1. COPYRIGHT HISTORY AND LAW

1.1 Origins of copyright

1.1.1 DEFINITION

GJ Lidovho provides a solid definition for the term 'copyright' that can be applied to any form of intellectual property: 'Copyright in its broad, general meaning refers to an exclusive right vesting in the author of a work which embodies intellectual content... [which] enables the author to do, or to restrict others from doing, certain acts in relation to the work' (2006: 339). These acts generally include reproducing, profiting from, destroying and selling the rights to the work. An intellectual property right comes into existence when the creator fixes his or her original expression in a concrete or 'material' form – a writer completes a novel, a musician records a track – and copyright protection applies automatically to the work, protecting it from the moment of its inception (Burns, 2001: 207-8). Richard Stallman provides a more straightforward analysis of copyright that touches on many of the key debates about rights and ownership discussed below and elsewhere: he calls copyright a 'bargain' between author and public, where the public trades some of its rights for the benefit of obtaining more content (1996: 292). Crucial for Stallman is that this balance is maintained, and that rights are not surrendered where they do not provide a concomitant benefit (that is, a noticeable increase in available content). The term 'intellectual property' is a misnomer, however, because the 'property' refers to the rights that arise from the act of creation, and not the thing created itself; intellectual property can only be 'owned' in the most abstract sense. Intellectual property has a number of categories that depend on the nature of the creation. The most common are patents (applying to new inventions), trademarks (for company signs and identifying marks) and copyrights (for cultural and artistic works). Each grant the creator the exclusive rights to perform certain actions and profit from the creation, though each type has its own unique limitations and requirements. A creator may also alienate his or her rights to the creation by selling the intellectual property rights or relinquishing them under contract (for example, many musicians sign contracts for a set fee, and the recording company owns the rights – and the consequent profits – of the work). Any intellectual property right will expire after a set duration though, again, this varies according to type and jurisdiction. This text will deal exclusively with copyrights, and whenever the term 'intellectual property' is used, it will be understood to refer to these creative and artistic rights.

1.1.2 HISTORY AND PURPOSE, FAIR USE AND THE PUBLIC DOMAIN

The full history of copyright law has been documented elsewhere and need not be repeated in detail here (see, e.g. Litman, 2001: 15-17). This discussion will consider the relevant developments in recent international and relevant regional laws pertaining to copyright in the digital age, and the concepts of fair use and the public domain, which are intrinsic to and necessary for free speech and the spread of

knowledge. The public domain is the realm of unprotected creative works: any work in the public domain can be copied, used, changed and exploited by anybody for the advancement of human knowledge and creativity (Rens et al, 2009: 18). Since the European Renaissance in the 1600s, creators have been granted certain temporary privileges over their works; however, these works quickly reverted to the public domain to ensure that public creativity was constantly nourished and advanced (May, 2003). As time and technology progressed, these rights and privileges increased. The Statute of Anne, passed in 1709 in England, granted the creator a 14-year monopoly over creative works. This term was soon doubled, and then extended over the ensuing three centuries to the current global standard duration: generally, a minimum time span of the creator's lifetime plus fifty years, due to the widespread adoption of the Agreement on Trade-Related Aspects of Intellectual Property Rights (the TRIPS Agreement) (Drahos and Braithwaite, 2004: 29). Originally, the argument in favour of a copyright term seemed sound: it ensured that the author could profit from the work for a set time, benefitting him or her, but assured that it would quickly be available to the public, benefitting the greater good and the advancement of knowledge (De Zwart, 2006: 21-2). This argument's force is lessened as the copyright term is extended, which results in fewer works entering the public domain (May: 2003). Very few creative works can be exploited financially by the creator for such an extended duration; in fact, many become 'outdated' in a matter of years and disappear completely from the cultural arena – neither available commercially (for example, out-of-print books) nor freely (as they remain under copyright). These works are relegated to a cultural limbo as, often, the author has died or cannot be traced, and therefore nobody can grant permission to use the orphaned works legally. Sadly, many early films are rotting away over time because they remain copyrighted and cannot be preserved through digitisation (as transforming a work in this way is a violation of extended copyright terms) (Schaefer and Streible, 2002: 140). South Africa is losing vital historical photographs for the same reason (Rens et al, 2009: 11). Part of the reason that the recent Google Book Search settlement has attracted so much attention is because it circumvents exactly this barrier: Google scans out-of-print orphaned texts without permission to make them accessible to the greater public, but allows any authors who come forward to remove their texts if they wish. Much of Google's argument revolves around the concept of fair use (Ganley, 2006: 8-9).

Fair use, or fair dealing, is the process by which some copyright provisions can be bypassed without seeking explicit permission from the work's author. It allows other parties to make use of the work in certain ways without needing to track down the rights-holder or having the rights-holder prevent some critical uses of the work such as reviews or commentaries. The difference between the concepts of fair use and fair dealing is that fair dealing, used in common law jurisdictions, consists of specific enumerated categories, whereas fair use is a less rigidly defined concept (De Zwart, 2006: 32). Key to this concept is the consideration of balance or fairness: the fair use must be limited, for educational or other publicly beneficial purposes such as review or parody, and must not allow the user to gain any

undue financial benefit from the use (Ganley, 2006: 9). For example, this thesis can cite words directly from other publications, as long as this copying is limited in scope and fairly acknowledges the source. Fair use is vital for freedom of expression, access to knowledge and the public good. Unfortunately, there is no agreed-upon standard for what constitutes fair use, and this concept has eroded with the advance of technology and the implementation of anti-circumvention laws (see section 1.6 below) (May, 2003). Individual national legislations allow varying degrees of permission or exception: some, like the US, allow only statutorily decided-upon exceptions while others, like South Africa, have more general categories under which uses are assessed (Sections 12 to 20 of the Copyright Act, 1978 outline fair use exceptions). Article 13 of the TRIPS Agreement outlines a test (commonly called the Berne three-step test) for evaluating whether the use is fair. It reads:

> Members shall confine limitations and exceptions to exclusive rights to (1) certain special cases which (2) do not conflict with a normal exploitation of the work and (3) do not unreasonably prejudice the legitimate interests of the rights holder [numbering inserted for the sake of clarity].

Rather than balancing the right to fair use in favour of the borrower, the test is prejudiced towards the copyright holder (May, 2003; Bowrey and Rimmer, 2002). However, as courts are the final arbiters of fair use, this concept remains subjective. Many wealthy content producers seek to prevent all uses – fair or otherwise – of their works. Twentieth Century Fox, which owns *The Simpsons*, notoriously orders the removal of any use of the show's footage, regardless of fairness, or demands exorbitant licence fees (Lessig, 2004a: 96-9). On fair use, Lawrence Lessig argues

> In theory, fair use means you need no permission [and] supports free culture and insulates against a permission culture. But in practice, fair use functions very differently. The fuzzy lines of the law, tied to the extraordinary liability if lines are crossed, means that the effective fair use for many types of creators is slight (2004a: 99).

The first major development in international copyright law was the Berne Convention for the Protection of Literary and Artistic Works, signed in 1886. The Berne Convention sought to assure that all countries respected each others' respective intellectual properties by requiring the protection of all – not just domestic – copyrights under the country's laws. Most countries in the world, including South Africa, are signatories. Ironically, the US only became a signatory a hundred years after its inception, in 1989 (Lessig, 2004b: 33); the incongruity arises in that the US abstained from strict copyright protections while the nation was developing (a beneficial position that allowed for the ready access to knowledge and invention) but would, within ten years of signing, be instrumental in driving the change for ever more radical copyright protections (Creative Commons South Africa, 2009). The rise of information and communication technologies in the 1980s prompted new fears about the possibility of infringement. In the digital age, the first key development was the negotiation of the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS Agreement), which was

signed in 1994 (Yar, 2005: 686). The TRIPS Agreement has a number of requirements relating to copyright laws that must be enacted into signatory countries' legislations. These include extending the copyright term to 50 years after the death of the author for certain classes of works, the inclusion of computer programmes under the category of literary works, the regulation of fair use and other provisions, such as requiring copyright to exist automatically upon the creation of a work (May, 2003). Many developing countries were opposed to the TRIPS Agreement terms because they granted unprecedented control over certain important knowledge centres to rich, developed nations and created 'knowledge cartels' that severely disadvantaged those who could not afford to pay for licenses for vital goods (like pharmaceuticals) or to create their own intellectual properties (Drahos and Braithwaite, 2004: 2-3). To enforce cooperation from these nations, the US used a 'carrot and stick' approach, simultaneously bribing nations with access to new agricultural markets and threatening trade sanctions if they did not sign the agreement (May, 2003). Despite widespread disapproval and protest, the TRIPS Agreement was signed into law by over one hundred nations that would be negatively affected by its provisions (Drahos and Braithwaite, 2004: 29). This widespread acceptance laid the groundwork for subsequent laws that sought further limitations.

The World Intellectual Property Organisation Copyright Treaty (WIPO Copyright Treaty) came into effect two years later in 1996, and added to the already stringent international copyright requirements: critically, it required countries to prohibit the circumvention of digital content protection measures (such as DRM) (May, 2003). Again, developing countries were coerced into adopting the new laws. Benkler argues

> Both the United States and the European Union drove for internationalization of the norms they adopted, through the new World Intellectual Property Organization (WIPO) treaties and, more important, though the inclusion of intellectual property concerns in the international trade regime (2006: 383).

This conflagration of copyright protection and international trade has further solidified the concept of intellectual property as a valuable good to be traded and purchased. Poorer countries were forced to adopt the WIPO Copyright Treaty to get access to developed-world knowledge and avoid trade and intellectual property sanctions (Röttgers, 2004: 377). The current global regime, including the WIPO Copyright Treaty, heavily favours the content-producing developed nations of the global North. It is no secret that developing nations have been coerced into following these nations' lead. The US has even amended the US Trade Act by including the Special 301 provision, which allows the US to place sanctions on countries that are unable to adequately protect US copyright against infringement (Yar, 2005: 685).

1.2 Current regimes against copyright infringement

1.2.1 TERMINOLOGY

The term 'piracy' wears a multitude of guises and is often colloquially used as an interchangeable catch-all for a wide variety of phenomena: it can refer to copying for profit (organised industrial-scale piracy) or copying for personal home use; it can involve physical products (street vendors selling copied discs) or exist purely in the digital sphere (downloading a file from a torrent); it can be done intentionally (as social protest) or ignorantly (out of sheer habit); it need not involve any copying at all – merely setting up a portal for illegal content can be termed piracy. Synonyms for 'piracy' that are commonly used are 'copyright infringement', 'copyright or IP theft', 'counterfeiting', 'cracking', 'ripping' and 'file-sharing' – each carry a different moral weight, legal connotation and subtlety of meaning. There is a lot of confusion – often generated purposefully by copyright enforcement groups (see section 1.5 below) – as to the precise nature of 'piracy' as copyright infringement; the word has become so laden with rhetorical meanings that its use generates conflicting understandings. Alasdair Taylor (2006a:168) sums up the issue as follows:

> 'Electronic piracy' is a vague, emotive phrase: emotive, because it evokes both the violence and supposed romance of marine piracy; and vague, because it can be used to refer to electronic copyright violations generally, or deliberate violations, or non-private violations, or commercial violations. These different categories of copyright infringement – accidental or deliberate, private or public, commercial or non-commercial – do represent fundamental divergences in the ethics and economics of copying; but the tendency of copyright law is to ignore the intent and motive of the infringer, and this means they all get tarred with the same brush.

This reasoning goes a long way to explaining the substantial degree of variance and confusion in survey participants' responses, examined below in Chapter 5, despite the fact that the term 'piracy' was defined at the start of the survey as 'obtaining an unauthorised or infringing copy'. However, the term is useful here for its brevity, its colloquial nature as understood by the study's participants, and its curious reappropriation as a counter-cultural slogan. Although much contested and debated, labels with negative connotations can be reappropriated to express positive, unifying qualities by communities, such as in the way that 'nigger' can be seen as having been redefined by black agents to express a shared cultural identity: for example, the ' term nigger frequently appears in Black speech as a way of referring, in an ironic or even affectionate way, to the in-group' (Carnaghi and Maass, 2007: 148). The term 'pirate' can similarly be seen as connoting a sense of rebellion, pride and counter-hegemony by those who value the free spread of culture that has traditionally been locked down by large corporate entities. This thesis will use the term 'piracy' throughout as short-hand for digital, not-profit-generating, personal copyright infringement or sharing of electronic files (also commonly referred to as 'warez'); as such, a 'pirate' or 'pirate user' will refer to a person who performs this type of infringement. Therefore, to limit the scope of this work, it will not deal with large-scale organised

piracy rings that create substantial quantities of copied discs for financial gain, nor with indirect piracy actions such as creating and maintaining servers of infringing content.

1.2.2 DEFINITION

It is very difficult to define the extent and scope of copyright infringement in today's world because the concept is in constant flux (Yar 2005: 678-9). International legislative and treaty developments constantly shift the boundaries of the definitions, almost universally towards stronger controls, stricter penalties and more limited rights. Lidovho explains that copyright infringement can be seen as an infringer performing 'any act which is the exclusive right of the copyright owner. The most commonly restricted act (which is subject to criminal prosecution) involves reproducing a work in a material form, for instance, by making a copy of it' (2006: 339). Majid Yar phrases the definition similarly, saying that piracy is 'unauthorized copying and distribution (often, though not necessarily, for commercial gain) of copyrighted content' (2005: 679). Lidovho identifies the types of activities that are considered infringing, dividing them into the categories of direct and indirect infringement. Direct infringement consists of performing any act that is the exclusive right of the copyright holder, especially unauthorised use or illegal copying of the software, and includes such aspects as softloading ('purchasing a single user license and loading it onto multiple servers'); counterfeiting ('making, distributing and/or selling copies that appear to be from an authorized source'); renting without permission; selling or distributing unbundled software; and downloading, uploading or making software available on the internet without permission (Lidovho, 2006: 344, 347-9). Certain limited instances of copying – such as a backup or archival copying – are allowed under South African law, provided the copies are created for personal use only (Lidovho, 2006: 344). This may not be the case under all jurisdictions, including the US: it is possible (though not yet clarified by law) that the prohibition against circumvention of copy protections in the DMCA makes this assumedly fair-use right illegal (Kravets, 2009b). Indirect infringement refers to acts that, while not infringing the rights themselves, aid in the act of piracy or allow piracy to be committed. This includes such aspects as linking to sites that provide pirated content, directing or linking others to such sites, hosting such sites on a server and supporting their operation (Lidovho, 2006: 348). The research component of this thesis will focus exclusively on direct copyright infringement on a personal scale, as performed by individual gamers. Other overarching discussions may touch on other aspects and scales of piracy.

Additionally, copyright infringement in the digital sphere should not be referred to as theft, as this provides a false comparison to the act of stealing physical goods. Lidovho explains:

> An expansive interpretation that equates copyright infringements with theft or fraud has the unwarranted effect of criminalizing a wide range of conduct involving copying of computer software. The only response to software piracy should be the copyright laws and not traditional concepts of crimes of theft or fraud. Copyright does not protect the

> tangible property embodying the software or programme, but the intangible intellectual property embodied by the tangible medium (2006: 355).

In other words, intellectual property is intangible, 'nonexcludable and nonrival' (Wagner, 2003: 999; May, 2003). This means that the owner does not lose anything when transferring rights to others, and that many users can simultaneously use the content without devaluing or diminishing it (Rens et al, 2009: 6). Christopher May argues that intellectual property rights create a false sense of scarceness in limiting the spread of the non-rival entity of ideas and knowledge; in essence, a situation is created where rights are protected and limited artificially by law 'for the express purpose of raising prices' (May, 2003). James Boyle agrees that there is no 'threat' to the intellectual property as it cannot be diminished by copying; its nonrival and nonexcludable nature prevents this (2008: 47-8).

1.2.3 ORIGINS

Copyright infringement has existed for as long as copyright has been recognised. Eighteenth century authors were well aware that their works were being printed cheaply by unauthorised print companies; Daniel Defoe famously observed that he would be concerned that his works were being printed 'again and again, by Pyrates' – bad printers who mangle and change the work – though he had no complaint with those who produced 'true' copies (Defoe, 1703). Due to the technology of the day, early copyright infringement could only be done on a mass-market, commercial scale – it would be far too expensive to create individual infringing copies (Stallman, 1996: 293). As technology improved the capacity to copy media – from recording devices to scanners – piracy became cheaper and entered into the realm of small, private operations or individual, personal infringements. The advent of digital technology has made this process even easier and thus more prevalent, because physical copies are no longer necessary: not only is it possible to make an infinite number of perfect copies of any digital media, these can now be spread via the internet to all corners and people of the world (Jansen, 2004: 100).

The legal nature of copyright infringement has also evolved in tandem with the changes of technology (Bechtold, 2004: 323). Originally, 'copyright' consisted only of moral rights – a creator should have the moral right to be acknowledged as the author of a work, as per the Berne Convention. Later, infringement of copyright on a large, commercial scale became a criminal offence, though private, research, reporting and other small-scale uses were not considered infringements. This latter class has become steadily more regulated over time, and now many civil offences are slowly becomes a criminal ones (Yar, 2005: 686-7). Recent international legal developments have seen strengthened penalties for infringers, including jail time and exorbitant fines for each file or document pirated; though these penalties were intended for commercial violators, recent developments have blurred the lines between commercial and private copying (Yar, 2005: 687). For example, the penalty imposed on Jammie Thomas-Rasset for sharing 24 songs amounted to $1.92 million, despite the fact that she

made songs available through Kazaa, clearly at no commercial benefit to Thomas-Rasset (Kravets, 2009c). This legal tightening, together with the moral, symbolic and rhetorical weight of the label 'crime', has made copyright violation into an extremely serious offence, and one with a very high profile. A wide range of private agencies, both non-profit and industry-funded, have been created to police copyright infringement (Yar, 2005: 686-7). The British non-profit Federation Against Copyright Theft (FACT) and the local equivalent, SAFACT, go so far as to perform raids, seize illegal equipment and media products, and institute court cases; the Recording Industry Association of America (RIAA) in the US has its own division which monitors and tracks music copying, and subpoenas anyone they consider guilty of infringement; to date, they have instigated – and settled – over 30,000 legal cases (Kravets, 2009c).

1.2.4 EVOLUTION AND CURRENT REGIMES

The current global framework and understanding of copyright infringement is based on the TRIPS Agreement and the WIPO Copyright Treaty. As the country with the most vehement support for copyright protection, as well as some of the largest content-producing industries in the world, the US has become the benchmark by which other copyright law regimes are measured, as well as the driving force and model for other jurisdictions' laws. Due to its undisputable importance as a global content, culture and regulation leader, it is interesting and useful to study the US's copyright policies. Yochai Benkler encapsulates recent legal development in the US as follows:

> Between 1995 and 1998, the United States completely overhauled its telecommunications law... revolutionized the scope and focus of trademark law, lengthened the term of copyright, criminalized individual user infringement, and created new paracopyright powers for rights holders that were so complex that the 1998 Digital Millennium Copyright Act (DMCA) that enacted them was longer than the entire Copyright Act (2006: 383).

The two key US statutes were passed in 1998: the No Electronic Theft (NET) Act and the Digital Millennium Copyright Act (DMCA). Although these regulations only apply legally in the US, they set the groundwork for most future applications of copyright infringement regulations globally (Lidovho, 2006: 359). The NET Act criminalised all forms of electronic piracy, not just those that resulted in profit for the pirate, as had previously been the case. Benkler explains that

> Prior to passage of the NET Act, only commercial pirates... would have qualified as criminal violators of copyright. Criminal liability has now been expanded to cover private copying and free sharing of copyrighted materials (2006: 442).

The DMCA added to this by criminalising any circumvention or removal of digital protection measures such as DRM: anyone who circumvents DRM or provides other with the tools to do so can be sued by the rights-holder whose work has been infringed, and if this is done 'wilfully and for profit' then it constitutes a felony (a very serious crime that carries a minimum one-year jail term)

under US law (Samuelson, 2003: 42). Common types of felonies include aggravated assault, arson, kidnapping, rape and murder; it is remarkable that circumvention of DRM measures for profit is considered in the same category.

Instead of targeting all internet-using consumers of a media by suing individual users for civil offenses (a bad business and public relations act), copyright protection organisations rather criminalise and enforce the subjugation of the sources of copyright infringement – file-sharing sites, P2P networks and others (Benkler, 2006: 442). In recent times, however, it seems that the focus of many enforcement agencies has moved away from the large-scale legal battles of the Napster ilk (Benkler, 2006: 419-20), and towards making examples of their consumers. The RIAA has prosecuted a record number of lawsuits against private persons in recent years, settling most out-of-court for several thousands of dollars each; of the over thirty thousand cases filed, only one – that of Jammie Thomas-Rasset – has reached court proceedings, and it ended in a $1.92 million judgement in favour of the RIAA (Kravets, 2009c). Enforcement of the DMCA is generally severe. For example, in a recent case, a young man was arrested by Homeland Security for jailbreaking various gaming consoles, and was released on $5,000 bail pending his hearing (Kravets, 2009a). The key idea behind the implementation of the harsh fines and penalties of the DMCA, and the lesser penalties of the NET Act, is that digital pirates will be deterred if they consider the risk of being caught too high (Lidovho, 2006: 370-1). However, several studies have shown that the risk of prosecution is, and is perceived to be, extremely low (Lunceford and Lunceford, 2008: 40; Cheng, Sims and Teegen, 1997: 56). Lastly, in addition to criminalising large swathes of infringing activity, the US has been successfully lobbied to increase the copyright term from 50 after the death of the author (as outlined in TRIPS) to 70 years, by implementing the Sonny Bono Copyright Term Extension Act (Schaefer and Streible, 2002: 140). The EU quickly followed suit. While South Africa's term remains at the limit set by TRIPS, it is not inconceivable that pressure from the US and EU could influence a lengthening of terms here; after all, as the major content producers globally, they have a vested interest in seeing their content protected as strongly internationally as it is domestically. The very real concern exists that, whenever their copyright term is close to expiry, lobbyists for major content-holders (Disney is a particularly prominent example) will continue to exert pressure on US lawmakers to extend the term, thus creating an effective perpetual copyright in US creative works and preserving the profits of the few at the expense of the very many whose works no longer have the same financial viability (Samuelson, 2003: 43; Litman, 2001: 13; Lunceford and Lunceford, 2008: 36).

While the DMCA does provide indemnity from its terms for fair use, the exact definition and reach of this can be notoriously difficult to nail down (Decherney, 2007: 121). In fact, Peter Decherney argues that the concept of 'fair use' is being slowly ousted from copyright legislation, to be replaced by a list of explicitly spelled-out exemptions (2007: 121). One of these exemptions, as related to gaming, is

that it is allowable 'to bypass encryption on computer games if those games require obsolete technology to be played' (Decherney, 2007: 124); this, for example, allows gamers to use emulators to play older games. As a rule, lawyers hired by content-producing companies and associations (such as the RIAA, Entertainment Software Association (ESA) and the Motion Picture Association of America (MPAA)) appear in opposition at any hearings regarding the creation of a new exemption to the DMCA (Decherney, 2007: 125; ESA Annual Report, 2009: 16). The ultimate barrier to fair use, however, is the DMCA's provision against circumventing copy protection systems or DRM – while using a copy legitimately in terms of fair use is allowed, actually creating that copy violates this condition and it therefore illegal (Decherney, 2007: 122). Marlize Jansen asserts that this 'threatens lawful use' (2004: 103). This is especially problematic as copyright terms are limited, but the DMCA's provisions are perpetual – this means that it may even be illegal to circumvent DRM to access works that have fallen into the public domain.

The Directive on the Harmonization of Certain Aspects of Copyright and Related Rights in the Information Society (referred to as the 'Information Society Directive') implemented the provisions of the WIPO Copyright Treaty for the European Union. It prohibits the circumvention of access and copy-control measures, and the manufacture of devices that do so; the Directive does however allow these measures to be circumvented with technological measures in exceptional situations (Jansen, 2004: 102-3). This is a departure from the US's DMCA, which prohibits all circumvention measures, regardless of the reason for access. The EU has however generally matched the US's copyright regimes, including the extension of the copyright term to 70 years after the author's death. However, enforcement and regulation are not equal everywhere in the EU. The Global IP Index shows that European countries vary quite dramatically both internally, in enforcing different types of intellectual property (for example, France's score for trademark protection was significantly higher than for patents), and externally, in relation to each other (Mallinson, 2008: 106).

Currently, a plurilateral treaty called the Anti-Counterfeiting Trade Agreement (ACTA) is being discussed by powerful, developed content-exporting countries (including the US, several European countries and Japan). ACTA seeks to further strengthen measures against counterfeiting and copyright infringement, and is broadly worded to encompass 'internet distribution and information technology' (Free Software Foundation, 2008). It contains provisions for criminalising all instances of copyright infringement, and seeks to create policies that force service providers to give out the details of suspected infringers without allowing for due process; ACTA seeks to 'apply new, stricter legal and enforcement standards to the trade in informational goods [that] would extend far beyond those required by the WTO TRIPS Agreement' (Shaw, 2008). The Free Software Foundation warns that ACTA may make legitimately free software hard to spread and develop, and would engender 'a culture of surveillance and suspicion' (2008). Several digital rights advocacy groups have spoken out

against the agreement for its stringent policies, disregard for consumer and privacy rights and the secrecy that has surrounded its negotiations (GamePolitics, 2008a; Electronic Frontier Foundation, 2009). If signed into law, this treaty will even further extend the powers of enforcement agencies against both criminal and private copyright infringers, as well as the definition of what constitutes a criminal infringement act. Aaron Shaw argues that the secrecy and process of negotiation show a 'blatant disregard for global consensus and the needs of developing regions' (2008). Though the treaty would be voluntary, it is likely that influential content-producing nations will pressure less-powerful nations into signing ACTA, as happened with the TRIPS and WIPO Copyright Treaty agreements (Shaw, 2008).

1.3 SA copyright

South Africa inherited its copyright laws from its colonial roots, absorbing many of the principles of British and Dutch law. The country is party to the most important international copyright regimes – the Berne Convention, the TRIPS Agreement and the WIPO Copyright Treaty (Rens et al, 2009: 9-10). South African copyright is governed by legislation, in the form of the Copyright Act, No. 98 of 1978 and its amendments. National law is in line with most major international treaties and agreements. Roux De Villiers (2006) provides an extremely thorough and in-depth appraisal of South Africa's copyright regime as it relates specifically to software. Andrew Rens et al (2009: 17-18) argue that South African law is insufficiently up-to-date in respect of new digital technologies, and that a major overhaul is needed. Overall, South Africa protects all categories of literary and creative works, including software, in line with international norms. But, in terms of software, 'the South African legislature has clearly recognized that different considerations apply to computer programmes than to literary works' (De Villiers, 2006: 326); this is corroborated by Yvonne Burns (2001: 206). De Villiers does indicate that 'South Africa is in the unique position that... it has chosen to protect computer programmes as a sui generis work rather than a literary work' (De Villiers, 2006: 326). This decision is in opposition to Article 10(1) of the TRIPS Agreement that states that computer programmes should be classified as literary works. This means that, according to legislation and case law, the catch-all term 'software' 'does not differentiate between the utilitarian and the artistic or aesthetic' aspects of the product (De Villiers, 2006: 337; Tong, 2005: 517). Therefore, the aspects of a game that might be considered 'literary', 'artistic' or 'aesthetic' may fall under a different set of laws and create substantial confusion (De Villiers, 2006: 337; Lidovho, 2006: 346-7). Furthermore, the South African legal definition of an author of a computer programme differs from international norms, by allowing the author to be the person who exercised control over the production of the software rather than the actual author him or herself (Tong, 2005: 513). The copyright term for computer programmes (including games) is 50 years from the time the work was published or lawfully made available to the public (Burns, 2001: 213). Section 19B(2) of the Copyright Act allows

the creation of backup copies of computer programmes for personal, private use; these copies must be destroyed if possession of the original is no longer lawful.

According to the Global IP Index, South Africa is rated 13th out of 22 countries assessed on the strength of their intellectual property regimes, rated according to their degree of 'obtaining, enforcing, licensing and attacking patents, trademarks and/or copyright' (Mallinson, 2008: 105). The country's relatively high position (scoring just 150 points fewer than the highest-ranked country, the UK) is attributed in part to the imminent FIFA World Cup in 2010; South Africa also ranks higher than traditionally high-risk copyright infringement countries like Russia, India, China and Brazil (Mallinson, 2008: 105). While South Africa has signed the WIPO Copyright Treaty, it has not yet entered into force or been ratified by parliament (WIPO Treaties Database, 2009; Jansen, 2005: 6). As yet, South Africa has not directly implemented the provisions that criminalise circumvention of DRM technology (Rens et al, 2009: 39). However, Jansen states that the Electronic Communications and Transactions Act 25 of 2002 (ECTA) contains a provision that may be seen to effectively embody the spirit of the WIPO requirements by criminalising the unlawful access of data, without authorisation or permission, where data could be read as referring to the digitised version of a copyrighted work (2005: 6). In fact, she states that by making circumvention of copy protection illegal, 'the international community [indirectly] recognised access as a right worthy of protection'; additionally, the user does not have a right to access the material, only a defence of an exception against the full rights of the author (Jansen, 2005: 6-7). If this assessment is correct, it indicates yet another expansion of copyright control in favour of the rights-holder and against the public interest; protecting access essentially negates fair use, as those who have not paid for the means to access the work cannot lawfully access it at all. This impinges severely on academic, scholarly and reporting pursuits, as few of the people involved in these fields would be able to afford buying access rights to all the necessary materials. Jansen recognises these failings, but offers no suggestions as to possible limitations on the right of access; in any case, she confirms that anybody circumventing copy protection is automatically guilty of a criminal offence, regardless of the reason for circumvention or if any actual copyright infringement occurs (Jansen, 2005: 7). However, Rens et al (2009: 40) argue that this is incorrect. The ECTA provision is not equivalent to that required by the WIPO Copyright Treaty, because fair dealing can be understood as 'permission' to circumvent access restrictions; furthermore, if this provision does not allow for fair dealing exceptions, it would most likely be struck down as unconstitutional (Rens et al, 2009: 40).

South African law focuses on measures that deter pirates rather than those that seek to prevent piracy overall. For copyright infringement to occur, a substantial amount of the work must have been copied (Burns, 2001: 213). Section 24 of the Copyright Act allows for action against copyright infringers by the owners of the copyright; this implies that the case is a civil – not a criminal – matter. Penalties can

consist of fines or jail terms, depending on the nature and scale of the infringement. Certain fair dealing exceptions are made in Section 12 of the Act, and deal with such uses as academic citation, teaching and reporting (Burns, 2001: 213-15). South African copyright law has had little opportunity to be tested, and as such there are many issues that are still uncertain or missing from the legal framework. For example, it is unknown whether enabling people to copy software for free by setting up the electronic means, without actively and directly encouraging the copying, would be prosecutable as a crime of copyright infringement (Lidovho, 2006: 360). Also, as noted earlier, South African copyright law has lagged behind the changes in technology and, as such, may founder if faced with such a challenge.

The most active and frequently discussed areas of South African intellectual property law are patents relating to medication – especially for HIV or anti-retroviral drugs, the status of traditional knowledge and the fight against widespread commercial counterfeiting – often tied in closely with illegal importation (Evans, 2002: 160; Halbert, 2005: 8-10). In recent years, however, the local Business Software Alliance (BSA) and SAFACT have begun to push private non-commercial piracy into the spotlight. Domestic law remains untested in many regards and the Constitution remains a powerful force in the protection of rights to freedom of information, knowledge and speech. It remains to be seen whether some of the current legislative provisions – for example, ECTA's prohibition against access to data without permission – will be struck down or upheld in constitutional terms. Groups such as Creative Commons SA and the Shuttleworth Foundation are constantly watching the development of local copyright laws and strongly urge policy-makers to keep the laws to minimum terms and open, free standards

1.4 Media piracy and copyright scares

1.4.1 REASONS FOR INFRINGEMENT

Copyright infringement is generally painted as a very straight-forward process of the pirate stealing the work of copyright holders for personal gain and to escape paying for the product. This overly simplistic view contains many errors and inaccuracies, but is a very useful framework for creating emotive support for anti-piracy measures. As this research will reveal, piracy is the product of many social, economic, cultural, personal and ethical factors, and is enabled by 'socio-economic, cultural, political and technological changes' (Yar, 2005: 680-1). To illustrate, research has revealed a direct correlation between inflexible pricing structures and piracy rates in low-GDP countries: Yar states that 'copyright industries... price their goods at levels beyond the practical reach of large portions of their target markets, thereby creating an incentive for consumers to turn to cheaper "pirate" copies' (2005: 681). When the goods are made affordable according to local standards, piracy drops (Yar, 2005: 682). For example, Microsoft took a radical and intelligent approach to selling the Windows operating system in China. Knowing that the population had little disposable income and that pirate

copies were available everywhere at low prices, the company simply opted to price their product in line with what pirates charged and the Chinese were willing to pay (Kirkpatrick, 2007). The effect of this was that legitimate copies began to circulate (interestingly, copies of Windows were cheaper than Linux, a free operating system, because the former required fewer discs) and Microsoft began to make a profit in the region (Kirkpatrick, 2007). Conversely, the recent worry that the economic crisis will result in higher levels of piracy only spurs publishers to raise their prices to make up for losses, rather than to lower them as an incentive to purchase, thus possibly generating more sales overall, and retaining consumer goodwill (IOL Technology, 2008). Unfortunately, video game retailers in South Africa seem to follow the same principle, maintaining or even raising game prices over time, where the general trend is to lower the costs of older games.

1.4.2 INFRINGEMENT SCARES

Every new media recording or storing technology has elicited an outcry from the dominant content producers globally (Liang, 2006; Filby, 2007: 2-3). When the audio cassette was first made available to the public, music producers foretold the imminent death of the recording industry due to unauthorised copying of music off radio stations. Later, the same protests were made in respect of writeable CDs: that piracy and the spread of free music would bankrupt the whole industry, to the detriment of all – especially the artists (Yar, 2005: 677). To compensate the largest US record labels, the RIAA received a percentage share from each writeable CD and each CD-writing drive; no artists have received any of this compensatory money (Tuomi, 2001: 70, 74ff). Movie industries reacted similarly to the advent of the VHS tape in 1970 (Lessig, 2004: 158) and, later, the DVD and personal video recorder decoders (Yar, 2005: 677; Smith and Telang, 2009: 324-5). All of these fears proved unfounded, and even allowed for new avenues in sales, marketing and technological improvement (Mason, 2008: 56). For example, movie studios can add a lot of value to DVD products (and therefore make them more desirable to consumers) by including commentaries, interactive features and alternate soundtracks (Smith and Telang, 2009: 335). However, these content holders continue to fight these technologies, attempting to limit their legal uses even further. Yar argues convincingly that the new scare over digital media has two points of origin: not only are technological, social and economic causes responsible for the perceived increase in piracy, but there is also a significant contribution from the constantly changing social construction of the act – laws are changed, definitions and figures modified, and the issue has risen in profile due to the new approach taken by the bodies that encompass the content industry (2005: 684-90). Therefore, not only is more piracy happening, but it also *looks* as though more is happening. This actual and perceived increase, taken together, raises the apparent severity of the situation. The consequence of this is that the problem is presented in much more dire terms than earlier.

The digital age presents a whole new dimension of challenges to enforcing copyright, on a scale that has never before been seen. The problem is easy to understand: the widespread proliferation of cheap new technologies (computers, optical drives, CDs, internet access) means that the entry point into digital media consumption is available to virtually any user. Furthermore, any moderately savvy users can make digital copies of media that they own, upload them onto the internet and, from there, allow them to be reproduced – perfectly, cheaply and infinitely – all around the world (Yar, 2005: 683). The legal and regulatory challenges are daunting and, many say, insurmountable. One of the crucial considerations is that the internet crosses all state, jurisdiction and enforcement boundaries, and thus no one nation can completely secure its works against all others. This is why international treaties regulating global copyright regimes are so important to content-exporting nations; they allow the nations to exercise some control, however limited, over global actions, and the treaties allow them financial recourse if their requirements are not upheld. According to Siva Vaidhyanathan, new digital technologies have blurred two previously clear distinctions: first, the dichotomy between idea and expression, and second, the division between obtaining, using and copying a work (2001: 152). He states that binary code can be understood as both an idea and expression. In addition, the very process of accessing works digitally necessitates the creation of multiple copies: in the computer's RAM, on screen, in the internet browser's cache, and so on. The difficulty comes in separating legitimate uses, which may well include copying, from illegitimate (sometimes criminal) pirate uses. Anonymity, decentralisation, fragmentation (as occurs over a P2P or torrent network) and the massive scale of online media exchange makes effective, comprehensive and repeated litigation impossible (Yar, 2005: 684).

1.5 Framing of copyright issues in the digital age and measures vs. piracy

1.5.1 FRAMING

Framing is the process by which the discourse surrounding an issue influences public opinion on it. Shayne and Brett Lunceford explain the effects of framing as follows:

> How the media frames a story can influence how the public perceives events, individuals, and organizations. Through selection of quotes, choice of interviews, and description of the issue at hand, the media not only reports the news, but provides a way to think about the news (2008: 37).

Using certain meaning-laden terms and emotive formulations encourages the reader to take the stance desired by the message sender; this process is often subtle and relies on subconscious, semiotic indicators. Despite the inappropriateness of the term (see section 1.2.2 above), 'theft' is still widely used to describe copyright infringement. Official parlance – such as in the No Electronic *Theft* Act and the Federation against Copyright *Theft* – seems to favour the term despite the reasoning that it is technically and legally incorrect. The label of theft is a potent one for the content producers to use. In the US, a comic published by non-profit group National Centre for State Courts was intended to scare

students about the nature of file sharing, but was riddled with errors – though one feels it is intentionally misleading. For example, file-sharing is presented as a federal crime, though it is not one (Kravets, 2008). David Kravets calls the comic nothing short of propaganda: it appeals to emotion by shaming the characters, parrots rhetoric about artists starving when careless consumers share their music, and provides blatantly erroneous statements such as 'she is charged with theft at state level' and 'illegally downloading music is a crime' (Kravets, 2008). The distinctions between theft and copyright infringement, and between obtaining, sharing and profiting from piracy, are never made or clarified. SAFACT's well-known anti-infringement advert states that downloading films from the internet is 'stealing' and equatable to shoplifting or even the theft of a car. In fact, South Africa does not offer criminal sanctions against copyright infringers, except where copyright is infringed on a mass, commercial scale or in certain other limited circumstances, such as parallel importing (see section 1.3 above). On a related issue, the prevalent use of the word 'illegal' in copyright protection messages runs the risk of being conflated with the concept of 'criminal'; for lay-people, the distinction between the two may not be immediately clear. Actions can well be illegal without being criminal, and different legal procedures, penalties and repercussions exist. Whenever this distinction is not explained or is purposefully obscured (such as in the SAFACT message), the public is being misinformed.

In recent years, copyright infringement has become a well-publicised and contested issue, and has become a challenge ground of rhetoric and opinion. In fact, Glenn Otis Brown argues that there is no longer a middle ground to the argument: one is either for or against copyright, and considers it either wholly good or bad (2004: 575; see also Bowrey and Rimmer, 2002). David Evans agrees that the rhetoric has become polarised on both sides, with the demonisation and criminalisation of infringing practices on the one hand, and the glorification of counter-hegemonic behaviour on the other (2002: 161). DRM is faced with particularly negative responses from dissenters (Dykstra, 2002: 49). However, because corporate content-protection entities have the financing and legitimacy to propagate their rhetoric, this point of view becomes prevalent and widely accepted – as shown below in section 5.9, participants in the survey overwhelmingly referred to the act of copying as 'stealing' or 'theft'. This casual absorption of anti-piracy rhetoric shows the effectiveness of the campaigns and the substantial degree to which the public trusts authoritative figures and organisations to be truthful. In addition to the obfuscation of legal terminology, anti-piracy framing also constructs the dichotomy between the apparently noble, righteous author and the socially deviant pirate who steals the author's hard-won creative work. This opposition relies on the positive social framing of the author as sole creator of a work, as well as the glorification of individual creativity (Woodmansee, 1984: 426). In modern times, however, works are generally no longer created by single individuals (for example, a movie relies on hundreds of co-operating participants) or, if they are, they are frequently owned by large corporations. Thus, the notion of the single author has no realistic equivalent. However, large

corporations co-opt this notion of the author for their own gains, taking the moral high ground by decrying the theft of intellectual property from hard-working artists, where in fact their own capitalist interests are at stake (Coombe and Herman, 2004: 559-560; Lunceford and Lunceford, 2008: 38).

The language used by copyright-protection entities frames copyright infringers as deviant, criminal social elements: 'the recording industry labels tens of millions of individuals in a society "pirates" in a rhetorical effort to conform social norms to its members' business model' (Benkler, 2006: 442). Naturally, the converse is said of those affected by the 'immoral' pirates: 'legitimate businesses and workers that rely on their protected ideas for their livelihood' are put out of work (Esper, 2009), while many hard-working musicians, filmmakers and authors are being impoverished by the 'staggering losses' due to the piracy of their intellectual property (LoPiccolo, 2005: 2). Broad sweeping comments like 'significant losses experienced by the gaming industry due to software piracy' are ubiquitous (Kavanagh, 2005). The act of piracy is framed no better: aside from being called 'theft' and 'a crime', piracy is labelled an 'attack' (Myles and Nusser, 2006: 120), 'plunder' (Holloway, 2007) or an 'invasion' (SAFACT, 2009). SAFACT goes as far as to say that 'it's criminal if it's not original', relying again on the public's misinformation regarding what constitutes a criminal infringement of copyright. Aside from the obvious negative terminology, other subtle issues in framing are at play. For example, authors take certain facts for granted, such as that piracy is a problem for all involved, or that it is universally undesirable: 'everyone knows that piracy of digital content is a serious issue' is an all-too-common style of phrasing (LoPiccolo, 2005: 2). Similarly, writers can assume certain favoured viewpoints, positioning the reader as somebody who, naturally, is in opposition to piracy. In addition, certain arguments about the nature of copyright and how it should be understood – for example, that copyright is a natural right and that all content should be paid for – are expressed as self-evident and beyond question (Stallman, 1996: 296). This form of rhetoric prevents other equally valid viewpoints from being taken seriously; anybody advocating open and free content is positioned as an opportunistic pirate or someone who has no appreciation for creative content or the work that it entails.

One of the most disturbing rhetorical trends is the equating of piracy with terrorism. Majid Yar explains that 'it has now become commonplace to find in the discourse of copyright industries, trade bodies, governments and criminal justice agencies the claim that media 'piracy' is linked with 'organized crime' and 'terrorism'' (2005: 688). The idea is twofold. First, piracy allows terrorists to subsist in a region while they plan their attacks, or allows them to make money while they hide from authorities: purportedly, the July 2007 London bomber did just this in Johannesburg (Kahn, 2007). Second, piracy can be used to directly fund terrorist equipment, by creating capital for the purchase of arms, training, travel and other terrorist necessities (Yar, 2005: 688). In fact, RAND Corporation has produced an educational film called *Film Piracy and its Connection to Organized Crime and*

Terrorism, which purportedly 'provide[s] compelling evidence of "a broad…and continuing connection between film piracy and organized crime"' (Esper, 2009). Mark Esper's (2009) argument quickly devolves into a slippery slope scenario: 'While one day they are pirating DVDs, the next day they may be mixing counterfeit medicines that can harm unwitting patients or producing electronic goods that can catch fire. It seems no one is safe.' David Kravets (2009e) reports on the same study, which is said to link piracy 'not only to organized crime, but also to terrorists.' Of course, none of these arguments draw the distinction between profiteering counterfeiters and other commercial pirates, and private file-sharing users who share media content or software non-commercially. All of these activities are lumped together – both conceptually and morally – and make the average home user out to be an agent of terrorism by association (Yar, 2005: 688; Halbert, 2005: 2).

The most worrying problem of all of this polarised rhetoric is that it presents only the narrowest view of the piracy situation, marginalising all others – even those it seeks to protect. Copyright ownership often only benefits the richest and most dominant content-owning groups – the record labels, the film studios, major publishing houses – and does little for the actual creators and artists. Many artists, especially musicians, have spoken out against strict copyright enforcement; they are happy to have their music circulated, as this creates marketing hype for the artists, draws larger crowds to concerts and creates a bigger market for merchandising and sponsorships (Mason, 2008: 154-5; Litman, 2001: 67). Therefore, vocal groups like the RIAA are protecting only their own profits and are generally not advocating for rights and respect of the apparently disenfranchised, maligned artists. This false emotive plea generates an inexcusable misleading of the public. Valuable counter-discourses are lost, and viable new means of content distribution, marketing and access to knowledge are curtailed. Dominant content owners maintain their unassailable legal and moral standpoints, to the detriment of innovation and development.

1.5.2 PIRACY STATISTICS, CONFUSION AND MISINFORMATION

There is a great deal of confusion and misinformation about the exact figures and losses that are caused by piracy. Estimates vary wildly. The best that many can do is to make an educated guess as to how many copies have been made, and how many of those represent a lost sale (Drahos and Braithwaite, 2004: 14). A serious problem relating to the use of data and statistics is that, often, the data refer to different types of piracy and include or exclude factors that other studies may not (Cheng, Sims and Teegen, 1997: 57). For example, some studies count only losses from counterfeiting or other commercially-motivated piracy, while others count all instances of piracy – both commercial and not – as 'lost sales'. Some studies track only physical piracy, while others attempt to account for digital too (see, e.g., the statistics published by the ESA). Even others express these figures as overall losses to the industry, encompassing not only lost sales but other estimated revenues. Few take into account the possible gains from piracy – Matt Mason reports on a study that

showed that 'file-sharing was actually *boosting* CD sales for the top 25 percent of albums' (2008: 157). Also, few of the studies realistically define the concept of a 'loss' at all. It is naturally in the interests of the partial content-producing industry bodies to release the most dramatic, and exaggerated, figures in support of their position. Where statistics and figures are used (and often extrapolated from limited or incomplete data), they are manipulated to overinflate the actual harm caused (Yar, 2005: 690). Generally, this is done to magnify the problem so that it reaches the attention of the authorities, who are thereby spurred into action and into legislating stronger and more limiting measures. Michael Filby expresses an indicting criticism of this practice:

> [T]he movie industry in particular, although not alone, has made a determined effort to fund lobbying based on research which is publicly unverifiable, and thus invalid, in order to communicate a bleaker and more damaging picture of file sharing and piracy than has been academically proven (2007:4).

Most writers argue that agencies like the RIAA, MPAA and BSA are over-exaggerating the losses due to piracy (Dames, 2008: 3; Litman, 2001: 78). Often these numbers simply indicate massive amounts that are hard to correlate to any real-world data (Yar, 2005: 680). Some of the following statistics are quoted by these groups:

- Industry losses, due to software piracy, in South Africa rose to R3.1 Billion in 2008 (BSA, 2009a).
- [I]n the United States, theft cost the US$6.9-billion gaming industry US$3.2 billion in lost sales [in 2002]. That's a staggering piracy rate of 46.4% – nearly five times the music industry's 10%. Hollywood, meanwhile, believes it's losing US$3 billion a year, less than 5% of its 2002 revenue (Holloway, 2003).
- [I]n 2002, an estimated 40% of all music CDs and cassettes sold around the globe were pirated, and the estimated value of the pirated market for 2002 was $4.6 billion (Ki, Chang and Khang, 2006: 406).
- In 2004, when sales of video games in the United States set a record at $7.3 billion, the industry lost more than $1.8 billion to global piracy (Myles and Nusser, 2006: 119).
- [T]he new report estimates that in all countries, including the US, revenues lost from piracy [in 2004] reached more than $25 billion (LoPiccolo, 2005: 2).

Clearly, these statistics are inconsistent and rely on differing variables. For example, when comparing the second and fourth quotes, the 2004 global loss to video game pirates is around $1.4 billion less than that reported two years previously – surely this should indicate a positive trend? It seems that often not even the authorities can keep track of actual losses, whether in number of units or in total revenues. The BSA of South Africa reported, for example, a drop in piracy for one year and a 1% rise the next, which they estimate brought the total worth of losses to R3.1 billion (BSA, 2009a). This last

statistic illustrates the problem of extrapolating loss data from vague estimations (Yar, 2005: 689). Moreover, these statistics are misleading of other trends. For example, the music industry has recently blamed piracy for the dramatic decrease in physical CD sales; however, Robert LaRose and Junghyun Kim report that legitimate CD sales fell in close proportion to the increase in legitimate online sales (2007: 268). Similarly, an MIT study confirms that the RIAA's loss statistics exclude legitimate online sales, which – if taken into consideration – would effectively halve the reported losses (Mason, 2008: 158). A recent survey of British teenagers found that their music players contained an average of 842, or 48%, infringing songs (Sabbagh, 2008). The younger the sample, the higher the prevalence was. The study also found that one in seven CDs owned by young people were copied (Sabbagh, 2008). The nature of these statistics may sound shocking, but close analysis reveals that there is more to them. For example, they show that over half of all music files, and six out of seven CDs, *have* been legitimately acquired by teenagers, who generally have less spending power or decision-making potential than adults. Lidovho states that there seems to be much confusion regarding the real issues of piracy and loss (2006: 362-3). Though some say that infringement is always harmful and that big losses arise, this is not necessarily the case and it definitely does not present the full picture. Richard Stallman outlines three arguments that questions this presentation: first, a single act of piracy does not equal one lost sale – in fact, it is generally accepted that most people are willing to pay for content if the price is fair and it is conveniently accessible, and that those who pirate would in any case often not have brought the product; second, it is important to remember that no actual 'loss' occurs because digital content is non-rival and its owners retain whatever rights they had; third, Stallman questions the assumption that copyright holders should be paid for the content at all (1996: 294-5).

Finally, the most puzzling aspect of these massive loss ratios begs the question: where should the lost-sales money come from? The founder of Atari, a games company, claims enthusiastically that a new type of motherboard-based DRM will completely stop the piracy of games, and the gaming industry 'will start to see revenues coming from Asia and India' (Androvich, 2008). However, this projected result seems questionable; if markets or regions are unwilling or unable to pay for games currently, it is unlikely that any form of 'uncrackable' DRM will encourage them to make purchases. This thinking presupposes that gamers pirate for malicious reasons or to obtain free products, but overlooks many of the highly relevant social, economic and market issues at play. It seems improbable that so much extra money would be spent on media products in any case; furthermore, most media industries *are* growing steadily – especially those that have embraced the digital format as a legitimate means of distribution and marketing (Clarke, 2006); for example, illegal file-sharing has been shown to lead to increases in sales (Mason, 2008: 157). Whether despite or because of massive copyright infringement, media industries are maintaining steady incomes, and always generate more revenue that even the most extreme estimates of piracy cannot negate (Tuomi, 2001: 69).

1.5.3 LEGAL ACTIONS

It is one matter to have laws and regulations relating to copyright infringement, but it is another entirely to find the skilled workforce to investigate and litigate against all manner of infringers. The changing boundaries of what constitutes a 'crime' has lead to increased number of 'criminals' and thus a bigger need for enforcement (Yar, 2005: 685). Due to the overwhelming scale of the problem, not only in the digital arena but also in terms of ubiquitous physical vendors, few nations have the capacity or will to investigate even a small proportion of offences; therefore, most choose to focus on the more serious, criminal aspects of infringement such as mass commercial counterfeiting, and leave the enforcement of civil offences to the individuals or companies concerned. Though this is legally the correct standpoint as prosecution of civil offences is a private matter, many large copyright holders insist that the scale of the piracy situation warrants state intervention. In the US, the FBI formed a Cyber Crimes division in 2002 in part to investigate concerns over non-commercial file-sharing networks (Monroe, 2003); the division's other mandates include halting the spread of child pornography and malicious viruses and prevent hacker attacks on vital networks and systems. Again, elevating copyright infringement to the level of such serious offences highlights the effectiveness of lobby groups' efforts to protect valuable corporate interests. In Korea, the government seeks to exercise the right to shut down internet forums and blogs if they do not comply with copyright take-down notices, and to cut off from the internet any users who are caught uploading copyrighted material three times (Tong-hyung, 2009). The French government tried to implement a similar measure after lobbying from industry groups that claim a '50-percent collapse in CD sales over five years'; users caught uploading would have their internet accounts disabled for up to a year (IOL Technology, 2009). This law has been thrown out as unconstitutional by the country's highest court (Wray, 2009). Britain is conceiving by far the harshest punishment, seeking to ban infringing users for life from the internet (Wray, 2009). This massively unpopular move is being challenged by music artists and citizens.

However, where official state measures are not sufficient to prevent the threat of piracy, content owners turn to privately funded and run industry groups such as the RIAA, BSA and FACT to investigate and prosecute on their behalf (Yar, 2005: 689). The RIAA is especially notorious for its long-running campaign of prosecuting private, non-commercial file-sharers, mostly ignorant and harmless music fans. Among the over 30,000 'perpetrators' who have faced cases opened by the RIAA are infants, grandmothers, dead persons and those who do not own computers (Lunceford and Lunceford, 2008: 35; Mook, 2003; Mook, 2005). Scared by the prospect of a legal battle with such a powerful corporate entity and ignorant of their legal standing, virtually all of the accused have settled out-of-court for sums of a few thousand dollars each; these proceeds are funnelled back into further prosecutions. The BSA focuses on prosecuting businesses that use pirated software such as

applications and operating systems (BSA, 2009b). This overlap of private and public law enforcement has led to a dramatic rise in the number of pirates uncovered and prosecuted (Yar, 2005: 689).

There is an interesting tension that arises between the organisations that seek to enforce litigation against copyright infringers – the RIAA, MPAA, BSA and others – and those companies who own the rights to the content that is being pirated. Many rights-holders, especially software developers, tolerate a certain degree of piracy, and actually consider it necessary and beneficial because it helps their products to spread to areas and people who many not be able to afford them. This allows these new regions to use, learn and further disseminate the packages – creating a potential new market and acclimatising new users to the product (Lidovho, 367-8, 385). By Bill Gates' own admission, many Microsoft staff learned to code using pirated software, and allowing rampant piracy in China actually helped to strengthen the company in the region (Kirkpatrick, 2007).

Several legal battles over digital infringement have already taken place. The two most famous cases are the 2000 US trial and subsequent closure of Napster and the 2009 Swedish Pirate Bay trial, which is waiting on appeal at the time of writing. The developers of Napster innovated a new way of sharing files that did not rely on direct computer transfers by bypassing certain requirements, such as a static IP address (Bowrey and Rimmer, 2002). Napster was sued by the RIAA for contributory infringement under a clause of the DMCA, and the RIAA demanded $10,000 for each of several songs that had been shared over the network (Röttgers, 2004: 374; Yar, 2005: 677). Ironically for the RIAA, the trial and verdict of the Napster case prompted file-sharers to innovate a new, decentralised form of P2P sharing: by doing away with servers and networking private PCs, the new system – called KaZaa – was exponentially more difficult to trace and interrupt (Röttgers, 2004: 375-7; Bowrey and Rimmer, 2002). In the Pirate Bay case, the Swedish court – based on tentative analysis and uncertain evidence – ruled that the Pirate Bay had acted as an accessory to the crime of piracy (though it was never established if any crime had taken place) and ordered it to pay hefty fines to the prosecuting US film and music corporations, as well as condemning the four founders to a year's jail time (Swartz, 2009). Undaunted, however, by the injunctions against it, the Pirate Bay continues to operate by hopping between servers and jurisdictions, always remaining one step ahead of authorities (Kravets, 2009d). This attitude of rebelliousness, anti-authoritarianism and counter-hegemony caused such interest in Sweden that the country's Piratpartiet (Pirate Party) has tripled in size and has won a seat on the European Parliament – a party whose political agendas relate to the loosening of copyright laws and whose headquarters are listed as 'the internet' (Piratpartiet, 2009; Mason, 2008: 56).

1.5.4 SOUTH AFRICAN COUNTER-MEASURES

South African copyright enforcement has lagged behind the powerful and well-funded efforts of international groups and wealthy governments. The local enforcement environment is dominated by

two groups: the South African Federation Against Copyright Theft (SAFACT, an offshoot from the British FACT) and the local branch of the Business Software Alliance (BSA). For SAFACT, one of the most important areas of piracy prevention is the seizure of imported counterfeit goods. For example, SAFACT seized a massive shipment of over 2 million pirated films at OR Tambo International Airport in Johannesburg in 2008, and is active in capturing pirated goods from street vendors and other resellers (SAFACT, 2008a). Despite this move being justified under the prevention of lost sales, poor communities are being targeted for piracy – communities that have no access to cinemas or retail stores, or whose low income rates prevent them from making any legitimate purchases (Kahn, 2007). As Jack Bishop argued about South America, where international and local music products are priced outside the means of ordinary citizens, this problematises access to culture but does nothing to increase sales (2004: 102-3). Unfortunately, the information on the official SAFACT home page is relatively out of date, but it does show that SAFACT initiated 362 court actions against counterfeiters in the first half of 2008, 254 of which were against street and flea market vendors (SAFACT, 2008b). In the same period, they seized a total of 176,296 counterfeited films and games (SAFACT, 2008c). The South African BSA has been very active on a different front, suing 193 businesses for using illegal business software in 2008, garnering R130,000 in damages and costing local businesses R2 million in total (BSA, 2009b). GJ Lidovho proposes that this type of litigation can act as an effective means of deterrence, education and moral affirmation for software consumers (2006: 370).

1.6 Critiques of copyright law issues

1.6.1 MORAL PROBLEMS, FAIR USE AND DRM

Copyright law has endured a long and heavily contested evolution, from its earliest roots in the Statute of Anne to its current global proliferation. As the laws became stricter and more limiting, they began to face more vocal opposition. This section outlines the three key critiques faced by copyright law – namely that it has lost its original moral and social intention, that it provides for fewer and less useful fair uses over time, and that it elevates DRM above fair use – and introduces the groups that advocate for alternative models. Many activists and renowned academics have argued that the recent developments in copyright law have moved it further away from its roots and purpose than ever before, and have now all-but eradicated the moral and social founding principle that inspired the implementation of copyright originally. This principle – encouraging creativity and the creation of knowledge by balancing the rights of the authors with those of the public – has become so heavily weighted in favour of copyright holders that the public retains virtually no rights (Bowrey and Rimmer, 2002). Even more unfortunately, fewer and fewer artists, writers and musicians actually benefit from their creative work as it becomes co-opted by corporate entities (Halbert, 2005: 67). This extreme financial lock-down means that corporate entities act as cultural gatekeepers: Benkler argues that the 'formal regulatory drive has been to increase the degree to which private, commercial parties

can gain and assert exclusivity in core resources necessary for information production and exchange' (2006: 384). When threatened with the open model of the internet, which democratises both access to and creation of knowledge, content industries urge the tightening of laws. The result is that network spaces become increasingly contested and regulated (Benkler, 2006: 384), and that laws such as the WIPO Copyright Treaty and the Berne Convention become ever more important to maintaining control. K. Matthew Dames has noted an 'increase in restrictive and imbalanced copyright law, both within and outside the United States' (2008: 3). He later writes that there has been a notable erosion of the public's rights to use and experience media rights 'through longer copyright terms, digital rights management schemes, or restrictive licenses that protect works that should be in the public domain, among other things' (Dames, 2009: 23). James Boyle argues persuasively that this process is leading to a 'second enclosure' of the commons: the commodification and regulation of an intangible thing through artificial laws that create new forms of property and rights where none existed previously (2008: 45-6).

State prosecutions and copyright protection laws in general seek only to curb piracy and prevent copyright infringement; however, this process may be disadvantageous both to businesses – who may occasionally benefit from the illicit spread of their software – and to developing countries – where software penetration and innovation are curbed. Further, as copyright terms become longer and dominant content-producing nations threaten legal action and trade sanctions against copyright infringers, much cultural value is lost. This loss manifests both in terms of materials that never enter the public domain (either through corporate protection or sheer physical disintegration) and the cultural products that are never created, but which may have been in a society with freer access to ideas, expression and iconic cultural symbols. It is especially disheartening to consider that much of the commonplace 'borrowing' of cultural ideas in the past has now become an actionable offence; those like Disney who benefited from this exchange are now some of the same who seek to curtail it for (Lessig, 2004: 23). Creative production relies on being able to interpret, reuse, borrow and reference many different ideas and authors, the so-called 'raw material for future innovation' (Boyle, 2008: 48). By limiting the public's rights to perform these acts through copyright and related protection measures, innovation and creativity may be stifled or severely curtailed (Boyle, 2008: 48-9). Owners of lucrative intellectual properties want to prevent others from borrowing and possibly profiting from their works, and thus lobby for greater protections. But for every valuable Mickey Mouse or 'Happy Birthday' song intellectual property, there are literally thousands of socially significant but non-lucrative cultural products that are carried along and protected by the unstoppable wave of tightened regulations. For example, some European libraries estimate that as many as 90% of their holdings consist of orphan works (Biba, 2009). These works, existing in a gray zone of copyright protection and authorial abandonment, cannot be usefully transformed for fear of expensive lawsuits; thus, they remain untouched, useful to few and benefitting no author financially or otherwise. Such

moral, social and cultural considerations have been usurped by the commercial imperative to create artificial scarcity and thus a monetised commodity. Naturally, this trend creates a serious moral conundrum. The alternative to this process of enclosure is the pioneering of a new approach to copyright and intellectual property thought. Advocacy groups that are attempting this are discussed below in section 1.6.2.

One of the most worrying results of the recent tightening of legal regimes is the near-ousting of the public's most valuable privilege in respect of copyrighted works: fair use. As elaborated above in section 1.1.2, the concept of fair use (or fair dealing) is vital for the continued intellectual, critical and informational discourse necessary to an open, democratic society. The provisions of the WIPO Copyright Treaty and the DMCA come under particular fire for their disregard of fair use. The DMCA 'impedes the progress of science, is economically unjustifiable, and lacks the balance the Constitution requires of intellectual property legislation', and the statutory exceptions to the DMCA 'fail to recognize many legitimate reasons for circumventing technical measures' (Samuelson, 2003: 43). The clear disregard for fair use allowances was demonstrated in the lawsuit against RealNetworks. In the recent legal battle, a judge ruled that RealNetworks' RealDVD, a programme that allowed users to create a digital or physical copy of any DVD by overriding a type of DRM called the Content Scramble System (CSS), was illegal because it broke DMCA laws relating to circumventing copy protections (Kravets, 2009b). This is despite the fact that the RealDVD programme has many legitimate, lawful uses: in fact, the judge stated that, despite there 'may well being' legitimate fair-use applications, the fact that the software by necessity circumvented the copyright protections made it illegal outright. Indeed, it is still uncertain whether it is at all legal under US law to make a backup copy of any owned disc (Kravets, 2009b). Furthermore, the notion that the software *could* be used for illegal purposes pre-empted the possibility that it *would*, thus seemingly prosecuting RealNetworks as an accessory to a crime that had not yet occurred. This contradiction in the law – the right to make personal copies but the illegality of making or obtaining any tools that allow this – weighs heavily against fair use and public rights (Lessig, 2004: 157). In fact, the 'anti-circumvention rules interfere with legitimate interests of consumers' (Samuelson, 2004:41-2). This is especially true when considering that DMCA regulations operate perpetually, unlike copyright terms, which lapse; this may in future make accessing public domain works illegal when such access requires the circumvention of DRM (Samuelson, 2003: 43). This is a counter-intuitive notion that destroys the purpose of the commons and flies in the face of cultural and knowledge dissemination. The EU's Information Society Directive fortunately allows such circumvention when it is done to exercise a fair use or exception right. South African legislature has not yet enacted the provisions of the WIPO Copyright Treaty into law, and thus circumvention of DRM is not yet an offence; the Copyright Act allows the making of back-up copies for personal and archival use.

Some argue that content users who lament that fair use is gone (annulled by DRM and corporate control) simply do not understand what constitutes fair use; they are simply missing the false freedoms that they personally consider justified and are complaining vocally to get these restored (Dykstra, 2002: 29). If this were true, why do teachers struggle to get permission to use video and sound clips in media classes, why are hobby engineers sued for reverse-engineering purchased devices to make them perform as intended from the start (Lessig, 2004: 154-5) and why do researchers get sued for academically testing (and therefore circumventing) new DRM technologies (Bowrey and Rimmer, 2002; Lessig, 2004: 155-7)? Fair use is intended to balance public creation and freedom with protection for an author's intellectual property (Evans, 2002: 160). The current balance weighs heavily in favour of the latter, to such an extent that fair use is considered a theoretical concept but is often not accepted as a viable practical justification. Many feel afraid to use copyrighted content under the banner of fair use because of the concept's legal uncertainty; after all, it only constitutes a legal defence in court and many do not wish to risk letting the matter go so far (Lessig, 2004: 97-8).

Peter Decherney levies an indicting criticism against DRM, saying that not only does it curb certain instances of copyright infringement, but also 'creates new limits, often disabling otherwise legal uses of digital media' (2007: 123). Pamela Samuelson says that DRM and copyright protection laws have been interpreted too broadly by courts, and that they had escaped the bounds of intention (2004: 41). DRM does more than merely protect copyrighted works, it strips the content of legitimate functions, running roughshod over the proper, fair use rights of digital media consumers (Samuelson, 2003: 42). In fact, Samuelson argues that 'the main purpose of DRM is not to prevent copyright infringement but to change consumer expectations about what they are entitled to do with digital content' (2003: 41). DRM can limit or modify the way some media are displayed and performed in the private sphere, as well as (legitimately) in the public sphere. It enforces the viewing of undesired content, such as commercials and warning notices. In this light, Samuelson prefers the use of 'digital restrictions management' for the acronym DRM (Samuelson, 2003: 42).

Aside from these general drawbacks, DRM also has four practical downsides that create problems for digital content users. The central component to all of these is that DRM is often installed secretly, without informing the user or allowing for an opt-out. First, DRM can actually harm or disable software, and has been known to destroy hardware (Varney, 2006). Disgruntled users – who are not compensated for the financial losses caused – have no recourse. In 2005, a class action suit was launched against games company Ubisoft, which had included the notoriously harmful StarForce DRM in one of its games; two weeks later, StarForce was removed and the case dropped (Varney, 2006). Second, licensing or developing DRM is very expensive, and has the knock-on effect of increasing the cost of software. If it were not used, software could be noticeably cheaper. Third, certain types of DRM can be used to monitor user activity, gather data or allow malicious software to

enter the computer system. This creates a plethora of privacy-related problems, especially as the DRM is often installed without explicit notification. Lastly, and perhaps most notably, DRM 'has not stopped piracy at all, but it treats fans as criminals' (Mason, 2008: 156). Despite being proven ineffective in preventing piracy, the very reason for its inclusion, it continues to be used. It could cynically be believed that DRM is included expressly because its circumvention is illegal; thus, though the DRM will be ineffective, its circumvention still constitutes a criminal offence and gives the publishers the option to sue infringers for any losses caused. DRM stands on the extreme far scale of copyright protection, and is responsible for many of the problems relating to limiting fair use, user dissatisfaction and bad public perception.

1.6.2 COUNTER-COPYRIGHT MOVEMENTS

International copyright law has by and large focused on the rights and privileges of copyright owners; most treaties have ignored or curtailed public media-users' rights and have propagated increasingly strict copyright infringement policies, regulations and sanctions. In response to the restrictions and hazards of contemporary copyright law, several groups have formed to monitor the progression of copyright law, advocate for moderation in laws, educate the public and create alternative systems to the current regimes. These groups promote the openness, freedom and potential for knowledge-building that the digital age offers, and warn against the excessive curtailment of private freedoms in relation to copyright laws. The groups can be divided into three fields. First, several groups or online movements are seeking to promote alternative approaches to licensing, sometimes referred to as the copyleft (Coombe and Herman, 2002: 940). Among these are Creative Commons, who have developed their famous eponymous licensing standard that can apply to all types of digital and physical media, and GNU, who created the GNU General Public License for open source software. Second, some groups have formed to promote the use and creation of open software, such as the Free Software Foundation, which runs the GNU project. The third group focuses on consumer education and monitors the public's rights in respect of copyright and media. Among these are the Entertainment Consumers Association, which is a non-profit group whose goal is to educate consumers about rights and to make the use of DRM and EULAs transparent and fair (Kuchera, 2009), the Electronic Frontier Foundation, which seeks to protect freedom of speech and digital rights in the US, and iCommons, an advocacy group for the spread of knowledge and the preservation of the public domain.

2. COMPARATIVE COPYRIGHT

2.1 One regime for all?

One of the perceived failings of copyright law is that it seeks to apply many-centuries-old concepts to radically new technologies and media (Boyle, 2008: 47). Similarly, it seeks to impose Western (and specifically US) cultural values on all parts of the world, even where different social norms apply, such as in collectivist societies that prioritise sharing of resources (Ki et al, 2006: 410). Copyright law takes one of two paths: either it simplifies its provisions by considering all types of digital media together, not accounting for the many differences that exist between them, or it fragments digital media into disparate parts that are each protected separately under different provisions. This can lead to many counter-intuitive results where, for example, a song's music and its lyrics are protected separately (Halbert, 2005: 73), or software is protected for the same term duration as literary works, despite software becoming virtually obsolete within a few years of creation. Solveig Singleton presents a chart comparing eight factors for five different types of media, and reveals how complex the relations and how big the differences between them are (2007: 6). In addition, despite the global push for copyright harmonisation, jurisdictions still vary on how long their nationally produced content is protected and how foreign content is treated, which can lead to further layers of confusion. For example, a work that is licensed for publication in one country may be unavailable in another, and thus it would be illegal to import the otherwise-legitimate product (Rens et al, 2009: 57-8). However, 'the South African legislature has clearly recognized that different considerations apply to computer programs than to literary works' and has classified them as sui generis works (De Villiers, 2006: 326).

2.2 Music

2.2.1 Problems

More has been written about copyright infringement in music than for any other type of digital content. The spread of Western cultural values, and the ancillary spread of popular US and European music, have made this particular medium highly desirable worldwide. Small music files are quick to spread on global networks, have short-term value but appeal to massive communities (Bhattacharjee, Gopal and Sanders, 2003: 107). Coupled with the ease of piracy and the prevalence of pirate sources, music has become the most widely copied intellectual property in the world (Greenberg and Irwin, 2008). This status has lead both to negative and positive repercussions. The RIAA has received a lot of media attention for its massive public assault on music pirates in the US, but online distributors of the medium have been some of the first to embrace alternate models for production and distribution. Artists have positioned themselves on both sides of the debate – some condemn the 'theft' of their music, perhaps at the behest of their recording companies, while others encourage file-sharing as a great way to generate interest and reach new fans (Bhattacharjee, Gopal and Sanders 2003: 107).

Copyright holders who seek to profit from their music often blame the rise of peer-to-peer (P2P) and bit-torrent networks for the music industry's recent reported slump in sales. Record labels and industry advocacy groups like the RIAA argue that artists are unfairly deprived of their profits by pirates; but Jack Bishop argues that 'the [music] industry argues for the protection of their artists' intellectual property rights, rights that they control, and in most cases have been wrested away from their rightful owner, the artist' (2004: 102). In other words, these industry groups do not advocate for fairness and creative recompense, but rather for their own profits. This is also demonstrated when action is taken against countries where the gross earnings are much lower than in the US but where music products are priced the same. Bishop continues by saying

> With the United States holding the lion's share of the world music market... it has assumed the position of enforcing policies and standards that in many countries are economically unrealistic. The unilateral imposition of these standards upon nations throughout the world is no less than a form of neocolonialism and economic oppression. Unfair price fixing and unilateral policies cause financial hardships for members of the underclasses wishing to consume the product. In Latin America... purchasing the product at suggested list price is simply impossible for the majority (2004: 102).

It is hardly surprising then that regions with large, relatively poor populations have the highest rates of piracy. China, Russia, Brazil and India are consistently on industry 'threat lists' for this reason (Bishop, 2004: 102-4).

In an effort to protect their profits, music industry representatives sue tens of thousands of private people who share files over P2P networks for supposed losses incurred. Networks such as The Pirate Bay, Napster, KaZaa, Lycos and Gnutella are filled with proprietary music files, and have been strongly targeted by anti-infringement groups like the RIAA (Röttgers, 2004: 374). Fierce litigation has led to the closure or dramatic overhaul of virtually all of these. Shutting down these networks has the inevitable effect that it prevents all legitimate sharing along with the illegitimate, as it is difficult to discriminate between the two. The music industry is unrepentant because it frames rampant piracy as the biggest threat to continued music production. But Mason believes that it is this response to file-sharing is the problem (2008: 157). By turning ordinary fans into criminals and damming up new self-sustaining distribution channels, the RIAA is only doing itself a disservice: it tarnishes its own image by propagating needless and ridiculous lawsuits, it alienates music fans and it prevents the expansion of profits by legitimate online means – while having virtually no effect at all on the actual rates of piracy (Mason, 2008: 157). Debora Halbert contends that the RIAA's 'draconian response' to file-sharing has spurred a 'growing discontent with the way the music industry operates' (2005: 67). To protect itself from piracy, the music industry initially made heavy use of DRM, first on physical CDs and later in online stores. A particularly notorious example of this was Sony-BMG's use of rootkit

software in 2005 (see the in-depth article by Mulligan and Perzanowski, 2007). This rootkit was 'a type of spyware that secretly installed itself on to the computers of their customers, allowing them to make only three copies of their CD and relaying private information about how their customers were using their computers back to Sony-BMG' (Mason, 2008: 156-7). This software prevented customers from playing legitimately-bought discs on many stereo devices and in computer optical drives, and allowed malicious software to infect the user's computer due to faults in the rootkit software. The public outcry forced Sony-BMG to recall the discs.

2.2.2 Solutions

By 2004, the music industry seemed to realise that a change of strategy was required; fighting against the spread of digital music online was an impossible endeavour. Music producers began to experiment with digital delivery and distribution methods (Johnson, 2004: 34). Online stores began to sell legitimate digital music files and very quickly gained in popularity; of these, iTunes is the most well-known. Meanwhile, smaller independent artists were already using the internet as a legitimate platform for the dissemination of their music that did not rely on hefty record label financial backing (Halbert, 2005: 67). Sites such as MySpace and Last.fm became social music networks where fans could download, listen to, recommend and discover new music. For these artists, file-sharing was a boon for several reasons (Bragg, 2009). First, music cost little to produce and nothing to copy, and so distribution costs were removed from the expenses of creating music; artists could now function wholly independently. Second, artists recognised that they could not make money from the limitless commodity of the music file, and so used the spread of music to draw people in to purchasing rarer, limited products like merchandise, special edition compilations and concert tickets. Third, artists could track the spread of their music and engage with fans more effectively than ever before, creating online marketing machines through websites and social networks, without having to pay for expensive promotional deals. A recent study in the UK has confirmed that those who illegally share music files online spend more money on music purchases than any other group (Shields, 2009).

Artists like Nine Inch Nails have moved completely away from the proprietary music model with great success. Nine Inch Nails frontman Trent Reznor has spoken out vehemently against copyright protection on music and released all his latest tracks for free under Creative Commons licenses, even encouraging fans to make remixes of the songs by providing all of the raw materials on his website (Reznor, 2008). In 2007, Madonna left her long-time record label, Warner, and has signed a new contract with a concert promotion agency (Allen, 2007). It can be argued that this move is indicative of the failure of labels to change with the times, and a recognition that concert revenues and merchandising are much more lucrative than sales of actual music files or CDs. Recently, Prince gave away free copies of his newest CD to newspaper buyers, and subsequently played to sold out concerts in London (Claridge, 2007). Additionally, in response to public pressure, online music stores like

iTunes and Amazon have stopped including DRM measures in the files they sell, leading other stores to follow this example to remain competitive (Andrews, 2009). Steve Jobs, CEO of Apple, confirmed the dropping of DRM by stating that 'DRMs haven't worked, and may never work, to halt music piracy' (Andrews, 2009). Positive changes like these show that the music industry is taking heed of market forces, and is stopping the unwinnable fight against widespread file-sharing simply by co-opting it as another marketing strategy. This in turn leads to a favourable result for the public, as music becomes more open, more widely available and less regulated. Though the music industry as a whole has behaved quite schizophrenically in recent years – at once suing file-sharers for exorbitant sums and spreading free, DRM-less music – the industry seems to be moving to an inevitable open and democratic standard, where savvy artists and promoters make the most of new technologies while archaic, inflexible record label structures founder and struggle to keep up.

2.3 Movies/TV

2.3.1 Problems

For the US, being a world leader in content production and exportation has the downside that this content is highly desirable and thus prone to being pirated. The spread of Western – and especially US – culture and ideologies encourages the concurrent increase in piracy of US movies (Yar, 2005: 681). While actual loss estimates are unclear as to the scale of the problem, it is evident that the pull to US cinema results in rapid and widespread sharing of new releases. Frequently, high-quality DVD rips of movies are available even before the film is on circuit, which has the presumed effect of lowering cinema attendance. Large movie-sharing networks like Overnet and eDonkey are immensely popular, as are generalist P2P and torrent sites (Röttgers, 2004: 377). Serialised TV dramas face the same predicament; as soon as an episode is released in the US, it is available worldwide over P2P networks and is thus 'spoiled' for audiences in regions where the show has yet to be syndicated. Additionally, viewers with personal video recording devices can tape shows and watch them at their convenience, skipping the undesirable content like advertising. This result is especially problematic for TV show producers, who rely on advertising revenue to fund production; if viewers are able to remove advertisements quickly and easily, this makes damages the relationship between advertisers and TV studios and inevitably leads to a withdrawal of advertisement funding and support. The result of this is that fewer and lower-quality shows are made. Michael Smith and Rahul Telang (2009: 322) explain that the pervasiveness of P2P and other sharing networks and the ease with which viewers can create edited, unencrypted versions of TV and movie content could be to blame for the lowering desirability of paid-for content.

Global networked societies exert both push and pull factors on its members in regard to films and TV series. On the one hand, audiences are pulled to watching the latest releases because of the intensive advertising and marketing campaigns that are targeted at Western audiences. On the other hand, they

are pushed into obtaining these movies and series both to be able to interact meaningfully with those who have watched them and to be able to experience the shows as soon as possible, to avoid having the plots spoiled in advance by online discussions. And because these shows are delayed in their regions (through the need for translation, licensing agreements or simply for reasons of exclusivity), viewers turn to piracy as an immediate solution. In the case both of digital and physical counterfeit copies, the quality of the product offered can be very high, even indistinguishable from the real thing (Yar, 2005: 683). In fact, pirate copies may be considered more desirable because they generally do not contain the advertising and copyright notices that legitimate goods are subject to. As long as US distributors limit the broadcasting of TV series and the screening of new film releases, viewers in non-privileged regions will have the motivation to turn to piracy to ensure an even field for themselves.

DRM is also a factor in video media. The most common and widespread is a form of DRM called the Content Scramble System (CSS). Since 1996, all of the major global studios have implemented CSS on their physical DVDs, creating the knock-on effect that DVD-player manufacturers had to buy a license to be CSS-compliant and therefore to be allowed to legally decrypt viewers' discs on their machines (Samuelson, 2003: 43). This created a global monopoly for the so-called MPAA film 'cartel' (Athique, 2008: 703), allowing them to impose conditions on DVD-player manufacturers that were favourable to the studios. Other forms of common DRM include region-locking (encoding the DVD with a certain key that can only be decoded by a player with the same region) and the use of different file formats (related to region-locking, formats like NTSC or PAL can only be played on appropriate disc drives). These forms of DRM can be frustrating to consumers who wish to buy legitimate copies of media that have not been made available locally, or who want to buy foreign copies for other personal reasons (for example, fans of Japanese console games may prefer to play them in their original, undubbed forms). These media users are then likely to turn to piracy, where convenience and availability allow them to obtain the desired media.

2.3.2 Solutions

Just as with music, the solution for maintaining film and TV revenues seems to involve opening up the medium, allowing new digital means of distributions and giving away a limitless free product (the files themselves) in order to profit on scarcer commodities. Unfortunately, as Smith and Telang explain, this framework is less effective for movies because they are generally only viewed once, and because the movie industry currently relies on physical media sales for up to 46% of their profits (2009: 322). Cinema ticket sales are generally only viable for a short period of time. However, this method should not be dismissed. Smith and Telang studied the impact of freely available content on sales of film media, for films other than new releases. They analysed the impact of both legitimate free access (such as TV broadcasts of movies) and illegitimate access (availability of movies through file-sharing over P2P or torrent networks). In both cases, they found that sales were not harmed: 'both

ad-cable and over-the-air movies experience a large, statistically significant increase in sales immediately following their broadcast' and '[there is] no evidence that a movie's availability on BitTorrent at the time of broadcast reduces the post-broadcast increase in DVD sales' (2009: 330, 334). They explain that free access of both varieties increases the interest in the film, which has the effect of increasing sales, and that sales increase whether the movies are available on pirate networks or not (Smith and Telang, 2009: 335).

TV content producers have recently been experimenting with digital distribution for serialised TV content. Full uploads of recently aired material is available through outlets like the iTunes store (though, of course, the material is regionally locked and accessible only to US viewers for licensing reasons). Consumers can buy the shows on a per-episode basis. Other services, like Hulu, allow viewers to stream episodes, movies and additional content for free onto their computers; this service is supported by commercials and advertisements, and is made available due to partnerships with many of the largest US TV networks, including NBC, ABC and FOX (Hulu, 2009). One of the most valuable benefits of websites like these is that they allow users to share and discuss clips, creating a social-networking buzz around certain material. This interest then feeds into further promotion and sales, acting as free publicity for the show.

Unfortunately, this strategy has not been expanded to allow non-US residents access to a similar quality and range of legitimate materials. It is therefore difficult to judge whether these services would be equally effective and beneficial. In South Africa, for example, limited bandwidth and slow internet transfer speeds would make the service difficult and impractical to use. Adrian Athique explains, however, that the Indian film and soundtrack market has exploded due to the availability of cheap technologies that allow media to penetrate and reach all corners and financial sectors of the population (2008: 703-4); however, he also notes that piracy of Indian films, especially outside India, continues to be a problem for the industry, though it does open up avenues for creating new export markets by judging the desire for pirated content in that market (2008: 704-5). In an effort to curb foreign piracy, Hollywood studios are increasingly making their upcoming films available simultaneously around the world. Though niche and art films are still often delayed, the bigger blockbuster movies are increasingly becoming available globally at the same time as in the US; for example, recent massive releases such as *Transformers 2* and *This Is It* were released concurrently worldwide (BBC News, 2009). The effect is that more viewers have the option of viewing the film legitimately than before, and need not turn to piracy to acquire the desired media. As is shown later in this text in Chapter 6, media consumers generally chose the avenue of highest convenience when procuring media; if the option to visit the cinema (with the concomitant 'big screen' experience) is available, it is likely that many will chose this route.

2.4 Ebooks

2.4.1 Problems

The ebook is the newest type of digital medium to gain mainstream attention. While digital versions of music and films are considered as useful as their physical counterparts, electronic books are generally thought of as less convenient and harder to use than their paper forms. Significant complaints included the comparative lack of portability, the inferior quality of the computer screen for long-form reading and the scarcity of useful content. However, the advent of portable ebook reading devices has resolved all of these problems. Online retailer Amazon created massive public awareness of the trend with the introduction of the Kindle ebook reader and, since 2007, dozens of new devices have appeared on the market. It is still too early in their lifecycle to fully assess the impact of piracy and rights management on ebooks, but ebooks have entered into the piracy debate. Alarmist articles like the *New York Times* editorial by Randall Stross (2009) indicate that a trend of thinking which is similar to that facing digital music is evident around ebooks; fears of rampant piracy, massive sales losses and exploitation of the artist are but a few of the concerns listed. Chris Walters outlines four 'mistakes' that publishers are already making with regards to piracy, copyright and ebooks (2009). First, publishers who refuse to make digital versions available are opening themselves up to piracy, because readers will create their own versions in the absence of a convenient legal alternative. Second, locking customers into one device, format, DRM or online store makes them very frustrated and dissatisfied with the product, leading to a move towards open pirated versions. Third, publishers are putting very little effort into making quality, attractive, functional ebooks. Lastly, as with many other digital media industries, publishers are making the mistake of highlighting and fighting (both technologically and legally) against pirates, rather than co-opting or excluding them.

As above with other media, ebook DRM creates serious limitations. Ebooks come in a multitude of file formats – anything from the general Word document, text or PDF files to the specialised EPUB or MobiPocket – but their devices are sometimes locked down so that they are only enabled to display a limited range of proprietary file formats. The Kindle, for example, can only display Amazon's proprietary, heavily DRM-restricted ebook files, which are available only through the Amazon online store (Moore, 2009). Ebooks also suffer from region-locking, often because of licensing issues across borders or the fear of widespread piracy in certain regions (Rothman, 2009). As with movies above, regionally based limitations can cause an increase in piracy because the desired content is not made available to the consumers. Even many devices and services are limited by country: for example, until very recently, the Kindle was only sold in the US and books could only be uploaded to it through Amazon's US-only Whispernet service (Biglione, 2009a). Because the file formats are so strictly controlled and because the proprietary files can generally only be used on proprietary devices (both owned by a single entity), some serious security and privacy concerns arise. David Rothman (2009) reports that online bookseller Fictionwise imposed a region restrictions retroactively on books that

had already been purchased: customers in the excluded regions found that many of their purchased book had suddenly become blocked. Recently, Amazon faced harsh reprimands from the public for secretly deleting already-purchased ebooks from customers' Kindles and refunding their money, after the company found out the intermediary seller did not have the rights to the ebooks (Helft, 2009). The move highlighted the extent of the control that Amazon could exert over its customers and revealed the potential for monitoring how they use their ebooks. The company has since apologised and restored the files, but its ability to access private people's devices secretly and manipulate the content contained there has worried many (Helft, 2009).

2.4.2 Solutions

The literary world has the least to fear from piracy because, of all the media discussed here, books have the most appealing physical form and are perfectly suited to the needs and sentimental desires of readers. Many readers profess that the physical book is superior to any electronic version because of its portability, easy readability and low-cost disposable nature. However, ebooks do bring a realm of useful applications to the medium where they are used openly, freely and DRM-free. For scholarly work, where the ability to search, annotate, copy and bookmark are invaluable, electronic versions facilitate the process. Ebooks provide a quick and potentially free way of previewing books before purchase. Interested readers can explore the book risk-free, and may well decide to purchase the physical copy if the work appeals to them. Karen Bruns of HSRC Press, a South African academic publisher, reports that having open-access ebooks available for free download on the company's website has increased the sales of physical books (2008: 4). Another study confirms that '[i]nitial results suggested that freely available digital content coincides with greater paid sales' (Magellan Media, 2009). In addition, the lower price of ebooks and ease of purchase that is enabled by some services (such as Amazon's Kindle and its online ebook store) make impulse purchases more likely. The recent influx of ebook readers has transformed ebooks from tedious and eye-straining media to book-equivalent, portable, comfortable products. The fact that in excess of one million electronic copies of Dan Brown's latest novel, *The Lost Symbol*, were sold within a week of release indicates that the medium is becoming more accepted and popular (Independent, 2009). Likely due to scares relating to other types of media, the first wave of ebooks and ebook readers were heavily locked down with proprietary complementary DRM. The Kindle is notorious for reading only a limited number of formats, most proprietary, and only accepting ebooks purchased through the official store; this sometimes led to the situation that readers were forced to pay for public domain works through the store, even though they were freely available elsewhere. However, there has been a swift move away from the DRM-proprietary format combination. Starting with Sony's reading devices and expanding from there, manufacturers and ebook sellers have acquiesced to a growing number of formats and to lesser forms of DRM (Minihane, 2009).

2.5 Software

2.5.1 Problems

The problems with software piracy generally mirror those of other media, but with the added caveat that software does not exist outside the digital sphere and is thus especially affected. In addition, while other forms of media play an entertainment role, there are many software packages that have now become a necessity for individuals, businesses and institutions. Due to the overwhelming prevalence of the computer as an office and domestic tool and the high standardisation of computer applications, programmes like Microsoft's operating systems, Internet Explorer, Microsoft Office and Adobe Creative Suite are a necessity for many people. Unfortunately, these applications are priced for wealthy developed-nation markets, meaning that they are well outside the affordable range of the majority of the world's developing populations (Kirkpatrick, 2007). Those without these programmes have difficulty performing the basic functions required for work – internet browsing, word processing and so on – and are unable to make use of prevalent file formats, such as Word documents and PDF files. This necessity, coupled with high costs, provides a very strong incentive to obtain pirated copies of crucial programmes. Seung Shin et al report that, in 1999, piracy in the business-application software market accounted for $12 billion in losses, amounting to over half the total revenues generated (2004: 103). They also state that South Africa showed a 47% prevalence rate of pirated business software in 1999 (Shin et al, 2004: 106).

DRM plays a markedly lower role in software piracy than in piracy of other media. In an interview with Brendan Sinclair, Brad Wardell – the head of Stardock, a games developer – explains that strict DRM is not an industry standard for software, as many believe:

> [Copy protection is] only industry-accepted in the PC game industry – the industry that people are regularly saying is 'doomed.' Most of our business is in the application software market (the market that no one argues is 'doomed'), and such copy protection measures are not used. I don't have to keep my Adobe Photoshop CD in the drive to use it (2006).

He especially notes that DRM or other copy protection measures have little or no effect on a software package's success. However, another form of content-protecting limitation is at play: purchasing software grants the buyer a license to use the product; he or she does not buy or own the product itself (Kuchera, 2009). Thus, the software user is required to agree to a set of terms and conditions before being able to use the programme; anybody who does so is implicitly assumed to have read, agreed with and understood the terms. These licenses come in one of two forms. Shrink-wrap licenses are literally printed on the wrappings of the software and removal of the wrapping assumes agreement to the terms, while click-wrap licenses require the user to begin the installation of the programme and then click a button to agree with the license requirements (Jansen, 2004: 100). The latter form is most commonly used today, and can contain long and unwieldy End User License Agreements (EULAs).

Josh Catone gives examples of some of these: popular search engine Yahoo!'s EULA is 5500 words long, while Google's Chrome operating system has a marginally shorter one at 4000 words; in addition to length, the EULAs studied averaged to a reading level above that of the New York Times (2008). Not only are EULAs long and difficult to read, some contain bizarre provisions, such as iTunes' EULA which prohibits the use of the product in the construction of 'nuclear... chemical or biological weapons' (Apple, 2008). Others contain potentially legally unsound extensions of rights and privileges (Taylor, 2002: 233). Refunds are generally not given for software products where the user disagrees with the terms of the EULA (Kuchera, 2009). Therefore, the conflict arises in users between using the software ignorantly, reading (though often failing to understand clearly) the terms, or not purchasing the software at all so as not to risk infringing or disagreeing with the terms.

2.5.2 Solutions

Developers and distributors face a challenging dichotomy, where the success of their software is both a boon, as it spreads and creates a large market segment, and a curse, because software that becomes necessary for proper business function will be pirated if no other means of obtaining it are available. In this way, they become victims of their own success. As with the discussions on media preceding this, the most effective way of curbing piracy is to open up the medium to digital distribution, and by charging for special services while leaving general ones free. The most successful strategy in curbing piracy is to adjust the costs of the software to the market environment of the region: that is, lower costs for poorer consumers and developing regions (Shin et al, 2004: 106). Microsoft implemented this strategy to great success in China – lowering the price of its Windows operating system to an affordable level for the country's domestic and business users (to as little as $3) created a massive boost in legitimate sales (Kirkpatrick, 2007). Because it was inevitable that most of China's computer-using population would obtain the package by any means possible, it seemed logical to allow them the legitimate means to do so while concurrently reaping a profit.

Aside from lowering the costs of the product, software manufacturers can be very successful in giving away free versions of their software. This can occur in one of three ways. First, a manufacturer of popular software for specialised uses (such as desktop publishing, computer animation or film editing) can target certain key demographics and give them free licenses to the programmes (Shin et al, 2004: 106). Target demographics can include students who will later work in the specific field (as they become accustomed to the package and will tend to favour it in their professional work), or as a primer for small start-up companies who cannot afford the costs of the legitimate product (with the assumption that the company will purchase subsequent versions or upgrades). Second, a software developer can employ a 'freemium' model: a general, free version of the programme is available to anyone, while a more powerful and feature-laden premium version requires a payment or subscription. Generally, web-based applications use this structure to great effect. The popular

photography site Flickr uses this model; the survey software used in this research also operates on a freemium basis. In this way, a company can engender goodwill from a large potential consumer base, and can demonstrate the application at no risk to the consumer. If the product is proven and useful, certain free users may opt to pay for the more advanced and user-friendly features of the premium version. A similar payment structure is evident in other important applications, where the division is between home and business users: many antivirus packages, like Avast!, offer free home versions but require payment if the product is used by a business; the non-regulated choice is governed by trust. Third, some companies have opted to release all of their software for free, and to monetise their services, maintenance and trouble-shooting skills. The open-source platform Linux works on this basis: the software is completely free for anyone to download (and to modify, if they possess the skills), and the company makes a profit off of the support services it offers (Bowrey, 2005: 90). Other companies, who give out free web-based products (for example, Mozilla, makers of the Firefox browser), benefit by having their platforms spread and become the dominant market leaders.

3. GAMING AND PIRACY OVERVIEW

3.1 Brief overview of gaming

The video games industry has never been stronger, larger and more dynamic than it is today. It has even recently surpassed the motion picture industry in terms of scales of cost, and 'global games sales at $32bn last year [topped] DVD revenues for the first time' (Independent, 2009). From the first renowned products – *Pong*, *Tetris* and *Space Invaders* – video games have appealed to a wide variety of cultures, players and communities. Games were popularised in the 1970s with the rise of arcade gaming, and were brought to the home in the form of consoles and early computers by the early 1980s. They have been part of popular culture since then, and have only grown in popularity and mainstream acceptance. While serious and dedicated gamers are still a minority, casual video gaming has reached virtually all computer owners: the Entertainment Software Association (ESA) claims that as many as 68% of American households play video games (ESA, 2009). Video games come in a plethora of genres, formats, complexities and levels of innovation. Some of the most straight-forward games, such as Microsoft's embedded *Solitaire* and *Minesweeper* games, have broad appeal; other highly-complex games, such as FPSs and strategy games, require powerful dedicated hardware and a high level of player skill. Most AAA titles (that is, highly anticipated game block-busters) cost in excess of $10 million to make (Wardell, 2008b). Some, like the infamous Grand Theft auto VI, cost as much as $100 million (Independent, 2009).

The current gaming landscape encompasses computer, console, handheld console and mobile phone gaming (Singleton, 2007: 2-5). Computer gaming is the most prevalent, because computers are multi-functional devices and are generally widely owned in developed-world contexts. The current-generation console market revolves around four non-portable devices, of which each has its own strengths: the Microsoft Xbox360 is targeted at computer gamers and is a good all-purpose platform; the Nintendo Wii, with its motion-control peripherals, appeals to gaming markets outside of the usual dedicated followings, including young children, women, casual and older players; the PlayStation 3 (PS3) is an immensely powerful device that touts its processing and graphics abilities; and its predecessor, the PlayStation 2 (PS2), is still hugely popular because of its low price and wide selection of games. In the handheld-console market, two devices dominate: the Nintendo DS (and its new incarnation, the DSi) is a touch-screen device that is extremely popular in the Japanese market; the PlayStation Portable (PSP) is a more powerful console with strong appeal in the US. Aside from these dedicated gaming platforms, other digital devices can be used to play games. Apple's touch-screen iPhone is one of the most popular of these (see section 6.6 below).

3.2 Games and copyright

Software and, by association, games first entered the copyright field in 1974, when the US body Commission on New Technological Uses of Copyrighted Works (CONTU) decided that software should become copyrightable (Samuelson, 1984: 699). As with any other type of software, when buying a game one usually buys the license to access the game (for example, the unique access code or CD key), and not any actual part of the software itself (Jansen, 2005: 4). This agreement is encapsulated in the EULA. According to the TRIPS Agreement, computer games should be protected as literary works, though a distinction can be made between the protection of the game content, visuals, sounds and so on, and the actual programming code that expresses these. It could be possible, for example, to infringe the copyright on a certain character or text of a game without necessarily copying any of the underlying code. Games developers initially had an open and fluid relationship with copyright (see section 3.6 below), and while development costs were low games were released a freeware or shareware. The contemporary increase in investment (and, thus, risk) has seen a move away from this.

Overall, the issues relating to games and copyright are similar to those in other media genres. However, a new development in games has opened the debate on what part of the game is owned by whom. Many modern games, especially Massively Multiplayer Online Games (MMOGs), allow the player to create an extremely detailed avatar – everything from the character's name and age, to their appearance, mannerisms and history. In addition, some games like *Second Life* and *EVE Online* extend this creation process to other facets of the game world: not only measurable factors like items, content, locations and story ideas, but also intangible qualities such as player organisations, world economies and social spaces (Taylor, 2002: 228). Indeed, it is often these latter, player-created aspects that attract players to a certain game: 'the interaction of the players provides the substance of their virtual worlds' (Coleman and Dyer-Witheford, 2007: 944). The pertinent question therefore arises of who owns (or, at least, who has intellectual property rights over) which parts of the game world (Taylor, 2006b: 127). Naturally, game companies own the copyrights to the worlds themselves, and the raw tools with which players create their personal content; but what about this player-created content? Game companies have considered this and have included relevant licensing clauses. For example, a commonly seen solution is that 'EULAs assert the publisher's ownership of all aspects of game content (including players' avatars)' (Coleman and Dyer-Witheford, 2007: 945; see also Taylor, 2002: 234). Some game companies even claim total rights over the player-created facets, including the rights to display them, change or remove them or use them for marketing (Lastowka, 2009). However, even such inclusion does not fully justify the claim of the game owner over all user-created materials. Players invest significant time and money into participation in online spaces, and TL Taylor argues convincingly that the worlds become co-created (2006b: 127-145; Taylor, 2002: 230). She states that the borders of such ownership are not as rigid and clear cut as may be assumed by copyright owners, and that the issue cannot be considered solved by a blanket-concept approach to

intellectual property. Her view is that contemporary laws are expressed and used too strictly and too all-encompassingly (Taylor, 2006b: 132). Mia Garlick dubs this the phenomenon of the 'conducer' – the blending of the role of the consumer with the producer (2005: 425). The question involves exploring fair-use boundaries when creating derivative works or reappropriating content for personal non-commercial use (Taylor, 2002: 235). A similar example is the case of fan fiction, stories written by fans of a particular book, movie, TV series or game that uses the source's settings, characters and other significant copyrighted aspects. While private creation of fan fiction is allowed (or, at least, cannot be disallowed in any way without constant surveillance), as soon as it becomes shared on the internet, the lines of permissibility become blurred. Some content owners happily embrace the stories, grateful for the time, effort and passion that the fans have committed to the intellectual property; others take a different tack, sending take-down notices to the hosting sites and threatening fans with lawsuits (Taylor, 2002: 235). The key question arises here, as with player-created content in games, of who actually owns the fan fiction or new content. This question has no satisfactory resolution. What is certain is that game companies rely on players volunteering their time and effort to create an engaging online gaming space, but that this co-creation is rarely acknowledged (Taylor, 2002: 230; Lastowka, 2009). A rare exception of this is Valve, a company that allows gamers to make mods (modified versions of game content) for their popular titles and occasionally purchases these if they are of sufficient quality, making them available to the gaming community as a whole. One of the most famed co-operative FPS games ever created, *Counter-Strike*, was originally a mod created from the highly acclaimed Valve game, *Half-Life*. Valve hired the pair who made the game and acquired the rights to it, spawning it into a massively successful franchise (Wright et al, 2002).

This confusing issue is elevated to another level when the sale of virtual goods or items is considered. Some of the most commonly sold things are rare, difficult-to-attain items and player accounts, which include the player's saved avatars and equipment (Taylor, 2002: 230-31). In the science fiction MMOG *EVE Online*, player characters only advance according to the amount of time they spend as subscribers to the game, and not through any in-game actions or quests (as is typical); thus, player accounts with several years' worth of gameplay are extremely valuable and fetch significant sums when sold. Both of these types of purchases are game short-cuts because they allow a player to gain a game advantage without investing the requisite time, and are often considered cheating by game administrators and other players alike (Taylor, 2002: 231-2). Digital goods may no longer be sold over online auction sites like eBay (Taylor, 2002: 230-31). However, the situation is growing increasingly murky. In *Second Life*, players retain copyright over the digital goods they create and sell through the game: in 2003, 'Linden Lab made a policy change unprecedented in online games: It allowed *Second Life* residents to retain full ownership of their virtual creations' (Hof, 2006). This sparked a massive upswing of player-created goods and interest for the game (Hof, 2006). A lawsuit filed by a *Second Life* player in 2007 takes the approach to virtual copyright even further. Long-time

player Kevin Alderman claims that another player infringed the copyright on one of his virtual sex-toy products by stealing his code and creating a similar knock-off version to sell in-game (Kravets, 2009f). In this scenario, the infringement happens purely within the gaming space and the only benefit received by the pirate is virtual currency (though this can be converted to real-world money, the amount is negligible). Nevertheless, the player has the right to sue for infringement, because of the explicitly granted right to intellectual property over the creation. Should comparable items in other games not get similar protection in that case? And, should the decision to grant these rights be left to the sole discretion of the game company involved? Players continue to trade digital goods for real-world currency despite the threat of being banned from the games that they supposedly infringe, and copyright is slow to offer a clear interpretation, if any at all.

3.3 Piracy in games

Since the move away from open shareware and freeware games, piracy has been present in the games industry. Copyright infringement of games can occur in many forms, and includes allowing others to install a game from legitimately bought discs, modifying the software to remove copy protections, counterfeiting copies of the product for sale and sharing game files over P2P networks (Myles and Nusser, 2006: 120). Because computer gamers are often also moderately skilled computer users, any digital manipulation of the game is bound to be widespread and easily replicable (Coleman and Dyer-Witheford, 2007: 938). As early as 1994, game developers were already moving towards creating harder-to-crack consoles, in the face of widespread piracy and fully-cracked games being posted online before the official release date (Nelson, 1994: 16). As with other media, piracy of games is made out to be a industry-threatening problem. Sarah Coleman and Nick Dyer-Witheford take a moderate view in saying that piracy does 'subtract from game revenues on a scale that, although probably not as large as the industry claims, can be damaging, particularly to small companies' (2007: 940). One of the most widely cited effects of piracy is the decision of many game developers to move away from making computer games and to focus, rather, on the console market. The reason for this is that console games are (and are perceived to be) much harder to pirate: the act is much more complex because it generally involves modification of the hardware (which many are not skilled to do) or the purchase of a device that attaches to the console (which may be expensive and hard to obtain). With consoles, 'consumers [are] not likely to bother with counterfeits or mods' (Singleton, 2007: 4). Because of this fact, game developers are turning to consoles as a safer haven for their digital products. The result is that 'investment flows to media more easily protected from piracy, PC games have been steadily losing market share to console games' (Singleton, 2007: 3). Unfortunately for gamers, this means that anticipated new titles may only become available on one of the three current-generation consoles, and the players must face not only the cost of the hardware but also the higher cost of console games in comparison to the PC versions. However, a study of 6000 console gamers in

2005 revealed that as many as 21% of them play pirated console games, indicating that the platform is not quite as secure as previously thought (Kavanagh, 2005).

For many gamers, piracy seems to be an integral part of the process of attaining and experiencing games. As shown in the survey below and elsewhere (see, e.g., Van Belle et al, 2007), many financially limited youths can only experience games though the practice of copyright infringement, and the habit may become ingrained. Piracy becomes a vital part not only of obtaining games but of being part of the contemporary networked culture (Lunceford and Lunceford, 2008: 39). The industry response to piracy has been mixed. While some companies view piracy as indicative of a failed business model and are taking active measures to invent better and more gamer-friendly structures (see Chapter 6 below), many associations still call for the strengthening of laws, policies and enforcement measures. The ESA's annual report for 2009 calls for greater liability for ISPs that allow piracy, increasing clamp-downs on DRM circumvention tools and improving global enforcement of intellectual property rights (ESA Annual Report, 2009: 13). In South Africa, the situation around games counterfeiting does not seem to be dire. SAFACT reported that, in 2008, a total of 143 pirated games were seized (of these, 133 were PlayStation 2 and 10 were PC games) (SAFACT, 2008). This rather underwhelming total does not come close to matching the 145,000 units of other media (mostly films) that were captured. This may be to the low prevalence of computer technology, and the fact that gaming is still largely a niche middle-class hobby. Worldwide, however, extensive resources are funnelled into combating piracy. But Brad Wardell of Stardock Systems responds incredulously to this trend, stating that the PC games industry is unique in catering to and focusing so many resources on 'the hard core gaming crowd... despite the fact that they're not the ones buying most of the games' (that is, after often pirate users) while overlooking many legitimate customers (Wardell, 2008b).

3.4 DRM in games

DRM systems and games have been closely linked since the first cartridge-based consoles. Before standard formats like the CD became popular, DRM was largely enforced through the use of differing file formats and console cartridges that were physically incompatible with other console types. However, the rise of computer gaming, and the format's easy manipulation and interoperability meant that DRM measures became more advanced as copying grew easier. In the face of insurmountable legal problems, 'the gaming industry now relies on technological mechanisms to deter, detect, and prevent piracy' (Myles and Nusser, 2006: 119). Unlike with other forms of software, games companies use and encourage the further use of copyright protection. 'In fact, the gaming industry, which has been among the most proactive on this front, builds copy-protection measures into video game consoles and embeds corresponding access codes into the software' (Lopiccolo, 2005: 2). Copy protection is not inherent or standard in other genres of software (Sinclair, 2006b). Game DRM can take the form of either hardware or software protection, sometimes used complementarily. Hardware

DRM has the reputation of being more effective (because fewer users can manipulate hardware than software) but raise the cost and create considerable inconvenience to the users (Myles and Nusser, 2006: 121). Types of hardware DRM include distributing media on proprietary hardware formats (for example, the PSP's UMD disc), requiring the game disc to be in the hard drive, physically locking the hardware up or requiring hardware add-ons to the game system (for example, the inclusion of the dongle DRM in earlier computer games). Software DRM has is more common, including region-locking codes, serial key or online authentication, limited installation authorisations, data obfuscation or encryption (Myles and Nusser, 2006: 121-4; Jansen, 2005: 4).

Bypassing DRM is a complex social and practical act. It is generally accepted, even by industry DRM developers, that any form of DRM will be cracked or bypassed eventually. This is partly the reason for the importance of the WIPO Copyright Treaty; by making the bypassing of DRM illegal, content owners have a recourse against this inevitable scenario (Coleman and Dyer-Witheford, 2007: 939). Hackers, crackers and modders have a high status in their community; respect is granted to anyone who can break a particularly difficult DRM code (Coleman and Dyer-Witheford, 2007: 938-9). Hardware can be modded (modified) or chipped (altered to include a computer chip) to allow it to play cracked games. The dongle's secret access code can be cracked and bypassed (Myles and Nusser, 2006: 121). Software DRM is easier to remove: executable game files can be modified to skip the authentication process, or games can simply be copied by excluding the DRM portion of the package. Serial keys can be generated automatically by special programmes that have decoded the game's serial key pattern. Pirate servers can be established to trick the main server into authenticating pirated games. As game protections become more sophisticated, so to do the measures used against them; there is a constant arms race between developers and hackers. Though developers state that DRM measures are necessary to protect their intellectual properties, analysts and gamers tend to disagree, providing several indicting arguments against the system (see section 3.5 below). Generally, the purpose of DRM is to prevent day-zero piracy (that is, piracy before or on the first few days of the game's release); after this time, the peak time for most game sales, it is a lesser concern for developers if the game DRM is cracked. Indeed, some developers later release patches that completely remove the DRM from the game (GamePolitics, 2008b; Varney, 2006).

The two most infamous brands of DRM are StarForce and SecuROM (see section 3.6 below). StarForce was developed by the company StarForce Technology (Scott, 2006: 28). It is generally used in Windows applications and has been present on over 150 games (Varney, 2006). StarForce is detested by knowledgeable gamers due to the consistent and wide-ranging set of problems that accompanies it (Scott, 2006: 28). Coleman and Dyer-Witheford corroborate that 'StarForce... became notorious for causing problems, from hardware crashes to disabled CD and DVD burners' (2007: 940). Many technically knowledgeable people have gone so far as to refer to the programme as

malware (malicious software) or as a rootkit, as it can make a computer vulnerable to access by third parties and to attacks on it by malicious viruses (Scott, 2006: 28; Varney, 2006). The key complaints about StarForce are that it is installed without the user's prior knowledge and permission, does not uninstall when the programme requiring it is removed, and can be tricky and dangerous to remove manually (Varney, 2006). Scott outlines the complex steps necessary to remove StarForce: they involve a fair bit of computer knowledge, such as accessing system files and clearing the registry (2006: 28). Australian publisher Aspyr apologised in 2006 for using StarForce on several Stardock Systems games because of the rash of complaints received (Sinclair, 2006a). SecuROM is a form of DRM developed by Sony that it used primarily in Windows-based computer games. It was used infamously not only on *Spore* (see section 3.6 below) but also controversially on the hugely popular games *BioShock*, *Mass Effect* and *Crysis* (Fry, 2009). Like StarForce, it caused a multitude of problems, including crashes, interference with the user's firewall, misrecognition of legitimate software and system instability. SecuROM is responsible for limiting the number of serial key activations possible, and requires that a game be authenticated every time it is installed or updated (Sutain, 2008). The programme is particularly nefarious because it installs itself to the Kernel of the computer's hard drive (the control centre of the system) and can therefore exercise power over virtually all lesser functions and programmes (Sutain, 2008). Reclaim Your Game, a website that offers information about games that contain DRM, lists five class-action lawsuits that have been filed against EA for its use of SecuROM in *Spore*, *Mass Effect* and other games (Reclaim Your Game, 2008).

3.5 Challenges to DRM and gamer rights

Gamers, scholars and industry experts have been very vocal in their criticism of DRM. Some of the indicting criticisms are that '[a]nti-copying protections for PCs add to game costs, slow game play, interfere with normal computer functions and can be highly intrusive, disclosing entire hard drive contents and all network activities' (Coleman and Dyer-Witheford, 2007: 940). Especially serious is that 'these technological protection measures place an unreasonable burden on consumers by creating security risks for their computers and potentially preventing them from installing the software that they have purchased' (Fry, 2009). While each DRM system has different effects on the users, most can be blamed for at least one of these problems. The majority of DRM simply causes hassle and inconvenience to the end user. However, other problems can arise in future: for example, some older DRM programmes are not compatible with current operating systems; or, if the online DRM verification server goes offline permanently (which most eventually will do) the game will no longer be able to verify itself, becoming unplayable. Some game developers are generous enough to release a DRM-removal fix if this is to happen, but they are under no obligation to do so. In addition, all circumvention of DRM systems is perpetually illegal under current legal regimes, which may cause severe problems when the games eventually enter the public domain.

In the past decade or so, some of these complainants have started the drive for recognition of gamers' rights. These rights take on a variety of characteristics, and include rights about what games companies should be required to provide (e.g. game quality, regular updates), what gamers should be allowed to do with their purchased games (especially regarding reselling) and what game developers should be held accountable for (e.g. use of damaging DRM systems). The year 2000 saw the creation of a very in-depth list of rights for online MUD and MMO players, mostly relating to gameplay elements, but also to technical and quality issues (Koster, 2000). David Wong created a similar list in 2007, which again focused on gameplay, developer honesty and quality (Wong, 2007). Even more importantly, Stardock Systems has created a Gamers' Bill of Rights initiative as a voice from inside the industry: Brad Wardell includes such elements as the exclusion of unnecessary DRM and the right to demand a finished, quality product from developers (Wardell, 2008a: 16-17). Other approaches have also been taken. For example, Hal Halpin of the Entertainment Consumers Association insists that DRM measures should be made explicit on game packaging to protect consumers against unwanted, secretive and invasive DRM programmes. He also believes that game companies should standardise the content of the EULAs so that customers know what terms will apply to the given game (Kuchera, 2009; see also Yeh, 2009). More drastically, gamers have organised themselves to act out against problematic DRM systems by encouraging mass piracy of a game, or spreading the word about its problems in online discussion forums (also see section 3.6 below).

3.6 EA: Miss and a Hit

Games distributor Electronic Arts (EA) provides a useful example for studying the difference between heavily DRM-restricted and DRM-free products. This section will examine two similarly popular EA games: *Spore*, released in 2008, and *The Sims 3*, released in 2009. This analysis will show how extreme gamer dissatisfaction with DRM harmed the first game, while the more lenient copy protections of the second were applauded. In *Spore*, the player takes on the role of an omnipotent being whose goal it is to evolve a civilisation from its earliest roots to the space age. The game progresses through several distinct stages before the final space-travelling level is reached. In *The Sims 3*, the player controls a family living in a neighbourhood, and caters for all of their day-to-day needs (eating, finding a job, making friends and so on). While there is no defined end-goal, the player continues to improve the characters' abilities and earns more money, which can be used to purchase homes, furniture and other extras. Both games allow the player to continue playing indefinitely, both appeal to a casual and family demographic, and both were widely marketed, promoted and anticipated before release.

Spore used a version of the SecuROM DRM, standard on several EA games (Fry, 2009). The game was limited to only three new installs per license key and had to be verified online before it could be

played, as well as every ten days after installation (Yeh, 2009: 2). Worst of all, the use of SecuROM was not disclosed anywhere on the packaging or in the EULA, meaning that it would be installed in secret, without the knowledge or permission of the computer owner (Yeh, 2009: 1-2). The disastrous application of the DRM was evinced in the constant loosening of limits: the original three installs were raised to five, before which the limit was removed altogether; online verification was no longer required every ten days (Pham, 2008). Despite these concessions, fans who had purchased the game found that many problems relating to the DRM were still evident: limited installs quickly affected those with computer problems, while SecuROM itself made the game slow and unstable to play (Fry, 2009). In protest, these gamers collectively initiated two actions: first, they spammed Amazon's *Spore* page with one-star ratings and bad reviews to lower the good standing of the game; second, they encouraged mass piracy of *Spore* (even by those who had already purchased the game) to send an anti-DRM message to EA (after all, the pirated versions had had their DRM stripped and were thus not fraught with the same problems as the legitimate version) (Greenberg and Irwin, 2008). Through this, *Spore* received the dubious accolade of being the most pirated game of the year, receiving an estimated record-breaking 1,700,000 downloads in just three months (Fry, 2009; Ernesto, 2008). In addition to the mass online protest and negative sentiment that was generated towards EA and *Spore*, several gamers initiated a class-action lawsuit against the company for the disruptions caused to their systems and hardware by SecuROM, the hidden nature of the DRM and the inability to remove it even if the game is uninstalled (GamePolitics, 2008b). Although there had been previous concerns, problems and media attention around DRM in games, the *Spore* scenario elevated this debate to new heights of public interest. It also spurred the gradual industry move away from implementing DRM as a matter of course, and challenged developers and distributors to implement it more smartly and leniently.

When EA published *The Sims 3*, it seems that the company had responded to player outcry over *Spore* (Pham, 2009). They reconsidered their anti-piracy strategy and the game was distributed with fewer, simpler and less invasive forms of DRM. Instead of using SecuROM, EA opted for using a standard serial key coupled with disc-in-drive authentication and did not require that the game be activated online (Caoili, 2009). Though some reporters have stated that the game would be DRM-free (see, e.g., Caoili, 2009), this is incorrect as serial keys and disc-based authentication still constitute DRM measures. Nevertheless, this proved a significant step for a company that had been notorious for its strict anti-infringement policy. In an even more open move, EA is currently developing and beta-testing *Battlefield Heroes*, an online multiplayer FPS that is completely free to download and play. The game allows users to purchase extra features and items, but these are purely cosmetic and not required for standard gameplay. This model of free software coupled with desirable content purchased through micro-transactions is discussed in section 6.3 below as one alternative to the standard content and copy protection model for games.

3.6 Difference of games to other media

On the most superficial level, games are no different to any other types of digital media because they are encapsulated in the same binary ones and zeroes as any other type of digital file. In fact, close to 80% of the respondents to the survey below considered there to be no difference, generally for this reason. However, there are more complex considerations that, when taken into account, reveal the unique nature of computer games. Central to these is the fact the games, as other software, exist purely as a digital medium and have no real value when expressed in any other form. Three other points, discussed below, emphasise that issues surrounding games should be considered partly separate to those relating to other forms of media.

First, the creation of games is a complex process that draws on the skills of many creative, technical and business professionals. The process is most similar to that of movies because both media generally require large budgets and involve a large network of related skilled individuals. Singleton affirms that

> [Games'] economic characteristics bear perhaps the closest resemblance to movies. Both are typical of the entertainment industry in that success of a product is hard to predict, and money lost on flops must be made up on hits. Both have in common high production costs and large file size, and both are often consumed once (2007: 6).

Aside from the simplest games, most contain an abundance of text, art, video, special effects and highly specialised programming. The development team can consist of dozens, or even hundreds, of programmers, coders, designers, modellers, artists and writers; added to this are the marketing team and the distributors. Another consideration is the creation of games for video game consoles: the developers must obtain a license to work on the manufacturer's hardware, and the particular hardware configuration may necessitate additional specialised programmes and personnel (Independent, 2009). In addition, advances in technology mean that the hardware base for games is always in flux, and constant innovation is needed to make full use of the best available technologies; as graphics, processors and storage become faster and bigger, developers must concurrently increase games' appearance and performance to remain on the cutting edge (Moore, 2009).

Second, games require an entirely different system of marketing and monetisation to other kinds of media. Crucially, games do not possess a performance aspect that can be charged for: while musicians can stage concerts and sell merchandise, film producers can screen movies in cinemas and famous artists, writers and actors can receive sponsorship deals, games do not have an equivalent outlet. Game merchandise caters to a small, niche market. This means that the only profit a game can generate is from its sales and corresponding services. These sales can take a variety of forms: aside from standard retail and digital sales, games can be bundled with hardware (enticing gamers to buy

the particular hardware and receiving a subsidy from the manufacturers), can charge a monthly subscription cost (a common practice for MMOGs), or can be distributed for free but contain the mechanisms for micro-transactions, whereby players can purchase additional items, content or extras.

Thirdly, games – and software in general – have always had an interesting and fluid relationship with copyright. Linus Torvalds essentially pioneered the idea of open-source, freely shared software with his Linux operating system (Bowrey, 2005: 84-5). Early games were often released under freeware or shareware licenses – both concepts allowed the user to distribute copies of the game legitimately and freely to anyone they chose (Taylor, 2002: 228). Unfortunately this is rarely the case with larger titles, as the monetary and time input into games has grown exponentially; however, the internet attest to the millions of smaller games that are available freely to players through websites and file-sharing networks. Another phenomenon related to games and copyright is 'abandonware' – a game or software programme that has been 'abandoned' by its creator and is no longer supported or is significantly outdated. Due to the increasingly rapid development of technologies, games and software become obsolete much sooner than other forms of media; despite their potential cultural significance, the high reliance of games on graphic and processing power as a key feature means that, as quickly as these trait improve, so quickly do older games become obsolete and outdated. Also, as game companies merge, split or close, they often lose track of who owns which intellectual properties, and it often occurs that older games become lost in the shuffle; essentially, they become orphan works. Gamers who wish to rediscover these games turn to abandonware sites, where older games are catalogued and available (often illegally) for download (while some rights-holders consent to having the downloads available, they generally require a fee; others simply issue cease and desist notices) (Coleman and Dyer-Witheford , 2007: 939-40). In this process, gamers infringe on the copyrights of orphaned computer games. Coleman and Dyer-Witheford refer to these pirates rather romantically as the 'renegade archivists of an ephemeral art form' (2007: 940)

4. PIRACY QUESTIONNAIRE RESULTS

4.1 Questionnaire outline

The original data for this thesis was gathered through the use of an online questionnaire hosted on FreeOnlineSurveys.com, under the title 'Research on Gaming and Piracy'. The questionnaire consists of 30 questions divided into six sections, and addresses gaming habits and preferences and issues surrounding DRM. The survey was launched on the 2nd April 2009. In total, 129 responses were logged; of those, 109 were fully completed and will be considered in this analysis. The remainder of the replies were not fully completed, likely due to the participants opting out of the survey once they had begun it. Significantly, a majority of these uncompleted questionnaires were interrupted after the section relating to piracy practice, resulting in a 15.5% rate of abandonment; it could be surmised that participants who answered that they did not engage in piracy felt that the remainder of the survey was not relevant to them and stopped answering (Deacon et al, 2007: 46). Calculating the percentage response rate is impossible; it is extremely difficult to track the actual reach of an online survey as many people may see the link but not view the site, or may visit the site and choose not to respond to the survey.

4.2 Sampling method

The online survey was distributed in three key ways. First, I personally emailed or messaged friends who are gamers themselves and some contacts in gaming-related industries, and propagated the link through my Facebook profile. The benefit of using social networking platforms for this research is that the link would likely propagate along chains of like-minded people with similar hobbies, and would reach them through the recommendation of a friend, which increases the appeal of and trust in the questionnaire. Second, I posted the link to the survey on several well-known and reputable South African gaming forums, most significantly on the Prophecy forum (forums.prophecy.co.za), which represents the largest local gaming community, and the website for Organised Chaos, a group that coordinates large-scale LAN events. Third, by encouraging participants to share the link, I sought to achieve a snowball effect by allowing the participants to spread the survey link to their own contacts and like-minded friends. David Deacon et al recommend this method for 'very closed or informal social groupings, where the social knowledge and personal recommendations of the initial contacts are invaluable' (2007: 55). In conducting a survey where participants must answer questions about personal behaviour and potentially illegal practices, such recommendation is invaluable. Additionally, while some gamers do congregate at various forums and online communities, many others choose to game without participating in community activities: for example, many Prophecy users and friends said they would pass the survey link along to a spouse or housemate who also games, but is not active in the online space. Furthermore, as gaming encompasses such a diverse range of activities and sub-

genres, the community is quite loose-knit and should definitely be considered informal. To illustrate, much debate arises around the topic of what constitutes 'gaming' and who could be considered a 'gamer'; this extrapolates further into a split between 'casual' and 'hardcore' gamers, gamers of different platforms, as well as distinctions among genres, such as 'FPS gamers' or 'RPG gamers' (Wirman, 2007: 377; Kuittinen et al, 2007: 105; Portnow, 2009).

4.3 Questionnaire structure

The survey is best defined as an online self-completion questionnaire (Deacon et al, 2007: 66). It consisted of a mix of single-answer, multiple-answer and freeform text answer questions. This resulted in a batch of data that contained both quantitative results and qualitative insights. Where multiple selections could be made – for example when asking which factors are important when considering a game purchase – the option was given to answer 'Other' and to input a freeform answer; this feature was well utilised. Responses to freeform questions where survey-takers were asked to type up their answers fully were also frequently used and often delivered a high level of quality and insight. Overall, it seems that the majority of participants took the questionnaire seriously and invested time and thought into their responses, despite the concern that online surveys can be interpreted as 'frivolous and trivial' (Deacon et al, 2007: 71). I believe that this can be attributed to the fact that gamers are often computer- and internet-savvy, are comfortable with participation in the online medium, and consider online communication and participation normal and valid. As such, they likely valued the use of a medium that is convenient and accessible to them, and responded with much more enthusiasm than they might have to a paper or interview-based survey.

The website used to host this survey is FreeOnlineSurveys.com. It offers both a basic free package and a more comprehensive paid-for version of the service. The latter was employed for this research. The website offered a high level of convenience at all stages of the survey preparation: the initial writing and structure, the propagation of the link, the survey answering, and the aggregation of the final results (Deacon et al, 2007: 69). This last feature has proven an invaluable aid to organising, decoding and analysing the data. An unavoidable failing of the website is that the questionnaire page can easily be closed without completing the survey (or the user's browser may crash, losing the entered data), allowing respondents to opt out; however, even this rate of abandonment offered some interesting insights, discussed in the following chapter. Some few participants noted that the website did not function properly for them, making it difficult to complete the survey properly. For these reasons, only the 109 fully-completed surveys are included in this analysis; the remainders were deleted from the sample.

4.4 Feedback

A major benefit to spreading the survey amongst acquaintances and on local forums was that feedback on the questionnaire could be received in real time, and corrections and amendments could be made quickly and easily. While none of the questions themselves were changed, some of the settings were modified to make the answering process easier; for example, the freeform text answer blocks were made non-mandatory, as many respondents either did not want to fill them out or had nothing to add. Overwhelmingly, the feedback on the questionnaire was positive and encouraging: many participants said that they found the questions interesting and expressed interest in seeing the results. The Prophecy forum topic (and its discussion) can be found at forums.prophecy.co.za/f4/survey-gaming-drm-66747. Private correspondence followed a similar vein, and an acquaintance at Organised Chaos also expressed a keen interest in the resultant data, as it is relevant to the organisation's attempt to prevent and discourage acts of piracy at their LAN events. Overall, participants found the topic of the survey current and relevant.

4.5 Concerns

Two main concerns arose from the use of the online questionnaire. The first is the question of confidentiality and the protection of participants' anonymity (Deacon et al, 2007: 71). Because this research topic relies on participants divulging honest information about potentially illegal behaviour, participants had to trust that their personal details would not be stored. For this reason, no personal identity data was gathered (even though it may have been useful to contact participants later by email for supplementary input). The introduction to the survey assured participants of their anonymity throughout. Aside from three broad demographic markers (sex, employment status and South African residency) the participants are completely anonymous. No concerns were raised during the study about the integrity of the researcher or the host site.

The second concern is that, by conducting the survey online, I may marginalise a part of the relevant demographic by excluding those who do not have access to online media (Deacon et al, 2007: 71). There are three responses to this. First, gaming is a diverse hobby that does not necessarily rely on community participation, and as such it would be difficult to identify a physical space for encountering an adequate number of participants; in any case, a physical meet would likely be arranged online first. Second, gamers are by definition comfortable – or at very least familiar – with computer and internet technology, and many use the internet for work or entertainment. Thus, an online questionnaire fits more easily into their schedules and environs, and is thus more likely to be answered. Third, although this data may present a bias towards computer gamers, this is mitigated by the fact that piracy is practiced most commonly on this platform, due to its ease and the wide availability of the appropriate tools and skills. In comparison, 'cracking' a console – that is, enabling it to play pirated games – is a much more technical and complex task, and often involves physically

installing a modified chip or erasing and replacing the device's firmware (Singleton, 2007: 2-5; Coleman and Dyer-Witheford, 2007: 938).

5. QUESTIONNAIRE DISCUSSION

5.1 Statistics

In total, 109 complete responses were obtained over a three-month period of April to June 2009. Three demographic factors were considered. First, of 109 participants, 99 or 90.8% were male. This correlates roughly with statistics of sex and gaming, where male gamers significantly outnumber female. Second, 72 participants – close to two thirds – were employed, while 34, or 31%, were students and only 3, or 2.8%, were unemployed. This generally implies that most participants are young adults or older, presuming that the category 'student' typically encompasses the ages of late teens to mid-twenties, and 'employed' participants are likely the same age or older. This will factor in crucially when examining the first hypothesis. Third, virtually all participants were South African residents; only 7 indicated that they were not. This is a favourable result for a survey that aims to target gamers in the South African context; non-residents' responses will be factored out when examining hypothesis 5, which deal specifically with questions about the South African situation.

5.2 Overview of gaming practices

This section will briefly examine the participants' expressed gaming practices, in order to frame the subsequent discussion. Participants were asked which platforms they used to play games, and were allowed to select several responses. Virtually every participant played games on the PC; only one indicated that he did not. The second most popular platform, by a considerable distance, was the console at 44 or around 40% of participants, followed by handheld consoles and mobile phones, close to equal at 16 and 15 players respectively. While none of the participants used all four platforms, 4 participants used three (PC, console and mobile phone) and 44 used both the PC and a console. It should be noted that the category 'console' implies a considerable range of devices – not only the currently available Nintendo Wii, Microsoft Xbox360 and the Sony PlayStation 3, but also a plethora of older game stations. However, for the current study, the distinction is unimportant because the devices are similar enough in purpose, price and availability, and gamers understand them to be a homogenous category. An overwhelming 81.7% of respondents play two or fewer games in the average month; close to 30% play 'less than one', implying that they either play no games or complete one game over several months. Only 5 respondents, or 4.6% of the sample, play more than five games a month. These statistics indicate that gamers play relatively few games compared, for example, to the amount of films and music consumed by the general public. This is most likely due to the high time input a game often requires, and perhaps due to variable availability and the high comparative cost of games. Whatever the reason may be for this, gamers must clearly exercise more discernment when selecting games to spend time on.

Participants were asked which channels they obtained games through, and were again allowed to select multiple options. The most popular method was through physical retailers, which 91 participants used. Curiously, the second most popular method was to copy games from friends, which 69 participants did, followed by purchases from online retailers, used by 55 participants. Two interesting points arise here: first, 101 out of 109 participants make use of one or another form of legal game purchase (even if they also obtain games illegally); and second, almost twice as many participants download games from the internet as make purchases from online digital retailers (44 versus 23). Of these participants, 13 made use of both methods. This statistic indicates that, for some users at least, bandwidth is available in sufficient quantity so as to enable downloading often-massive game files (but see section 5.9 below). The fact that some users still choose to download games illegally will be explored below.

Finally, participants were asked which factors influenced their decision to purchase a game. Unsurprisingly, the top three selections related to value-for-money factors: replayability (chosen by 67%), game quality (63%) and length of gameplay (61.5%). Clearly, when participants paid for games, they wanted to be assured that they would get a product that sufficiently matched their investment. Following value for money, participants were likely to decide on a purchase based on friend recommendations or reviewer ratings. Only 33 participants considered the presence of DRM in itself before purchase. However, the presence of DRM can affect several of the higher-ranking considerations (for example game quality and reviewer ratings) and 26 participants also stated that they considered whether the game would need to be activated online (which is a DRM measure in itself). In all, the fact that just over 30% of game buyers take the presence of DRM into account is not insignificant, considering that virtually all games have some or other form of protection – anything from low-security CD keys to complex online activation that requires a user account.

5.3 Overview of piracy practices and understanding

78 participants in this study admitted to computer game piracy, while 31 stated that they did not pirate; significantly, LaRose and Kim found virtually the same prevalence (71.3%) when they studied the self-assessed piracy habits of a group of student participants (2007: 271). This seems to indicate that attaining roughly a 70% prevalence of piracy is a good representation.. When asked how many pirated games they obtained in an average month, 35 said that they did not obtain any (indicating that even some participants who pirate games do so very infrequently), while 62, or almost 57%, obtained 1 or 2 pirated games; this correlates quite closely to the number of games played per month, where 57 participants (52%) played 1 or 2 games and 32 (29.3%) played fewer than 1. Only 12 of the total number of participants pirated more than 3 games a month; of these, only 3 pirated more than 5. Students showed the highest rates of piracy and number of games played, while employed participants were generally ranked, at 57%, in the range of 1 to 2 games pirated and played. Virtually all

participants also pirated other forms of media, with music and TV series coming out most frequently (84 participants each), followed by movies (78) and other computer software (73). Ebooks ranked last, but not insignificantly, with 47.

One of the most fascinating results from this survey is the fluid nature of participants' understanding and framing of piracy. As will be discussed below, this fluidity is the result of several interlinking factors: the participants' own perceptions of right and wrong actions (participants are disinclined to think of actions that they consider fair to be piracy), the rhetorical constructs surrounding the field, peer perceptions and surrounding social norms, and even such simple factors as habit and consequences (participants pirate from a young age, and consider the chance of being caught to be minimal). This sometimes leads to contradictory data, which must be analysed and unpacked. The introduction to the thesis defined piracy as 'obtaining an unauthorised or infringing copy' of a game. Out of 109 participants, 78 participants, or 71.6%, admit to pirating computer games; however, in the very next question, 86 participants state that they share games with friends or online (8 with friends and online, 78 with friends). Richard Stallman refers to social file-sharing as 'a constructive activity that strengthens social bonds' (1996, 294); it is possible that community sharing of games (for example among friends) is not considered piracy because of its positive connotation of sharing resources. Personal experience has shown that sharing between friends is widely practiced and is rarely, if ever, frowned upon or done hesitantly; in fact, many gamers encourage friends to copy games that they particularly enjoyed. It could well be argued that, for example, South African gamer culture straddles both the economic deficiency and the social collectivist arguments. Not only did over two thirds of respondents to the survey below cite the excessively high cost of games as a reason for piracy, but 79% also indicated that they freely shared games with their friends (while none shared exclusively online). Additionally, many studies have found that the social or sharing aspect of piracy was much more important to pirate users than the possibility of obtaining free material (see, e.g., LaRose and Kim, 2007: 268). Furthermore, of those 31 participants who answered that they did not pirate games, 6 answered concurrently that they copied games from friends, 3 copied games at LANs and 5 downloaded games from the internet. Furthermore, of these participants, 4 admitted to obtaining 1 or 2 pirated games a month, and 1 admitted to getting between 5 and 9 games. Several even answered affirmatively that they pirated certain games on principle. Clearly, then, there is a discrepancy in either the participants' understanding of the concept of piracy (that is, they do not know what actually constitutes it), in their honesty in responding to certain types of questions or statements, or in their perception of their own acts. Possibly, sharing just with friends is not considered piracy – in fact, 11 of the 12 who answered that they did not pirate games answered that they shared games with friends; only one said that he shared with friends and online. Brett and Shane Lunceford report on several studies that have found that file-sharing itself is considered a normal and acceptable part of social interaction, despite the media framing campaign waged by entities such as

the RIAA (2008: 39). These results show that normative studies relating to piracy exist in a murky domain where both social and legal definitions of the phenomenon vary depending on context, understanding and the honesty of participants. The question of anti-piracy rhetoric and framing in the mass media was dealt with above in section 1.4.

5.4 Hypotheses

The analysis of the research data will focus on proving or disproving the following five hypotheses: (1) the motives for piracy go beyond simply wanting to obtain free games; (2) gamers are aware of DRM and feel strongly negative about it; (3) gamers sometimes express social activism through acts of piracy; (4) gamers justify their acts of piracy, or do not consider them immoral or wrong; (5) South Africans are well-informed about the legalities of copyright infringement and have a unique approach or relationship to piracy.

5.5 The motives for piracy go beyond simply wanting to obtain free games

'Had no choices but to pirate.'

The belief that gamers pirate only to obtain free games arises from the widely-spread institutionalised rhetoric that imagines pirates of all forms of media as social miscreants and thieves (see the discussion of this rhetorical construct in section 1.5.1 above). For example, Marlize Jansen writes, self-evidently, that

> Users did not want to pay for the privilege to access a protected work and reverted to hacking or circumventing access controls in order to gain free access to works (2005: 4).

This section will aim to shift preconceptions and present a more holistic and balanced analysis of gamers' actual motivations for acts of piracy. In this study, 71.6% of respondents admitted to piracy. Questions of price and financing are relevant here, and many gamers do pirate for financial reasons, but these are by far not the most prevalent motives. This research has identified a considerable range of motives for piracy. The most prevalent of these – discussed below – are the perceived excessive pricing and inability to afford games, 'trying-before-you-buy' or testing a game's value and quality, lack of local availability and social or peer pressure. Moez Limayem, Mohamed Khalifa and Wynne Chin report that Cheng et al, similarly, found that the main reasons for software piracy were expressed by participants as 'software too expensive, want to try out software, and cannot afford the software' (2004: 416), which correspond to the first and second most frequent motives in this study. Equally, an earlier study by Hsing Cheng, Ronald Sims and Hildy Teegen found exactly the same ordering of motives for pirating software programmes: first, because the software was too expensive and second, to try the package before buying (1997: 56). Motives relating to the unwieldiness and presence of DRM, which often frustrates gamers and forces them into piracy, will be discussed in 5.6 below.

The retail price of games has risen considerably in recent times: where once games cost no more than R300 regardless of platform, it is now not uncommon to see PC games retailing for R400 to R450 (the PC version of the recently released *Call of Duty: Modern Warfare* 2 retailed for between R430 and R500), and most console games begin at R500 and can even eclipse R1000, even on some standard editions. One participant stated that 'most [g]ames are just so overpriced its[sic] insane'. Excessively high prices and their resulting 'unfairness' in the ratio of income to software cost was cited by Alina Collisson as one of the leading reasons for piracy in Eastern European countries, the conditions of which form a good analogue for the situation of many software-buying South Africans (2004:1013). Shin et al corroborated these findings (2004: 105). Others participants in this study said that

- Games are too expensive to play. Games [I] play online will definit[e]ly purchase. I have a console 'PS3' and [I] think it is absurd that games are almost R1000 when released. If piracy were available on PS3 [I] would most likely have had a few titles like this pirated as [I don't] see how they can justify a R800-R900 pricetag.
- If I could afford them I would be more likely to buy them. Their cost is prohibitive, and varies too much for me to justify paying the (higher than average by far) costs in my local retailer.

Furthermore, one participant felt that, '[e]ssentially, if a PC game is more than R400, its need[sic] to have a very good reason to be priced that high or else it gets pirated.' Although there has been much encouragement to price software products according to the financial means of the region they are sold in, to allow for the maximum dissemination of legal software, this has very rarely actually been implemented (Lidovho, 2006: 372). In response to the direct question of why participants pirated games, 73 answered that at least one of the factors was the 'prohibitively high cost' of games. One participant stated that he pirated, on principle, '[g]ames that cost a lot more than the normal... Microsoft games used to be R550 vs the normal R300 of any other distributor'. Despite this clear sentiment that games are priced unfairly high, Activision has recently announced that their popular releases – including the highly-anticipated *Call of Duty: Modern Warfare 2* and *DJ Hero* – will be priced higher than the standard retail prices (Ivan, 2009). The CEO Bobby Kotick even stated that he would prefer to raise prices even further, citing the rate of pre-orders as evidence that consumers are happy with the pricing standard (Ivan, 2009).

However, many gamers expressed an awareness of the costs that are involved in game production and seem to value the medium above others. For example, one participants stated that, 'pirating TV series [I] have less of a problem with as if [I] want to keep up to date with a show [I] have to wait a year living in SA which is a crock.' Another expressed this sentiment more acutely:

> I just find it 'harder' to pirate games, I'm not sure why. Could be that I value games more than music, movies etc and take more pride in my collection of games than any of the other mentioned media.

A third stated that

> [If] I come across a game (or music for that matter) that I like then I often buy it after playing it, even though I got a pirated copy. But I don't buy the films or TV series I pirate.

These gamers simply seem to set upper cost limits for themselves, based on how many games they can afford and what they consider fair prices to be. Very few state that they cannot actually afford games at all. In fact, only 68 of the participants (62%) would consider buying a game rather than pirating it if the price was discounted, a surprising result when considering how prevalent the perception is that gamers consider games to be too expensive. This response constituted only 20% of the total selections made when the participants were asked what would incite them to buy over pirating. This seems to indicate that pricing and cost are merely part of the consideration of piracy, and not as significant a contributory factor as anti-piracy rhetoric deems it to be. In fact, based on the comments above, gamers seem to be more loyal towards game products and developers than other kinds of media, and seem more willing to purchase games due to this heightened appreciation. Many participants expressed very clearly that they would not buy a game at all if it was not 'worth it'.

This reasoning segues into the second most prevalent, and the most often expressed, motive for pirating games: try-before-you-buy or, in other words, testing or demoing a game before purchasing it. Sudip Bhattacharjee, Ram Gopal and Lawrence Sanders found that the same justification is given by consumers who pirated music (2003: 107). Games do not undergo the same vetting process that movies, TV series and music products are able to: consumers can view movies at a cinema or watch TV series at home to discover if they like a particular show before purchasing, and many music stores allow customers to listen to the full CD of a band before making their purchase; music is also previewed through music videos. However, the equivalent for games is the 'demo', a short prelude or introduction to a game that the players can test out, but one that rarely contains all of the significant features and draw cards of a game. Therefore, with games, prospective buyers can only test the product in a very limited way, whereas with movies, music and others, the entire product can be scrutinised beforehand. Participants expressed this in various ways, such as in the following independent responses:

- I pirate to try out a game, if I like the game in most cases I will go buy it.
- If the game is good, I'll buy it, otherwise I'll delete it.
- I won't pay for a bad game. If it is good I'll buy it. Simple.
- Wanted: Weapons of Fate... played it and it sucked. Would've wasted my money.
- If the game is good I buy it. If it suck[s] then the developers do not deserver[sic] to receive my money.

- [I pirated] Bioshock... wanted to see if I liked it before I spend the money. As a result of being a strict try-before-you-buy guy, I pirate the game, and buy it if I like it.
- I would like to try a game before spending over R400 on it. If I play a game for 5 minutes and hate it, whats[sic] the point of spending R400 on it[?]
- Refuse to buy something I hate.
- Sometimes [you pirate] because you are curious.
- Some developers have put a lot of time and effort into their games, which is only truly revealed after installing. These games I usually buy later.

Trying-before-you-buy was the second most chosen response when participants were asked why they pirated games: 69 chose this option, after 73 who cited prohibitively high cost. Personal observation indicates that the process of assessing a game's worth was a highly subjective one, based on various criteria depending on the gamer and the type of gameplay they enjoy. Several acquaintances refused to buy *Call of Duty: Modern Warfare* after pirating it because they discovered that the game took only five hours to finish; others were happy to purchase quality games such as *Dragon Age: Origins* or *Mass Effect* even after they had completed them, both to be able to retain a copy of an enjoyed game and to reward the developers. In addition to this, the vastly prevailing sentiment (as evinced in the quotes above) was that gamers would tend to buy games they had pirated and enjoyed. This is reinforced by the response to the question of whether participants ever bought games they had previously pirated. The overwhelming majority of participants answered that they bought these games at least occasionally: 37 participants seldom bought the games, 42 bought them often and 7 always bought them afterwards; in total, 86 participants made ensuing purchases, and most of the remainder who never buy games they have pirated consist of people who do not pirate at all in any case. This is also reflected in post-rental sales in regions that allow the rental of games: 'about 79 percent of rentals in the United States lead to sales' (Singleton, 2007: 5). One additional positive effect of this process is that it serves as a free advertisement for a game's subsequent follow-up products, such as expansions and sequels, as well as other games by the same developer. For example,

> I pirated C&C [Command and Conquer] Generals. It impressed me and caused these legal purchases: C&C Generals, C&C Zero Hour, C&C 3, C&C Kain's Wrath, LOTR Battle for Middle Earth 1&2 plus their expansions.

In addition, young players who as currently not able to purchase games legally may pirate the games they want, and through this become introduced to genres and game lines that they might in future be more inclined to buy, due to familiarity. Personal observation corroborates this: while friends would share widely and freely as youths, this practice lessens with age, when simply buying a game is often more convenient and not hampered by financial limitations. One participant admits that 'I used to

pirate games a lot when younger however now... if [I] play it properly [I'll] buy it.' Indeed, some software developers like Adobe make free software available to students (Gallagher, 2007). According to Lidovho, many popular software products became successes due to their widespread piracy and the consequent growth in demand for support, additional products and services (2006:364); also, it is common that '[p]iracy is tolerated by software publishers and copyright holders when it is an aid to their marketing strategies' (Lidovho, 2006: 375). In total, these statistics indicate that, while gamers may be motivated in some part by financial concerns, this does not necessarily imply that they aim purely to acquire free products. Close to 80% of gamers make subsequent purchases, indicating clearly that other motives are at play. Typically, most gamers expressed a combination of complementary motives, such as one who wrote

> I usually only pirate to test, unless the game is ridiculously expensive, like R500 or something. If I enjoy the game I buy it; regardless of price... If Diablo 3 was R600, I'd buy it in a heartbeat. If I'm only going to play like 5-10 hours, I usually just pirate then delete.

A response like this indicates that gamers perform very subjective analyses of cost (both in terms of money and time spent) before deciding to purchase a game, and that pirating the game plays a crucial role in weighing the value of the product. For many gamers, official demos 'are not good enough', as often these present only a small fraction of the game's world, mechanics and progression.

A further motive for piracy was expressed as the lack of availability of certain rare or new titles locally. The first can either be expressed in terms of actual inability to access the desired game or medium – as explained by a participant who states, 'why do you pirate? Bad availability and/or exotic materials (translated videos, or rare/discontinued music)' – or in terms of a higher degree of inconvenience – framed as follows:

- It's really all about what you are not willing to pay for, but want. I will pay for a game, because I can buy it in Rands and have it sent to me within 2 days, but I won't use my credit card online to buy US software and then wait for 5 weeks. Rather download a pirated version.
- [M]ost of the games I have pirated are games I am unable to easily purchase.

Another participants added that he pirates 'small games [I] could not legally obtain from any reasonable source.' In these examples, gamers feel that piracy is easier and more convenient than attempting to track down and acquire scarce legal software and games. Equally, many gamers turn to piracy because it is much more convenient, even for readily available titles, to download or copy them from friends. Other factors, such as the presence of DRM, can increase the drive towards convenient pirating:

- It's easier to play the illegal version than the legitimate copy. I have purchased a few [games that use DRM] after the DRM has been removed by developer patches.

- Occasionally, if unavailable locally or DRM too problematic I will pirate a game instead of buy it.

It stands to follow that if products were more readily available and more conveniently accessible, these players might choose to buy these games legally over pirating them. Gamers do not seem to be inherently opposed to paying for games; in fact quite the opposite has been expressed. When some do pirate, it is '[m]ore for the convenience' than for the sake of pirating a game on principle.

Another motivation that became evident from the research is the pressure some feel to pirate a game for the purpose of playing it socially. To explain, one participant stated that he pirated '[s]ome games that I didnt want to play... I had to at a [LAN] because it's all thats being played[sic].' Several other participants added that, for example, 'I only pirate games for use in a LAN... if the game is good, I'll buy it, otherwise I'll delete it' or that a game 'was needed to play at a LAN'. At a social event such as a LAN, participation in gaming activities is paramount and all players must naturally possess and play the same game. While this would be a contentious issue if only legally bough copies were available, having access to pirated games means that this valuable community participation can occur for each member, regardless of available resources. It seems that players who would ordinarily not buy a certain game pirate it for the short-term purpose of playing it at the LAN, and then delete it afterwards. In many cases, this cannot be considered a 'lost sale' because the gamer expresses no interest in the game itself, but only uses it as a means to facilitate social interaction. However, this process may have the ancillary positive ripple effect of introducing a player to a game or franchise. A similar finding was reported by Myles and Nusser in respect of music piracy:

> [D]ownloaders of free, so-called 'pirate' music seem to be more motivated by the social aspect of trading and sharing music with other music enthusiasts rather than the proposition of saving money on music purchases (2006: 119).

In conclusion, the motives for pirating games are myriad and varied for each gamer, and many express important non-monetary reasons for doing so. This strongly favours the hypothesis that many gamers pirate for non-monetary reasons. It is telling that only 10 participants responded that they pirated because they felt entitled to play games and that – presumably – they should not be required to pay for them. Most other participants treated piracy as a means of deriving benefit from games without the initial monetary risk, and were readily prepared to compensate game developers if the product was deemed worthy – though this assessment is entirely subjective and unmonitored. This allows the community to 'vote with their wallets' by compensating those who have created quality products, and thus driving the industry to innovate and improve their outputs. While this process may not always lead to positive outcomes – some smaller developers may be overlooked or may not have the marketing spend to compete with big-name titles – it does at very least provide a barometer for current trends and interest. Overall, it seems that considerably less harm arises than is popularly

assumed: if gamers generally pirate 1 or 2 games a month, and close to 80% of those gamers make occasional subsequent purchases (45% make purchases often or always), then it seems apparent that a lot is being inputted back into the industry. It may even, radically, indicate that piracy – or at least, the free spread of games – should be encouraged, as gamers might not risk paying for an untried product, but are often willing to pay later for one they enjoyed. The possibility of using such a model is discussed in Chapter 6 below.

5.6 Gamers are aware of DRM and feel strongly negative about it

'DRM is just plain wrong!'

Game developers and distributors often go to great lengths to protect their copyrighted intellectual property, and have used a wide range of both physical and software-based means of effecting this protection (see section 3.4 above). Concurrently, hackers have been breaking down these systems to free the games from the countermeasures and enable them to be copied and played illegally. This section seeks to clarify how familiar gamers are with DRM measures, and to explore their opinions and feelings towards their inclusion in games. When asked if they were familiar with DRM, close to 90% said that they were; of these, 58.7% considered themselves to be very familiar with DRM, while an additional 29.4% said they were moderately familiar. Overwhelmingly, this shows that gamers' awareness of the presence and use of DRM measures is high and that gamers take an interest in facets of the final product that go beyond just the game itself. This high awareness can in part be contributed to the heightened media attention around DRM, especially in such high-profile cases as EA's *Spore* debacle (discussed in detail above in section 3.6) and Sony's illicit use of rootkit DRM software on some music CDs, which led to a class-action lawsuit against the company (Welte, 2005). Additionally, many gamers have become familiar with DRM through personal negative experiences: 50 participants, or 46% of the sample, have been personally – and negatively – affected by the use of DRM. This section will explore the following points: how much gamers actually know about the DRM measures that affect them, the negative terminology that gamers use to refer to DRM, and the ways in which some gamers feel forced into piracy by DRM.

Several gamers express very well-informed views about DRM. Gamers are generally more knowledgeable about computer usage and features than casual users because they tend to be more technologically proficient, and as such are likely to understand issues related to DRM more easily than non-gamers. Gamers in this survey often referred to themselves as IT professionals, or hinted that they frequently modified, rebuilt or formatted their computers, indicating a high degree of skill and knowledge both of software and hardware. Several participants named SecuROM and StarForce as particularly disliked programmes, and many were able to explain the effects of DRM on their computer systems. Many also seem to have informed themselves about the DRM associated with a

game before purchasing it, and some who had negative experiences vowed that they would pay attention to this factor from that point on:

- I once didn't purchase a game that I otherwise would have because of very bad press about its DRM on the internet.
- I vow never to buy a game with [StarForce].
- I have since then vowed that I will never buy any games featuring DRM. If I buy a product, I have the right to use it as many times as I like.

Gamers were not only aware of DRM from personal experience, but also showed awareness of the wider debate around this contentious issue. One of the most important points to remember, key to much of the anti-DRM sentiment, was expressed by the following responses:

- DRM does not curb piracy. If it did these games would not be available at my flea market. DRM only hurts the legitimate users.
- DRM... affects my gaming experience, I like to buy a game and know I own it, not that I have rented it for 3 installs or whatever. Especially when the pirate copies don't have any limitations in terms of installs or activations.

Because DRM is, by definition, stripped off pirate copies of a game, problems relating to DRM only affect those who purchase the legitimate software; pirating users experience none of the quandaries expressed in this chapter. Even MMOGs and games that require frequent online verification can be played for free by using pirate servers that trick the official servers into verifying pirate accounts. Thus, no type of DRM is completely uncrackable. This observation alone should speak strongly against the use of DRM at all, and it should be kept in mind during the subsequent discussion.

Some gamers expressed the view that DRM itself had forced them to pirate games. There are two aspects to this: first, several gamers pirated to enable the use of software that they had already bought, and second, some pirated to protest the inclusion of certain types of DRM measures in game files. While the latter will be dealt with more fully below in section 5.7, it will be mentioned briefly here in conjunction with the former. One participant expressed the following:

> Bought [Football Manager 2009]. Pirated it when SI [Sports Interactive] messed up the online activation. had pre-ordered and paid R400 for it, yet pirates were playing before me, so I decided to just pirate it.

Several others have experienced a similar situation, expressed variously as:

- [I bought] BattleField 2142. The online activation aspect didn't work. Had no choices but to pirate.
- DRM interfered with the legal copy I bought.
- StarForce nuked two DVD drives, resulting in financial loss. I can also not play my legally purchased games that use StarForce out of fear of losing another DVD drive.

- Unable to play games I legitimately bough[sic] due to DRM conflicts with personal computer settings and software which was resolved by obtaining a pirated version.
- DRM install[ed] rootkits and other malware on my personal system.

In the above examples, and many more not listed here but offered in the questionnaire, gamers experienced a situation where they paid for legitimate copies of software, but were then forced to resort to acts of piracy to enable the game to run. Not only is this highly inconvenient and frustrating, but it leaves the gamers with the decision of either forfeiting money already paid for a game that does not work, or breaking certain regulations and the terms of the End User License Agreement (EULA) by pirating to enable the game. A patch or game fix resolving these issues may take a while to be developed, if it is at all; some other issues, such as the necessity of online activation, cannot be resolved so simply. This makes game playing especially difficult for gamers who do not have a permanent internet connection at home. Participants expressed their dislike for this system as follows:

- I had to purchase a home net connection just to play a game I bought myself. In the end it was just cheaper to crack it.
- [I]nconvenience due to no internet access at home
- Steam: Sometimes the Go-Offline mode does not work correctly and you are unable to play your games until internet is available again... It is less hassle to install a pirated game sometimes than to get a title with online activation to work

Some games require online registration before the game is fully installed, while others constantly 'call home' to the developer's server to confirm that the copy is legitimate – if the connection is lost, the game is shut down and cannot be played again until it reconnects with the parent server. This method of DRM has two additional hazards: the server can become overloaded or too busy to allow the game to be played (occurring at peak gaming times when players are home), or the server might be closed in the future, after which the game can no longer be verified before play and essentially becomes defunct. It is possible for developers to release patches to counteract this but they are not obliged to do so and, if they decide not to, there is little a player can do other than to turn to piracy and crack the game.

Another point of contention for gamers is that DRM programmes are either incompatible with their gaming systems, or cause instabilities. Some gamers might not be able to run older games on new operating systems due to the incompatibility of the DRM with the system, even though the game itself would ordinarily run properly; the converse is also imaginable. DRM can also interfere with proper operating-system functions. Some participants explain that:

- Certain DRM like Star Force (present on older games) is not compliant with Vista ... need to find workaround to get classics to work.
- Installed [*Spore*] and PC would no longer boot into Windows.

- I had a game once install low level device drivers 'to prevent illegal copying' which resulted in system instability

Incompatibility can also arise between the DRM and other installed programmes:

- Game would refuse to run with Daemon tools or other [CD]-imaging software installed.
- One of my original games used to crash due to its DRM not being compatible with other software on my [PC].
- Unable to play games I legitimately bough[sic] due to DRM conflicts with personal computer settings and software which was resolved by obtaining a pirated version.

Conflicts can also arise between the DRM and certain hardware, which can even lead to physical damage to the hardware:

- [C]ertain (brand new) devices stopped working.
- Game crashes due to DRM incompatibilities with CD/DVD-ROM drives.
- [T]hings can go wrong like viruses destroying you OS or Hardware going faulty.
- StarForce nuked [destroyed] two of my DVD drives.
- StarForce nuked two DVD drives, resulting in financial loss.
- I bought the original game and then obtained a pirated copy in order to avoid... DRM incompatiblilities/crashes[sic].
- Ever since I've uninstalled [StarForce], my new drive has lasted much longer.

The problems relating to StarForce – computer crashes, programme malfunctions and physical hardware damage – have been noted by other gamers the world over, and have been documented in gamer publications (Scott, 2006: 28). Each of these three problems prevent the game from being played, and often interfere with the normal functioning with the computer system overall. As some participants have noted, this can lead to financial setbacks (when replacing damaged optical or hard drives) or unnecessary time wastage (formatting the PC or trying to get all programmes to run concurrently). In these situations, gamers feel justified in pirating games that they had already purchased, simply to bypass the hassle and damage of DRM. It should be noted that there is no recompense available to gamers who have suffered financial loss due to damage caused by DRM; additionally, most retail outlets do not accept returns based on system incompatibility issues. Even when gamers turn to the official support structures for a game, the response can be ineffectual:

> I purchased Mass Effect before knowing about DRM and after having a streak of bad luck [I] ran out of installation authorizations, requireing[sic] me to contact EA customer support... they took 2 months to reply with a yes to my query for more activations.

When investigating how gamers felt about DRM, it was interesting to note the descriptive and emotive terms that they used when describing the products and experiences. DRM was described several times as 'restrictive', 'invasive', 'heavily intrusive' and 'obscure', as well as 'draconian', 'problematic' and 'ridiculous'. One frustrated participant – as shown in the titular quote of this section – called it 'just plain wrong', and another wrote that *Spore*'s use of DRM was 'a disaster'. When describing encounters with DRM, participants often felt 'irritated' and 'hate[d] it passionately' because it 'interfered' with their enjoyment of their game and system settings. One even referred to DRM generally as 'malware'. The language used overall indicates varying degrees of hostility. Not a single positive comment about DRM was expressed; those who had an opinion universally expressed a negative one. Apart from the wholly negative sentiment towards DRM, the type of language indicates that gamers feel that DRM measures violate certain perceived rights and expectations. Words like 'invasive' and 'intrusive', both of which appear several times, indicate a violation of privacy, while other terminology such as 'obscure' and 'ridiculous' indicates that the measures seem senseless and cryptic, potentially hiding malicious properties and not allowing users to understand the consequences of using the software. Participants object both to the presence and the functioning of DRM, and often feel frustrated when problems arise, such as when DRM makes 'activation... impossible' and thus infringes on the right of the participant to play paid-for games. One participant suggested that DRM is used to '"victimise" the buyer'; a means of treating the paying customer carelessly and unfairly for no benefit. In fact, only one participant presented a measured view of DRM, stating that '[not] once have I had a problem contacting the authentication servers or run into an install limit'. Aside from this, every single other mention of DRM was accompanied by a negative experience, perception or opinion. Even some the 54% of participants who hadn't had a negative experience with DRM expressed unfavourable feelings towards it.

In conclusion, this overall impression strongly supports the hypothesis that gamers generally know and feel strongly about DRM and, overwhelmingly, the sentiment towards it is negative. Not only is DRM generally ineffective (see section 3.5 above), it is also seen to be ineffective and malicious. As expressed here, gamers are often baffled by the inclusion and extent of DRM in the games they buy, particularly when the DRM programmes make their experience of the game much more trying and complicated. There is abundant evidence that strict DRM is not necessary to protect the profits of game companies (see some of the solutions outlined in Chapter 6 below) and that gamers themselves see less DRM as a positive move. However, it would seem that games companies are reluctant to reduce their use of DRM even for the benefit of their customers, judging by its almost ubiquitous presence in games. One of the rare exceptions is Stardock Systems. Brian Clair of Stardock Systems stated that a poll of registered users on the *Galactic Civilisations 2* website indicated that 'thousands of people said not having CD copy protection helped make the difference in their decision to purchase the game' (Varney, 2006). Perhaps this approach will garner momentum and game companies will

reduce their usage of a system that is disliked by gamers, expensive to implement and ultimately ineffective.

5.7 Gamers sometimes express social activism through acts of piracy

'They milk the community. I milk them for free.'

This hypothesis proposes that gamers are socially aware and occasionally act so as to promote the gaming community's rights against other entities. The main causes of such discontent are perceived excessive pricing and the inclusion of DRM, as cited by 73 and 31 participants respectively as reasons for pirating games. In general, however, such social activism focuses on the latter issue, and can be explained by two reasons: first, pricing and the relative expensiveness of games can vary between regions (a PC game might sell for $50 in the US, which might translate to roughly R500 – clearly beyond the bounds of standard local pricing); second, the issues surrounding DRM are more closely related to debates around gamers' rights, privacy and social good, which tend to incite mass social action more readily. This type of social 'activism' is generally targeted at game developers and distributors and can happen at an individual or massive scale. Protests can involve viral internet-based attacks (such as *Spore*'s negative Amazon ratings), raising community awareness through discussion forums and networking sites, boycotting the company or launching mass actions (mainly online) to make a clear statement against certain practices (such as the call for mass piracy of *Spore*). It has been well established that gamers express instances of social activism within games – such as the cosmetic modifications made to *The Sims* and *Counterstrike* in protest against the recent US wars in the Middle East (Poremba, 2003). There are also organisations such as Defective by Design that openly call for the boycotting of DRM-containing digital media, including games such as *Grand Theft Auto IV* (Mattl, 2008). Additionally, internet attacks by 'hacktivists' and electronic civil disobedience attacks can create a disruptive, but peaceful, commentary on certain practices that the members find unethical or unjust (generally in response to copyright matters). Clearly there exists enough impetus and awareness to allow for such action in response to DRM, but does it take place?

When asked why they pirated games, a surprisingly high 31 participants, or 28.4%, said they did so to protest against the inclusion of DRM in games. When later asked if and why they had pirated games on principle, 26 commented that they had pirated games containing DRM on principle, either to protest the inclusion of DRM or to obtain a functioning copy of a game where DRM had prevented the legitimate copy from being played. In addition, when asked if the presence of DRM would make them more or less likely to pirate a game, 41 or 37.6% said they would be more likely to pirate, while only 15, or 13.8%, said they would be less likely to do so. Taken together, these statistics point towards gamers researching products and pirating them with some intention or thought on the issue of DRM, possibly as a result of the game's negative press online. Gamers additionally seemed to set certain parameters for games that they would or would not purchase, and tended to pirate games that

fall outside these bounds. For example, one participant stated that he 'refuse[ed] to pay for games that require online activation'. This trend continues with other participants, who state variously that:

- I have since then vowed that I will never buy any games featuring DRM
- I vow never to buy a game with SF[StarForce]
- I refuse to pay for *World Of Warcraft*, if I buy a game I should not have to pay to play it.

Some participants even take more radical stances, stating that, for example, 'I'd expect to get the source code for anything I paid for'. Though the latter is an extreme minority view, it demonstrates the wide range of expectations that gamers may have. These individual proclivities show how vehemently some participants maintain their views of matters such as DRM in games, and these individual stances can accumulate, over time and over large numbers of gamers, into noticeable protest standpoints.

As stated above, most protest actions are directed at developers and distributors who repeatedly use excessive DRM measures in their software. These companies were judged unfavourably by participants in this survey: they were perceived to ignore of customers' wishes consistently, partake in unethical business practices, and employ DRM purely as a means to line their pockets and disenfranchise the buyers. EA, as discussed above, is a particular offender whose DRM is used to 'destroy good game companies and milk people'. Participants consider them 'profiteering gluttons' and 'hate their mindset [and] the way they treat their employees'. Another participant stated that he did not feel guilty pirating games because:

> [T]he major game houses are just in it for the money, they charge excessively while underpaying the developers. Money should go to the people that did the work.

Still others expressed similar feelings:

- Consumers constantly get ripped off by companies. Sometimes it is nice to be the one doing the ripping off.
- It was a horrible port to PC, actually a full on slap in the face to PC gamers. This company too, after creating a name for themselves thanks to PC gamers, treats them liek[sic] shit now and focuses on the consoles. They blame piracy and they have a point but still I say fuck them.

Participants also displayed keen insight into the arguments generated by these companies regarding such topics as the use of DRM and the effects of piracy:

> Developers have this false loss-equation of every pirated copy equals a sale and therefore piracy damages the industry by x-amount of dollars each year. This isn't true, if I like a game I'll support them, and often I come across games that I wouldn't buy but because I pirated them and get to 'test drive' them I'll buy them.

A comment such as this one indicates that participants may feel some scorn towards companies who make what appear to be false accusations against them. They feel that, conversely, as users on the ground, they have a much better insight into the processes surrounding distribution and the effects of piracy, and that the 'false' and over-simplified model produced by large companies is completely out of touch, lowering the companies' credibility even further. At the very least, this indicates that gamers are mistrustful and disbelieving of such companies and their rhetoric. Looking at the comments overall, participants express a significant sentiment of counter-authoritarianism and tend towards community-based perceptions. Often the company is framed as the immovable entity that dictates certain rules, and the consumers as the society of victims and counter-agents who seek to redress the damage done by the companies. Participants feel that these negatively-perceived companies 'subject [gamers] to advertising', 'destroy' other companies and 'milk people', 'treat [PC gamers] liek[sic] shit', and piracy 'feels less bad if it's a big corp'. Many also distinguished between the 'bad' large corporations and the 'good' small or start-up companies. And though consumers 'constantly get ripped off', most participants expressed a good sense of their own agency, much of it along the lines of escaping the seller-buyer dichotomy and being able to dictate, through action, what changes should be brought about.

Protest can also be directed at certain notorious DRM packages and the games that include them. The worst-perceived DRM programmes are StarForce and SecuROM, both named several times by participants (as evinced in extracts used above). On principle, some participants stated that they pirated:

> [A]ll the games that have securom[sic] or any other measure of DRM that affects my gaming experience.

Another participant felt that 'anybody who use StarForce as DRM deserve to be ripped off' due to the software's infamous reputation for damaging optical and hard drives. Of the games that were most frequently pirated on principle, *Spore* was the highest, with 17 mentions of it being pirated. *Mass Effect* received 12 mentions, *BioShock* had 10, and games such as *Half Life 2*, *Red Alert 3*, *Dawn of War 2*, *Grand Theft Auto IV* and *Need For Speed* were named between two and four times. All of these games are large, popular titles and all of them have been criticised for containing often-insurmountable DRM problems. Gamers do not simply act out to make a statement; many do seem to believe that these protest actions have repercussions and effects on the way games are made and sold. At very least, the notion that community action is occurring is evinced by a participant who states that he '[m]ight have jumped on the pirating DRM games protest band wagon'. Clearly, the notion of pirating as protest action is entrenched. Aside from 73 participants who pirate games because of excessively high cost, 31 who pirate as protest against DRM, and 41 who are more likely to pirate a game if it contains DRM, 62 participants (or 57%) believe that game companies are less likely to include DRM in their games following such protest action as faced *Spore*. Only 7 (or 6.4%) believe

that companies would be more likely to include DRM. Even though the remainder believe that this makes no difference, it is significant that well over half of participants believe that such mass action has a discernible effect. It is clear from the discussion of *Spore* and *The Sims 3* above (in section 3.6) that even a large company such as EA is not immune to negative publicity, nor oblivious to the dissatisfaction of its customers. At very least, protest action brings increased awareness of game companies' pricing or DRM practices to larger audiences.

In conclusion, it seems that the hypothesis that gamers sometimes express social activism through acts of piracy is upheld. Naturally, not all gamers and not all pirate users act according to this or feel that it is effective. For example, 36.7% of respondents feel that mass piracy action has no effect on developers' use of DRM, and one participant states that 'I don't think the mass protest did anything to discourage the use of DRM. I think publishers are finally realising that it is ineffective.' Despite this, there is a significant and evident trend towards 'piracy activism' – pirating games to make a statement against a certain company, practice or policy – especially against the use of DRM. This finding is corroborated by the evidence available online, such as *Spore*'s low user ratings, the numerous forums dedicated to anti-DRM protests, and the literally millions of comments, posts and blogs expressing antipathy towards the use of DRM (see, e.g., the GamersHell.com forums or DRMblog.com). It is especially interesting to see that South African gamers feel similarly and engage in the protests with equal fervour.

5.8 Gamers justify their acts of piracy, or do not consider them immoral or wrong

'Do you feel guilty taking a car for a test drive?'

Gamers are often strongly devoted to their hobby and enjoy associating themselves with it. They have also developed a strong sense of what is considered fair and 'right', and tend to rebel against any means that subverts this system. An example is David Wong's gamers' rights manifesto and similar lists that can easily be found through an internet search (and see section 3.5 above). Gamers also seem to feel that they have certain rights that the usage of DRM revokes. For example, one participant to this survey feels that '[i]f I buy a product, I have the right to use it as many times as I like.' Another feels that his status as a paying customer unfairly prejudices him:

> I as a customer gets done-in by the developer (because why do they care, they made their money) while my friends with pirated copies still enjoy the game CD-FREE!

Lidovho found that 'when making a moral decision to copy or not to copy software, people value the benefits of illegal copying, more than the legal concerns' and that they also account for the likelihood of being caught; generally, knowledge about the wrongness of copyright infringement had no deterrence effect (2006: 370). A similar result is found in this research. This section will explore the hypothesis that gamers who pirate games find moral, social or other justifications for their behaviour or, conversely, do not consider there to be anything wrong with the act and thus feel no need to justify

it. This question has two aspects: first, how the participants feel personally about committing the act, and second, how they feel about the legality or morality of piracy in general. With an entrenched sense of rights and entitlements, participants justified their pirating practices is several ways: some pirated out of protest (as discussed above); others justified it as habit or convenience; some simply felt entitled to games, felt that no harm arose or that the developers or publishers 'deserve' it. However, a significant portion of participants thought that piracy was wrong and unjustifiable (even if they themselves admitted to it). This leads to an interesting counterpoint between the two views, both of which are considered self-evident by their proponents.

When asked if they felt guilty about pirating games, the response was mixed: just over half of users – 61, or 56% – never felt any guilt (of those, 18 claimed never to pirate in any case, and thus clearly would not feel so); conversely, 39 (or 36%) participants sometimes felt bad, while 9 (or 8%) always did. Responses to the question of why the users felt so were analysed according to their discourse, and the following key reasons were found. Nine participants stated that they did not pirate and that, self-evidently, weren't made to feel guilty by it. Aside from these, the most frequently cited reasons for not feeling guilt were that participants were simply trying games out before buying them (19 responses), they felt that no harm was caused or acted out of protest (6 responses each), or acted out of selfish reasons (4 responses). Personal experience has shown that gamers generally feel no qualms about the actual act of copying or sharing a game and express derision when criticised for these illicit activities; in fact, many gamers have openly encouraged others to copy their pirated or legitimate games. Significantly, the presence or absence of guilt made virtually no difference to the overall prevalence or rate of piracy. In fact, 72% of those who felt guilty pirated, compared to the marginally smaller piracy rate of 70,5% for those who did not feel guilty. Feelings of guilt did, however, seem to impact the rate of game buying: of those who felt guilty, 87% seldom, often or always bought games they had pirated, compared to 74% who pirated without feeling guilty.

Many participants felt no guilt in pirating because they only did so to try games before purchase. These arguments largely reiterate the discussions of section 5.5, but several further points can be made here. First, gamers do not seem to feel obliged to pay for sub-standard products, as encapsulated in the philosophy of 'I won't pay for a bad game. If it is good I'll buy it. Simple.' Participants felt no guilt pirating and playing, and then deleting, a bad game; the feeling differed if the game was considered good, and this will be discussed shortly. Games had to 'earn' or 'deserve' a purchase. Second, participants felt that some piracy was justifiable if the remainder of their practice involved purchasing games legitimately. For example, one felt that 'I also buy enough games normally that I feel I am not hurting the community by what I do.' Here, the overall picture is taken into account, rather than the individual act. Third, some participants felt that '[i]f people pirate games with no intention of some later renumeration[sic] to the producers... then they should feel guilty'; in other

words, piracy with the explicit intention of obtaining free games was frowned upon, in contrast to piracy that served another function and could (in theory) lead to later expenditure. Overall, participants who pirated while entertaining the possibility of making legitimate purchases later felt no guilt, even if such expenditure did not occur.

The argument for those who pirated for social commentary or protest has been fully addressed in section 5.7 above, and is added here for the sake of completeness and reference. These users generally felt no guilt pirating either due to the presence of unfair and harmful DRM, through the necessity of pirating to get legally-bought copies to work, or '[b]ecause the major game houses are just in it for the money, they charge excessively while underpaying the developers. Money should go to the people that did the work.' In fact, most of these respondents felt empowered and personally justified in their acts, the very opposite of feeling guilty:

- Some people deserve to be pirated.
- I buy a game, turns out too[sic] be crap. I've now wasted R359. So I'll pirate their game just to stick it to them.

Those who felt no guilt pirating games because they believed that no harm arose from the practice constitute an interesting category. In legal terms, at least under US copyright law, no harm has to be demonstrated for copyright infringement to occur; in other words, liability arises even when infringement does not result in any benefit for the infringer or any loss for the person whose work is infringed (Litman, 2001: 19). In South African law, the court must take heed of the 'benefit shown to have accrued to the defendant'; no mention is made of harm to the copyright holder (Copyright Act of 1978). In addition to the 6 comments made here, when asked why they pirated, 9 participants (or 8.3%) stated that they considered that no harm arose. There were three main threads of justification. The first expressed an interesting concept of piracy: simply possessing a pirated game is not bad, but sharing or downloading it is. Two participants expressed this as follows:

- No physical harm can be seen as done by it... that and the fact that I'm not the one downloading pirate games from the internet... they are given to me by friends... I am the end process.
- I am merely playing it. I am not redistributing or selling it.

Curiously, these users do not identify their stance as potentially hypocritical: they did, after all, attain the game from 'bad' pirate users and were beneficiaries of the process of redistribution/sharing, but nevertheless consider themselves justified and guiltless. In fact, Shin et al reported that this sort of community or friend-sharing accounted for as much as half of all revenue losses due to piracy (2004: 104). The second class of participants who felt that no harm arose justified this by only pirating games that were already successful, and thus could not be harmed: 'I seldom pirate and when I do it is a

game that has made a huge profit already and played by many.' Participants used a game's existing success to justify not having to purchase it legally. Thirdly, some participants felt so removed from the people involved that they no longer sensed any guilt: 'not having a face to put to the person/entity who owns said game helps'. In essence, piracy becomes a seemingly 'victimless' crime, because content producers are so far removed from end users (through distributors, retailers, websites or other means of copying). In all three instances, participants justify their behaviour as not causing any financial harm to the company involved.

Some participants expressed purely selfish reasons for pirating, and felt no qualms about doing so. Ten participants answered that they pirated because they were 'entitled to play games'. One stated that he doesn't feel guilty because 'the damage doesn't occur to me' while others admitted to having a '[l]ow moral conscience' and being 'cheap'. Others expressed this more subtly.

> If its[sic] a good game and decently priced I will get it. However if the game is unavailable or to overpriced how else am I supposed to get hold of it[?]

A comment like this shows that the participant feels naturally entitled to play the games that he wants to; it doesn't occur that a game is a non-necessity and that if he cannot 'get hold of it' then there is no automatic entitlement to pirate it. In fact, many gamers express this subconscious sense of self-interest, occasionally lamenting that the only means of getting a prized or rare game is through piracy. However, it should also be considered that today's interconnected global social groups rely on experiencing digital media as soon as it is released; if this immediacy is not maintained for local users, they feel that they must pirate to keep up with games and trends. Local consumers are no longer content to wait:

- I won't use my credit card online to buy US software and then wait for 5 weeks. Rather download a pirated version.
- [I]f [I] want to keep up to date with a show [I] have to wait a year living in SA which is a crock.

Upcoming games, especially the biggest and most desired titles, are usually advertised extensively to generate hype before the release. However, games are also often distributed on different schedules depending on region, and may not be available locally for weeks or months after the release date (as also occurs with some cinema releases) (see, e.g., De Klerk, 2009). Eager gamers thus turn to piracy as the quick and convenient solution, though they may have bought the game had it been available. The importance of this consideration was confirmed when Valve chose to release their games concurrently around the world and found that piracy rates, especially in Russia, were greatly reduced due to the games being legitimately and conveniently available (GamePolitics, 2009).

Only 9 participants answered that they always felt guilty for pirating games, while 39 (or 35.8%) felt guilty sometimes. The justifications for these overlap considerably and can be considered together.

Robert LaRose and Junghyun Kim explain that people constantly judge themselves according to personal and societal norms of correct behaviour, and when they encounter behaviour that they consider to fall outside these bounds, they create moral 'incentives' such as guilt to effect a change in behaviour (2007: 268). It is illustrated in many of the comments below that guilt spurred the participants into compensatory actions such as purchasing the product they had pirated. Many gamers expressed that they felt an internal moral sense of when a game was worthy of purchase, and would feel bad if they did not do so. This was expressed variously as:

- The times I feel guilty is when I often buy the game.
- If its[sic] good ill[sic] feel bad and go and buy it.
- I feel bad when pirating GOOD games.

For those who felt guilty, two main reasons were expressed. In the overwhelming majority were those who felt that game creators worked hard but received no rewards (17 responses), followed by those who understood piracy to be wrong (6 responses). The first group expressed the standpoint variously as:

- Sometimes you might find a diamond in the rough and simply dont[sic] have the funds to give the developer at that point of time.
- They put in a shit load of work, and I'm not honouring that, thus degrading their hard work which means they'll either go out of business or start making games that are generic and rubbish since they don't have the assurance to try new types of games.
- The devs and publishers deserved the money.
- Felt guilty about pirating *World of Goo*, because the developer went bankrupt due to low sales (even though the game had great reviews).

These participants recognised the intensive investment and work that went into producing games, even stating that financial recompense is deserved, but continued to pirate for various reasons (such as lack of money). Participants were clearly aware of and tended to agree with the notion that the producers of creative works should be compensated, even if they themselves did not actually pay. They also recognise the harm that can arise from such acts, both in general and in specific cases. This harm, however, is measured in degrees depending on a number of factors, such as who the target of the piracy is:

> I still get a twang of regret when pirating, it feels less bad if it's a big corp (but still bad), but you feel way worse if it's a start-up company or an indie company that really needs the money.

Again, participants showed devotion to games above other forms of media:

> Game industry tends to not have as much money as TV, movie, music industry. This makes me feel nothing for pirating movies, but slightly bad for pirating games.

Personal observation has shown that gamers make regular gaming purchases but virtually never buy the movies or TV series that they share, watch once, and delete. These latter products do not seem worth a purchase because of their limited use and thus do not elicit any sense of guilt, whereas games have a much longer appeal. This is important because, often, the feeling of guilt can spur gamers to make legitimate purchases (as regards the comments above) or to consider their actions in future. The sense of 'feeling bad' about piracy can lead to positive effects. The 6 participants who felt intrinsically that piracy is 'wrong' or 'a crime' generally stated that:

- It is illegal, but it is so damn easy.
- It feels like stealing to pirate a game.
- Piracy is still a form of theft, and it does lead to feelings of guilt about stealing another person's property (intellectual or otherwise).

In these cases, the participants felt guilty for committing what they perceived to be a crime, rather than for causing harm to the people involved. It is also interesting to note that most of those who felt guilty expressed the sentiment quite strongly; for example, very few chose lesser synonyms for the feeling, while others felt 'way worse', that it 'feels like stealing' and that they 'feel bad for the people who worked hard to create the game'.

Finally, a marginal though perhaps significant reason for feelings of guilt (or rather absence thereof) for pirating games seems to involve age: that is, younger people seem to feel less guilty. Two main reasons present themselves: ignorance of the issues and legalities, and sheer habit, desensitisation towards or normalisation of the behaviour. Jean-Paul Van Belle, Brandan Macdonald and David Wilson found that several studies indicated that youth in South Africa were very 'ethically lenient' with regard to software piracy, and that this attitude was growing (2007: 49). Similarly, Trevor Moores and Jerry Chang found that 'judgment [deciding on the most justifiable course of action] strengthens with age', which then leads to a corresponding change in behaviour (2006: 176). Although this study did not ask for participants' ages, it can reasonably be assumed that most are adults and can no longer be considered youths, judging on the fact that virtually all are either employed or students. Despite this, several did indicate that they experienced a change in perception or behaviour as they aged:

- I know it is wrong, yet I have been doing it since 1983.
- I don't pirate anymore. When I used to pirate, I didn't feel guilty.
- I used to pirate games a lot when younger however now if [I] pirate 2 a year its[sic] a lot.

Personal observation seems to corroborate this view: as gamers age, there is a greater incentive (convenience, moral justifiability) and fewer hindrances (availability of money and equipment) to buy

games. While youths seem less considerate of the potential harm caused, adults have a better grasp on the effects and legal and moral downsides of piracy.

To address the second part of the hypothesis – whether gamers consider game piracy itself to be intrinsically wrong or immoral – participants were asked how they perceived the morality of piracy. 59 participants, or just over half at 54%, considered piracy itself to be morally neutral. Slightly fewer participants – 47, or 43% – considered it to be morally wrong, while a mere 3 considered piracy morally right. When asked how they perceived the label 'pirate', the answer was similar: 60 participants (or 55%) considered the term neutral, while 36 (or 33%) considered it negative and as many at 13 (or 12%) found it to have positive connotations. Fascinatingly, when asked if they considered piracy to be a crime, fewer than half actually did: 53 (or 48.6%) answered yes, while 28 (or 25.7%) each answered either no or that they were uncertain. They were then asked whether they perceived any difference between game piracy and piracy of other media. It has been noted earlier, but bears reiteration, that gamers tend to feel more strongly about games than other media. Answers fell into one of three categories: those who perceived no difference, those who thought game piracy was worse, and those who felt other types of piracy were worse.

The largest category was the first, those who felt there was no difference, with 87 participants (close to 80%) choosing this option. The overwhelming reason given was a variation on 'piracy is piracy' or 'stealing is stealing', with 27 responses. The gist of this point is that '[w]hile reasons for pirating different materials may differ, piracy is still obtaining an unauthorized copy.' One participant makes the distinction between physical and digital piracy by stating that they 'both are essentially stealing, however since one cannot physically see the 'damage' been done, it is not considered as morally wrong by those performing the action'. For these participants, the act is the same regardless of target. The second key reason, given by 10 participants, was that there was no difference between pirating games and pirating other media because they were both found in the same places, were equally easy to obtain and were – in data terms – identical. This was expressed in a variety of ways:

- It's not different in acquisition, nor is it different under the umbrella term of media. Games are as easy to pirate or acquire as are movies, shows and programmes.
- It's all digital and obtainable online or copying from friends.
- A game is the creative work of a whole team of people, as is music.
- Same basic principle of easy availablity[sic] and access.
- Data is data. The way the 1s and 0s are arranged don't mean anything.

These participants did not differentiate between the varied processes that occur in the production of different media, nor the possible revenue streams (see section 3.6). It is interesting that the data that makes up an MP3 and the data that encapsulates a many-gigabyte computer game are considered

equivalent, despite the vastly differing file sizes, production processes, capital input and many other factors that contribute to making a song or game. However, 6 respondents did identify that equivalent harm or effect is created regardless of medium:

> As with all types of media there are costs involved in the creation of that media. Games are no different: There are large costs that need to be paid off from a game's sales.

An additional 4 participants stated that there is no difference in the piracy because 'they all forms of entertainment'. For all of these participants, there is nothing specifically about the medium of games that they consider different to other types of media – the source, nature, effect of and reason for piracy of games are the same as for other media.

Those who answered that a difference did exist between pirating games and other media either thought that game piracy was worse (6 participants) or that other types of piracy were worse (6 participants). Generally, those who found game piracy to be worse said so for two reasons. They felt, firstly, games are pirated purely for non-vital entertainment reasons, rather than for more pertinent motives:

> [C]ertain software products are pirated because either 1) they are priced corporately, and the layman cannot afford to purchase these products 2) learning to use these software products is vital to your career

Second, others identified pertinent financial concerns (though likely based on personal conjecture) relating to income and revenue streams:

- Game industry tends to not have as much money as TV, movie, music industry. This makes me feel nothing for pirating movies, but slightly bad for pirating games.
- Software relies on revenue from sales (mosetly[sic] first week), whereas movies/TV have several different (box office, DVD, merchandising, syndication). I.E. software piracy is more damaging.
- It's a bit worse than pirating music and equivalent to pirating movies (I think anyway) since a lot more effort goes into making a game (or a movie).
- I know that selling games is how game companies pay their developers.

Although some participants identified this key argument, it has been shown that very few media users, even gamers, distinguish between pirating different forms of media. In the convergence culture of today, it seems that all forms of media are united by the similarity in their distribution and format. Those who found other types of piracy worse generally felt so because they were more likely to buy pirated games than other forms of media ('If I come across a game... that I like then I often buy it after playing it, even though I got a pirated copy. But I don't buy the films or TV series I pirate'), because other media – especially certain software packages – were too expensive, or because of the ways

certain other media were used ('it is less moral to pirate a business application you will use to generate income').

In conclusion, it is clear that a definite divide exists between pirating gamers who feel no guilt, and those who feel it keenly. Naturally, most users expressed a range of reasons for feeling guilty (or not), though most expressed one primary cause – lack of compensation for the hard-working game creators. Those who did not feel guilty expressed similarly pertinent reasons. Overall the hypothesis cannot be upheld in full, because while some gamers do justify their acts of piracy, others make no effort to do so and claim openly that the behaviour is wrong. This is an interesting finding in light of the perception that gamers thoughtlessly and without qualms steal copyrighted materials; many do, in fact, feel badly for doing so and are often driven to amend their acts of piracy through this. Also, it is evident that most participants are well aware of the debates around the issues of piracy and DRM and keep such topics in mind when pirating media. However, it is equally interesting to note that the vast majority of participants do not distinguish between the piracy of games and of other media. Overall, however, participants tended to consider piracy and their own acts of piracy to be morally neutral.

5.9 South Africans are well-informed about the legalities of copyright infringement and have a unique approach or relationship to piracy

As shown above and discussed below, there is a great deal of uncertainty in South Africa regarding the actual legal matters that surround piracy and DRM. Many participants show evidence of a layman's perspective or personal understanding of the issues – likely based off copyright protection messages, personal experiences and internet discussions and sources – but very few possess a clear and correct understanding of the relevant facts. While the discussion of the legalities at hand is presented in detail above in Chapter 1, this section will focus on the perceptions of the participants, and how their knowledge is constituted in relation to this. Also, for this question, non-South African participants will be excluded, and so the data set will consist of 102 (rather than 109) replies.

Participants were asked if they considered game piracy to be a crime. Exactly half of the sample, or 51 participants, answered that they did believe it to be a crime, while close to 25% thought the opposite; interestingly, the remaining 25% were uncertain. This high rate of uncertainty alone indicates that even participants who have expressed a wide range of opinions and beliefs about the nature of intellectual property and DRM were unsure, when asked directly, what exactly the nature of the infringement constituted. According to South African law, piracy on a private, non-profit scale is not a crime at all (see section 1.3); this data indicated that at least half of gamers are badly informed about the legalities of their behaviour and have likely been intentionally misled by the rhetoric of SAFACT and other groups (see section 1.5.4). When subsequently asked if they considered game piracy to be as much of an infringement as stealing a cellphone or handbag (as per the SAFACT anti-

piracy campaign advertisement), the vast majority of 90 participants (or 88%) felt that it was less serious. Of the remainder, 11 thought it was as serious, while only one considered digital piracy to be more serious than physical theft. Lastly, and most interestingly of all, participants were asked to mark a list of infringing practices according to which they considered to be computer game piracy; they could select as many as they liked from the list; all of the choices were, in fact, types of piracy and a knowledgeable respondent would have ticked them all. The results were quite unexpected: out of 102 participants, only 88 thought that buying physical copied games from a street vendor constituted piracy; therefore, as many as 14, or 13,7%, did not consider this to be the case. Additionally, fewer participants considered copying a game off a P2P network or torrent site to be piracy: 86 out of the participants ticked this option. Similarly, 85 participants thought that copying a game from another person's hard drive (for example, at a LAN event or between friends) was piracy, while a remarkably low 49 participants, or 48% of the total, considered installing a game from another person's legitimately bought game discs to constitute piracy of a computer game. Overall, 39 participants (or 38.2%) selected all four options and were thus fully aware of the extent of what is considered piracy, while 74 (or 73%) selected only the first, most serious-sounding two.

In addition to these statistics, participants expressed interesting patterns of word use when discussing the act of piracy. Only one used the word 'crime' throughout; however, no participants disputed or queried the use of the word 'crime' in several questions, though the option of responding in a freeform text box was available. When referring to the act of piracy itself, by far the most common appellation was 'stealing' – generally used in such definitive statements as 'it is stealing' or 'stealing is stealing'. Less frequently used was the word 'illegal', and the term 'infringement' only received two mentions. This seems to align with the typical rhetoric of such agencies as the local SAFACT and the BSA who insinuate (sometimes quite directly) that piracy is a crime that is equivalent to physical theft. As discussed in section 1.2, this is a misconception and provides a skewed understanding of the legal issues to the public. Many users casually used the term 'pirate' to describe their activities, not ascribing any particular moral significance to it; used both as a verb and an adjective, the term appears dozens of times throughout; 'downloading' used in the same context only appeared twice and 'copying' did not appear at all. This indicates that 'pirating' is used for a vast array of actions, concepts and conditions; the term has entered colloquial speech as a catch-all for all manner of (perceived) infringing activity. This affirms the usefulness of using this terms as part of this study. Consequently, the actual legal and moral meaning of the root concept of infringement becomes blurred. Understanding of the concept also manifested in another direction: some participants even expressed a counter-hegemonic reading of the nature of piracy: 3 participants when so far as to say that the act of pirating games is morally right, while 13 considered the label 'pirate' to have positive connotations. 28 of the participants, or over a quarter of the sample, believed that game piracy was not a crime, despite the glut of corporate rhetoric to the contrary.

This research has found that the South African gamers face a worrying problem in the form of a lack of access, which manifests in three ways: lack of product availability, lack of bandwidth and lack of the same support and features that are available to First World countries. For the first concern, participants had the following to say:

- Its damn near impossible to get hold of BBC series here in SA.
- [I]f I want to keep up to date with a show I have to wait a year living in SA which is a crock.

The problem is either that certain media and games are simply never made available in the country – many smaller game titles are never imported, and even some gaming platforms (notably the original Xbox console) are never distributed or officially supported – or the media is available at a much-delayed rate – Microsoft's Xbox360 console was release a year later locally than in the US, many smaller movies and TV series may take years before they flight locally, and even Nintendo's worldwide console hit, the Wii, was severely delayed (Dingle, 2007). While this problem has slowly lessened as South Africa's market has grown, it is still noticeable in non-mainstream products. The result of this situation is, invariably, that South Africans turn to piracy, which provides a convenient method of obtaining whatever they like from a virtually limitless catalogue of media products.

The second problem relates to South Africa's woeful internet and bandwidth offerings. Many news sites have long reported on the poor state of local connectivity (see, e.g., MyBroadband, 2009) and many users have expressed that they are highly disappointed by the high price paid for relatively poor internet services. It is estimated that only around 500,000 South Africans have access to broadband internet, and a further 5 million to slower, modem-based connectivity (Simmonds, 2009a; Rens, 2009). The two key concerns are the speed of internet lines, which is still lagging behind even some of the poorest African countries (MyBroadband, 2009), and the amount of bandwidth available to users, often in limited bundles of several gigabytes and far inferior to many countries that provide uncapped access. Participants said the following:

- Problem currently in South Africa is the download restrictions and limited bandwidth.
- Our bandwidth issue in SA doesn't cater for downloading game demo's. As a result of being a strict try-before-you-buy guy, I pirate the game, and buy it if I like it.

This limit in connectivity has two effects: first, as the comment above indicates, gamers are unable to source game demos, game files for online games, or updates for owned products; second, limited bandwidth and slow line speeds prevent some gamers from taking part in certain online play or verifying their games online. If locally hosted servers are unavailable for a game, gamers must use international servers which generally require faster connection speeds and make the experience frustrating as gamers are constantly kicked from the game. Gamers are spurred to pirate games if they

cannot have access to features like demos and updates; it seems that the lack of service and support makes gamers reluctant to pay for, in essence, a crippled product. This paucity of internet access calls into question the scope of piracy activity in the country and the possible scale of criminal activity (Rens, 2009). In any case, most sharing of games and other media happens between friends, well outside the scope of criminal activity.

The third problem is the most difficult to surmount. Many game services, features and support structures are regionally locked and serve to exclude South African users. For example, iTunes does not make its extremely popular games store available locally, and Microsoft's Xbox Live community and store are still not officially supported locally (Simmonds, 2009a). Many other similar features are not supported locally, for example:

> Dawn of War II requires Windows live online profile for onlune[sic] play but is not supported in South Africa.

Many forum topics and discussion groups have been devoted to the frustration gamers feel for not being able to access the same content and community features as their international counterparts (see, e.g., discussions on gaming.do.co.za or mybroadband.co.za). The repercussions of this are that South African gamers cannot take part in and contribute towards international gaming communities, and that they cannot get the complete services and features that are available to most other paying consumers. Many game developers release free downloadable content (DLC) for those who have bought their games, but often South Africans are not privy to these value-added features: the DLC for the hugely popular game *Grand Theft Auto IV* was not available for a long time to local users, and only became accessible when Microsoft removed the region locking from the Xbox Live files (Simmonds, 2009b). In essence, paying gamers in South Africa are treated as second-class users. The reason for this is often cited as South Africa's low prevalence of broadband users, generally considered to be below 500,000 (Simmonds, 2009b), but other reasons, such as the country's negatively perceived piracy profile (Motsoeneng, 2006) or simple marketing and logistics issues (Simmonds, 2009b) have been raised. While these barriers remain, services will continue to be unavailable to local gamers. To counteract this, local gamers turn to two options: first, they may modify their PCs or consoles to make them appear to be in a country where the service is available (either by changing the settings or by physically modding the device, which may result in a voided warranty); second, gamers may set up 'pirate servers' (which imitate the officially supported servers) where users can play multiplayer games using unverified or illegitimate copies of games to avoid subscription costs or a lack of local support. Both of these methods circumvent DRM measures and are considered infringement.

In conclusion, the final hypothesis is overturned: South African gamers do not seem to have a set, correct and clear understanding of the nature of copyright infringement, and South Africans have an approach to piracy that is consistent with that found in the developed world. There seems to be

considerable variation in individuals' experiences of and opinions on DRM and copyright issues, as well as in legal or factual awareness of the issues. As demonstrated above, participants often expressed contradictory or hypocritical views of their actions (for example, those who said they did not pirate but who nevertheless shared games with friends). Part of this, such as the labelling of the act as a 'crime', seems to be informed by the messages propagated by SAFACT and other local copyright advocate agencies; other participants seem to accept information from hearsay or develop an intuitive sense of what they feel is justified or deviant behaviour. Unfortunately, there are still considerable challenges facing local gamers who want to participate in the global gaming community on equal terms. The lack of availability of certain key services, such as online stores, and the woeful state of local telecoms means that South African gamers are still lesser citizens of the global community. This results in some key differences in piracy behaviour; for example, gamers are much more likely to share games offline with friends than to share or download them from the internet. In other respects, such as understanding and attitude, the changes are not evident. These differences provide for a unique and interesting landscape to study.

5.10 Discussion

This chapter has shown in practice what Chapter 1 demonstrated in theory about copyright and related issues affecting media today, and has provided some enlightenment to points made earlier. Chapter 1 explored some of these key concepts, including the complexity and of the definition of copyright, the legal and social obfuscation, as well as framing, of what constitutes infringement, the slow erasure of the public domain and the often-extreme measures that content owners take to protect their digital intellectual properties. In this chapter, these concepts were elucidated to varying degrees. This research data has clearly shown that gamers' understanding of the key concepts in this field is varying and imprecise. In fact, many participants were not even consistent when describing their own piracy practices, at once answering that they did and did not pirate. Coupled with this confusion is the anti-piracy rhetoric propagated by SAFACT and others; gamers have subconsciously adopted terms such as 'theft' and 'crime' to describe their actions, but have clearly not informed themselves of the actual nature of the infringement. Benkler argues strongly against the use of such severe labelling and this legal evolution (2006: 442). It is unfortunate that these discourse constructs are seen to come from trusted authorities and are therefore not questioned, because this spreads disinformation. However, it is clear that despite this, gamers express social awareness through their actions in rebelling against the inclusion of DRM and the perceived unfair pricing and practices of games companies. And, in any case, few if any participants here were concerned about the illegal nature of their acts; none expressed a fear of being persecuted for pirating games.

Benkler argues convincingly that contemporary media consumers cannot be considered passive absorbers of corporate ideologies (2006). While gamers' engagement with issues relating to the public

domain and its slow enclosure were not raised in this survey, gamers do however require that games be conveniently available and fairly priced, and make significant use of file-sharing as a means to access these products. In many ways, gamers create an informal and non-legal open commons through their practice of sharing and communicating about games: the files are freely and widely available, discourse is maintained through public forums and groups that – in theory – allow anybody to participate, and gamers express agency in modifying, cracking, sharing and protesting against games (Boyle, 2008: 78-9). This freedom is taken as self-evident, despite its dubious moral and legal status. As will be discussed below, any forward-thinking company will co-opt this sense of freedom by allowing gamers a convenient legal alternative to file-sharing, a practice they already engage in so fluidly and openly. One of the key components to promoting this openness is the removal of the reliance and favouring of DRM. As authors like Samuelson (2003), Lessig (2004) and Singleton (2007) have argued, DRM is fraught with problems but offers comparatively few benefits. Participants in this study seem to agree: DRM privileges content owners to the detriment of legitimate, paying customers, but has no preventative effect on pirates. It is puzzling why a system that is very expensive, completely ineffective at its intended goal (preventing file-sharing) and frequently prevents customers from making full use of purchased products is still so widely used in games. Both the theoretical and practical evidence highlight the absurdity of this continued adherence. While gamers in this survey did not express legally developed arguments relating to copyright and infringement, they touched on many key legal debates indirectly. Aside from sharing, gamers also take part in other infringing practices like game cracking and modding, as shown in sections 5.5 and 5.6. However, all of these practices are justified under the banner of fairness: gamers pirate to test a game before buying; they crack games or remove DRM where the DRM prevents them from playing their legitimate purchases; they modify consoles and game files to allow them to perform what they consider to be fair and useful applications. Though these uses are not justified under legal rules, they do constitute what many would argue justifiable practices. This links back to arguments about fair use made by theorists like Lessig (2004a), May (2003) and Bowrey and Rimmer (2002) in section 1.1.2.

6. ALTERNATIVES FOR THE GAMING INDUSTRY

6.1 Time for a new business model

When deciding to implement a new business strategy, media creators can choose to take one of two directions: either employ stricter measures that protect copyright with increasing severity, or change the strategy to take account of worldwide networking and co-opt the process of sharing. The former trend has seen much attention from industry-protection bodies such as the RIAA and MPAA in the US, and SAFACT and the BSA locally. However, other producers and developers of a variety of media – music, film and TV, ebooks and software – have begun to experiment with new business models that omit the traditional enmity towards digital distribution and file-sharing. In either case, copyright owners cannot ignore the massive changes that have been ushered in by digital technologies and their savvy users. This chapter will seek to outline some of the strategies that tend towards openness and creative new models, to demonstrate how effective these can be and to encourage media producers to experiment with innovative strategies that take full advantage of current technology but that offer comparatively little risk.

6.2 What worked for music, movies and others

Innovators in a range of media industries have found that several key concepts apply to new strategies of media product marketing, distribution and profit. The five most important insight are: offering the clients the highest possible convenience; treating all consumers equally; using less prominent and invasive DRM; embracing openness and digital distribution; and monetising scarce products by freely releasing infinite ones. Convenience for the consumer is the most important single factor to consider, and it informs all of the other points to a greater or lesser degree. Time and again, research across all types of media has shown that consumers tend to choose the most convenient – not necessarily the cheapest – avenues for obtaining digital products (see, e.g., section 5.5 above). Consumers are generally not interested in legal or moral debates and do not care about distributors' concerns; they simply want to obtain and experience the content. Most consumers are not averse to paying for digital content and do not pirate on principle; they turn to copyright infringing activities because these provide the easiest, most comprehensive and convenient channels to obtain the desired media. In a nutshell, the 'only way to tackle illegal filesharing is not suppression, but to offer reliable, easy to use, fairly priced alternatives' (Bragg, 2009). The British Music Rights group agrees that 'the solution [to curbing piracy] partly lies in developing new legal services that make breaking copyright unappealing' (Sabbagh, 2008). Felix Torres argues that the same is true for ebook piracy: 'offer a competitive legal product that offers a good balance of price and value, quality, and accessibility, with

fully defined terms of purchase' so that the curious 'under-served customers' can make convenient legal purchases (2009). Kirk Biglione agrees that convenience is key, and outlines the power of Kindle's instant-purchase, instant-download function (2009b). File-sharing networks are replete with all manner of desired content which can be obtained and consumed quickly. Sharing between friends over LANs is even easier, as the participants do not need to have an internet connection or to expend bandwidth. Traditional legal means of obtaining content, which generally involve physical retail sales, are undesirable to many due to the time needed to travel to the store, the extra cost of media (accounting for the physical elements and shipping of the product) and the relatively low range of products (due to the limited physical shelving space). While popular content may be available readily, niche and special-interest materials are rare and expensive. Those who desire the unavailable content often have no recourse other than pirating it or not experiencing it at all. Both outcomes are arguably negative for the content producer.

Region restrictions and staggered content release has the effect of alienating consumers in the unfavoured regions. While marketing and fan excitement penetrate to all interested gamers through internet forums and news sites, the final product is often not available in all regions simultaneously (and sometimes not at all). This combination of anticipation and frustration leads gamers to find alternative sources for the product, sometimes importing it from foreign retailers but more frequently simply downloading the game over P2P or torrent networks, or obtaining copies from friends. This has the effect both of losing possible legitimate sales and of creating a negative reputation for the company. Unfortunately, the regions that are often restricted (due to the perception of high piracy rates) are those where there is a devoted and active gaming culture, specifically Russia, the Near East and China. This exacerbates the problem. Jason Holtman of Valve argues that '[p]irates are underserved customers... We found that our piracy rates dropped off significantly [when games were released at the same date and time in Russia as elsewhere]' (GamePolitics, 2009). It seems that treating all potential customers equally has marked positive repercussions for games companies and all efforts should be made to license the game globally before it is released. Companies that do this avoid segregating some customers into the standing of second-class global citizens. Unfortunately, South Africans are still treated this was in many respects; services that are available to many globally are restricted locally for seemingly arbitrary reasons (see section 5.9).

One of the most prominent causes for media consumers' complaints are problems with DRM systems (dealt with in detain in section 3.4 and elsewhere). DRM does nothing to deter pirates but causes significant inconvenience to non-pirates. Some opponents of so far as to say that DRM treats legitimate customers as criminals, by making the legitimate buyers reveal personal information, locking down their systems with DRM and demonstrating no trust in them (Wardell, 2008a: 16). Many media distributors are moving away from using DRM (iTunes is one prominent example), and

platforms that use non-proprietary or open formats are gaining on those that have been locked down. Game companies such as Stardock (see section 6.5 below) are pioneering the move away from using DRM in games, arguably to great effect. It is important to remember that the absence of DRM does not mean that the copyright holder revokes any legal rights to the material and is not an assumed permission for file-sharers to infringe the copyright freely. It simply means the removal of a technological or digital barrier that undermines consumer interests but has little to no effect on pirates. Where the complete absence of DRM is undesirable, the measures should at least be fair and non-intrusive; for example, online activation should not be required for a single-player game (Wardell, 2008a: 16).

Traditional channels of distribution and retail are quickly becoming obsolete as digital and networking technology improves. Physical sales and physical retail spaces are diminishing. While some bodies like the RIAA are quick to blame counterfeiting and piracy for this, others have reasoned that as physical transactions decrease, digital ones increase (Mason, 2008: 158). Digital distribution has gone from being a niche marketing strategy to a media industry standard. It has several important advantages over retail sales: a significantly wider range of materials can be made available; all customers can benefit from the product simultaneously; new products, updates and features can be made available virtually instantly; the digital medium allows for users to link, discuss, review and search products; and the costs of rental, shipping and manufacture are eliminated. The biggest risk perceived is the possibility of rampant piracy if materials are made available digitally. However, as demonstrated above throughout this text, piracy exists independently of legitimate digital channels and will happen regardless of, or despite, legitimate avenues being available (Smith and Telang, 2009: 330). Therefore, rather than stymieing a company's potential sales by not offering digital sales, it is best to co-opt digital technology for marketing and distribution and offer a legal alternative for those who turn to piracy because they have no other recourse. In any case, consumers enjoy the convenience and limitlessness of file-sharing, and so any company that neglects this avenue will quickly be made obsolete. Game developers are taking a cue from the music, film and software industries and are exploring and experimenting with digital means of delivery. For example, game developer and distributor Valve has pioneered a system for digital delivery called Steam (discussed in 6.4 below), and the major console manufacturers (Nintendo, Microsoft and Sony) offer console-based online stores through which players can buy full games, updates and the like (though these services are not available in South Africa).

Finally, an important lesson arises from recent successful experiments with distributing free creative content. The assumption that content should be paid for is questioned by the very nature of digital technology: if something can be reproduced perfectly and infinitely at no cost, can it have any value at all (Anderson, 2008)? Free content pioneers like Cory Doctorow, Trent Reznor and EA (with the free-

to-play *Battlefield Heroes*) have shown that infinite free content can function as an excellent marketing tool for the sale of rarer commodities. Doctorow has created a world-renowned reputation for himself through the free distribution of his fiction and non-fiction writing, and is paid to write columns and give presentations; he makes money from his scarce resources (his time, appearance and reputation) by freely distributing the digital versions of his writings (Doctorow, 2009). Trent Reznor quickly sold out of limited-edition albums and concert tickets when he released his latest album for free online; the scarce limited editions alone netted him $750,000 (Van Buskirk, 2008). EA has created the free-to-play *Battlefield Heroes* that earns money through the micro-purchases of cosmetic extras; life-simulating MMOG *Second Life* functions on a similar basis. The free model also has the potential effect of selling the content itself in non-digital forms: for example, readers who peruse the free digital version of a book may buy the hard-copy because it allows for easier reading (Bruns, 2008: 4). If it is necessary to charge for digital files, the cost should reflect the higher availability and lower unique worth of the product.

Taken together, these suggestions recommend the use of open digital frameworks for distributing media products, unburdened by DRM and freely available to all interested customers; essentially, to provide the most convenient channel for media consumers so that they opt to use legitimate sources willingly, providing profit and exposure to the content producer and satisfaction to the receiver. Several strategies that use all or some of the above suggestions are outlined below. All demonstrate that stepping outside industry norms according to these principles brings a measure of success. Thus, they form tried-and-tested models for future businesses to follow, and provide lessons and recommendations for future pioneers.

6.3 What is the product?

It has already been shown that customers do not purchase games themselves, but merely the licenses or means of access that allow them to play the games. No rights to the actual computer source code, images, sounds or concretised story elements are transferred. Therefore, aside from any packaging that may be included, gamers purchase only the intangible permission to access the game – itself an intangible digital thing. Additionally, the very nature of the digital file and the relevant technology means that the files can be reproduced infinitely and therefore have proportionately zero value. The question therefore arises of what the actual product is – or should be. For example, Singleton suggests that games companies can 'secure an income stream by selling services (or hardware) associated with the game (such as membership in a community)' (2007: 6). Four suggestions (and several variations) present themselves, most of which involve the distribution of the actual game for free. Many of these models are closely related and can be used concurrently to complement each other. They take into account earlier discussions of the uniqueness of games in relation to other forms of media (see section

3.6 above) and step away from the assumption that one intellectual property regime is appropriate for all types of media (see section 2.1 above).

6.4 Valve, subscriptions and other DRM

First, content producers can allow their software to be spread freely, but require the users to pay a license or subscription fee to 'activate' the software, making the user's copy legitimate (see section 6.7 below). Digital products that require online verification generally fall into this category. To clarify, any person can acquire the actual software for the game over file-sharing networks or from friends, but the copy will be unusable until the person creates an online account with the relevant publisher or distributor and pays for the game. This payment can be a once-off fee (as with, for example, Valve's *Left 4 Dead* FPS game) or an on-going subscription, usually on a monthly basis (as is the case with *World of Warcraft*). In the games industry, this concept is standard practice for many MMOGs, which require an initial payment to purchase a legitimate license key and afterwards a paid monthly subscription from each player who wishes to access the game world. The payment activates the player's account and, when he or she logs in to the game, the legitimate paid-for status is verified by the company's servers. Here, the product is the access to the servers and all of the related benefits: game advancement, the social gaming space, any updates that are made available during the subscription period and other specific factors relating to the individual games. The game files (commonly referred to as the game client) are not actually sold or protected, and are often even available for free download from the company's official site.

Game developer and distributor Valve pioneered a model for online distribution of single-purchase games that borrowed from the idea of monthly subscriptions. The company launched Steam, a digital distribution platform that operated according to three key principles. First, any willing game developer could make their game available over Steam to fans, meaning that the game would appear on the server and could be downloaded at will, simplifying the process of distribution for many (usually smaller) companies immensely. Second, gamers who wished to play the game would create a personal account and profile with Valve and, having downloaded the game, would pay online to activate it. Third, and most importantly, whenever the player started the game, Steam's servers would verify if the copy had been legitimately paid-for and thus whether the game should launch (Valve, 2009). One of the biggest benefits for users was that once the game had been purchased, that user could download and play the game any time and on any machine, provided that he or she logged in to their Steam account; that is, they had paid the once-off fee for permanent access, and the game would always be available to them. Other benefits for users include automated game updates, a social networking space, the ability to search for and create game mods and the wide variety of available titles (Moore, 2009). For game developers, a critical selling-point is that the Steam model is largely infringement-proof because few pirates have the skills or inclination to set up pirate servers to verify

the infringed copies. Gabe Newell, the managing director of Valve, believes that the best way to beat pirates is simply to provide better customer service that they do (Newell, quoted by Leahy, 2009).

However, Steam has negative aspects that have been criticised by its users. Steam remains a type of DRM, and an occasionally-aggressive system of content management and piracy prevention (Kuchera, 2009). To complement Valve's protection of its clients' intellectual properties, the company has a strict banning policy: if the verification server detects a pirated Valve game on the user's system or discovers that the user had accessed a pirate server, the account will become flagged and may be banned permanently. The user thus loses all of his or her legitimate content along with access to Steam. The bans are generally irrevocable, which has led on occasion to mistakes that result in unfair non-infringing player bans; for example, if a computer owner's friend or family member uses the machine to play pirated games, this could reflect on the otherwise-innocent owner; similarly, viruses or malicious programmes could imitate pirated content. The harshness of the penalty, Valve's inflexibility in moderating the situation and the arguable intrusiveness of the system are significant criticisms. Additionally, Steam has given rise to concerns over user privacy, as data relating to gameplay and the characteristic of the user's system are gathered without disclosure and without providing an opt-out (Moore, 2009). Although Managing Director Gabe Newell insists that gamers are happy to sacrifice a bit of privacy for better features and a more tailored experience, critics disagree (Leahy, 2009). Since the inception of Steam, other digital distribution platforms have become available, and include Impulse by Stardock Systems (used to distribute both software, games and third-party applications) (Wardell, 2008a), Direct2Drive (a PC and Mac game download site) and the three current consoles' online stores – Xbox Live Marketplace, PlayStation Network and the Wii Shop Channel – which sell console games, patches and additional downloadable content to console owners. While this model is useful for consoles, some aspects are problematic. First, region-locking is widely practiced, making the services unavailable in certain parts of the world. Second, Microsoft's Xbox Live Marketplace does not allow content creators to release content for free; it is mandatory that a minimum charge of $5 is imposed (Faylor, 2008). This situation is particularly unfair for Xbox360 owners because, while they pay comparable prices for their games, they cannot access the same materials other gamers (for example, those who play on PC or a PlayStation) receive for free (Surette, 2007). The discrepancy that this creates between gamers, like the one between gamers from differently resourced regions, creates a sense of unfairness and dissatisfaction.

While the once-off payment ensures permanent access to the game, the monthly subscription model mean that access will be lost if the payment is stopped. This pay-for-play model has been immensely successful in China (a country considered to have rampant piracy): in fact, the 'Chinese game market receives 84% of its revenue from online games' (Gaudiosi, 2006). In the absence of an easy means of piracy, it seems that many gamers opt to chose the more convenient legitimate route, substantiating

the claim that convenience, and not necessarily price, dictates consumer choice. Even if cracked pirate servers are available, they lack many of the positive qualities that gamers enjoy about MMOGs: for example, the community is markedly smaller, it is much harder to join player groups for completing missions and updates are rarely available on time, if at all. For the MMOG, the experience as a whole, and not just the gameplay or story itself, is the pulling point. Thus, the product that is sold is the community experience and the access to a dynamic and changing world. This model seems to be immensely successful, judging by the number of subscribers to the most popular games. However, this model of subscription access is not desirable for all gamers. For example, one of the participants in the survey above states that 'I refuse to pay for *World Of Warcraft*, if I buy a game I should not have to pay to play it.' Other gamers feel that the monthly subscription, which is usually around $15, is excessive for the service that is provided. They cite the existence of free-to-play MMOGs, like *Guild Wars*, as an example of a well-functioning game that requires only the initial buy-in. In fact, the recent trend in games is to move away from an over-all subscription model to a staggered, freemium construction (see section 6.6 below). MMOG developers feel that the market for paid-subscription games has been saturated (and overwhelmingly dominated) by *World of Warcraft*, and that the only way to be competitive is to provide a good alternative product at lower price or for free. Regardless of cost, however, the MMOG model does not escape the need for a certain level of DRM.

6.5 Stardock and moving away from DRM

Stardock Systems has created an impressive reputation for itself by being an active proponent of DRM-free products. While they maintain the standard model of selling their software itself (often through their digital distributor, Impulse), they believe in adding value services for legitimate customers rather than focusing on punishing pirate users. Brad Wardell, the managing director of Stardock Systems, explains

> By releasing frequent, convenient, free updates, we reward people for buying the game... Any copy protection system, in my opinion, should be focused on trying to increase sales – not stop piracy. The two aren't the same. Most people who pirate a software product would never have purchased it... The people to focus on are the ones who might have bought your product or service but chose not to because it was easier to pirate it (Wardell, quoted by Sinclair, 2006b).

Auran, the Australian publisher of Stardock Systems' games, believes that the key to preventing piracy is not using DRM, but rather having 'a quality product that provides registered users with frequent updates, additional features and outstanding support to create a best-seller' (Sinclair, 2006a). Stardock Systems has published two acclaimed best-selling titles in recent years: *Galactic Civilisations 2* and *Sins of a Solar Empire*. Both games were released DRM-free (Wardell, 2008b). Despite the general worry of rampant piracy, *Galactic Civilisations 2* achieved a number one sales rank (Wardell, quoted by Sinclair, 2006b). Wardell explains that 'we feel the most effective way to

increase sales is to protect IP in a way that doesn't seem to punish legitimate customers' (2008a). Because the company primarily develops and publishes business software (an area of media where DRM is very uncommon), they are familiar with non-protected models and therefore felt comfortable with extending the experiment to games. On his private blog, Wardell explains that the mistake made by game developers is that they calculate their market according to the number of potential players rather than the number of customers (2008b). He also criticises developers for focusing too much on 'coolness' potential and forgetting about good business models and practice, emphasising that '[h]ard core gamers have different tastes in games than the mainstream PC gaming market of game *buyers*' (Wardell, 2008b).

Other prominent game distributors are following this trend to strip DRM from products. It is critical to remember that using DRM and protecting intellectual property are not synonymous: the latter can be done very effectively without the former. Most notably, EA seems to be abandoning the use of the notorious SecuROM DRM programme (see section 3.6 above). EA learnt from the unfortunate *Spore* DRM-usage controversy and released their next blockbuster title, *The Sims 3*, without the same strict DRM. A recent announcement has confirmed that the highly anticipated *Dragon Age: Origins*, published by EA, will not contain SecuROM (Cavalli, 2009). Other games companies that have recently rejected the use of DRM include Ubisoft, on their recent *Prince of Persia* title, and Bioware, after the problems experienced with *Mass Effect* (GamePolitics, 2008c). This pattern in games echoes recent abandonment of DRM is music and video distribution (see Chapter 2 above). It seems that as DRM and copy protection laws tighten, content producers are loosening and opening up their own measures. This is a positive step because it indicates that copyright-holding companies are more willing to acquiesce to public and market pressures than to the results of secretive corporate government lobbying, meaning that public will and not private interests is steering the evolution of media distribution. The constant reconfirmation of the inefficacy of DRM, as well as its unfavourable status among knowledgeable users (and, increasingly, the general public), has made it undesirable from a marketing and public-image perspective.

6.6 Micro-transacting, freemiums and the rise of mobile/casual gaming

Third, media producers can deliver a generic, functional product for free, and charge for any extras that the user may want. In this scenario, the extras are generally small additions that provide added functionality, cosmetic improvements or, in the case of games, additional content, items or characters. The purchases – called micro-transactions – are often small and effected quickly and conveniently through pre-verified banking or credit card details, and allow the user to buy the desired content often at just the click of a button. This model benefits from quick impulse purchases made at low cost (and low risk) to the user. The product that is sold is content that is made artificially rare by its cost and its role in the game or software.

Some of the best-known games to use micro-transactions are EA's *Battlefield Heroes* and Sony Online Entertainment's *Everquest* and *Everquest 2* (ZergWatch, 2009). *Battlefield Heroes* is completely free to download and play, but users can spend small sums on in-game items that create cosmetic modifications to the players' avatars, but have no gameplay benefits as such; this is a positive approach because it doesn't allow richer players to 'buy' themselves an in-game advantage (ZergWatch, 2009). The *Everquest* games are MMOGs that require monthly subscription fees, but that include an extra layer of micro-transactions for purchasing bonus items and content. Micro-transactions can also be decidedly 'macro' in scale. The popular online game *Second Life* has seen some of the largest purchases of in-game digital goods ever recorded. *Second Life* is blend of simulation game, social networking space and the largest virtual economy in the world, with transactions equalling over $1 billion thus far (Net Imperative, 2009). One of its crucial features is that it allows gamers to take an active role in creating aspects of the media they consume, a critical factor in today's online media culture (Benkler, 2006: 136). It has a tiered payment system: free membership nets the player an avatar and access to the world but little else; $1 allows the player to receive 250 Linden Dollars, the in-game currency that allows the player to purchase digital goods such as clothing, accessories and even land; Premium membership for $10 gives the player additional features. Above these costs, players also pay rental fees for the virtual land that they own, as much as $295 a month for a private island. Virtual real estate purchases themselves can easily eclipse thousands of real-world dollars (Hof, 2006); island purchases can be in excess of $10,000 (Kindle Review, 2009). The fascinating result is that gamers are willing to pay significant amounts of money to purchase rare but completely virtual goods, but may not be willing to buy actual digital media (games, music etc), preferring to pirate it (Kindle Review, 2009). Of course it could be argued that those who pirate would not spend money on these types of virtual goods, but this example still indicates that creating a system of scarcity and value (for example, limiting the number of available islands in *Second Life*) gives the virtual goods a very real inflated status and worth.

A related concept that is similar to micro-transactions but distinguishable is the freemium model, where a free version of the software is available to all, but privileged subscribers are given access to more powerful and useful applications. Freemium is a portmanteau of 'free' and 'premium', and indicates that both types of product are available in one package. Here, the product is increased functionality and value-adding benefits that are not free for the company to provide (for example, server storage for a higher amount of content, or greater processing power). For a web-based product, as few as 1% of the users subscribing to the premium membership can support the entire product and turn a profit (Anderson, 2008). Turbine's *Dungeons and Dragons Online*, a popular MMOG, has recently converted to the freemium model. Players can download the game client and play for free up until they reach a certain character level; after this, free content gets 'sparser' and additional content

and the game's best items must be paid for through the VIP subscription plan (Turbine, 2009). Virtually all other subscription-based MMOGs, including *World of Warcraft*, offer the potential subscriber a free grace period of play (usually 10 to 14 days), during which the player can try the game and decide if they like it; they count on the addictiveness of the play and the time investment already inputted to draw new subscribing players in. This model allows curious gamers to try out the game without any unnecessary investment, and later decide if the premium package is worth the cost based on the enjoyment of the experience; as the survey above indicated (see section 5.5), trying-before-buying was a reason for pirating a game for 63% of respondents. The freemium model legitimises this practice by making the initial download and experimentation process legal. Its greatest advantage is that it can cater to a wide variety of users and needs without compromising on quality and service.

Mobile gaming has exploded into popularity recently, since the advent of powerful and feature-laden cellphones and PDA devices like the iPod Touch, iPhone and BlackBerry. Of these, Apple products have dominated due to the company's innovative and highly usable App Store: an online marketplace where iPod Touch and iPhone owners can browse for, purchase and download small, quirky applications and games for their devices. The store contains hundreds of thousands of applications and games, all generally ranging in cost from free to around $10. In addition, virtually all the products available are made by private users with no affiliation to Apple: the company simply offers them a platform for distributing their applications, and charges a percentage of the final cost as a hosting fee. The ultimate convenience of the model – users can simply search for what they want, purchase with one touch of a button, instantly, from their devices, and download immediately over wireless internet – has ushered in a wave of imitation services. For example, Amazon operates a similar model for the Kindle ebook reader, and it has now become accepted that any high-powered mobile device should have its own application store. None have yet rivalled Apple's offering. This can be explained due to the immensely powerful corporate brand of the company, the widespread proliferation of its devices (especially iPods) and the multitude of features incorporated in its devices – touch screens, accelerometers, wireless internet receivers – that make it easy and interesting to create applications. By all estimates, the iPhone is the most widespread gaming device in the world (Kohler, 2009).

6.7 Open source, crowdsourcing and service

The fourth model, used by successful open source software developers like Linux, involves distributing the software for free and selling the maintenance and support services that are sometimes necessary to operate the software. This model embraces open distribution over file-sharing networks because every person who downloads and uses the software becomes a potential customer for the service provided. As users become more familiar with the products, they may demand additional support or customised solutions for their businesses, providing work for knowledgeable technicians.

In this case, the product is a value-adding service or technical support (Singleton, 2007: 6). The open-source model is not ideal for large games – they often require too much coordination and too many non-technical skills to create – but it has many suggestions and advantages that may help in structuring a new approach to game distribution. For smaller, flash- or browser-based games, the open source approach in invaluable because it allows single creators or small teams to benefit from the knowledge of others, and improve a product that they release for free to interested gamers. Open source software embraces the idea of collaborative creation: any user can modify, improve or advance the software, and then spread the new material to the whole community. In many ways, MMOGs already employ this model, however loosely: they release a software package for free and, if the gamer pays for the service of accessing the game, he or she can create characters, items or story threads, altering the world through creative enrichment. Of course, in the MMOG context, the creations cannot be shared freely among all users, and the participant's impact on the whole game is minimal, but the comparison is useful to consider.

A related concept to open content production is crowdsourcing: literally, sourcing ideas or materials from a large community. Crowdsourcing has the benefit of being able to draw on a wide range of ideas and expertise for a project, though individual contributions are not necessarily of equal value. Most importantly, it lets users improve the final product for the company, for free. Not only does this increase the value of the final product, but it also engenders a sense of community, participation and value to the users: they feel that they can be equally part of the experience without needing to contribute beyond their means. The crowdsourcing-cooperation model was used very effectively by Nine Inch Nails, who released the base tracks of their songs for free and allowed users to remix them; the best offerings were made available online at remix.nin.com, raising traffic and interest in the band's website and giving the fans a degree of acclaim. Apple allows anybody to create a application for their online store; the company does not need to generate its own products. The idea of crowdsourcing in games is to co-opt the efforts of the most enthusiastic fans. Valve has a long history of allowing its users to make game mods for the games that they publish; often, the best created products are bought by the company or hosted on the game's Steam page. This increases the profile of the game because of the added value, but it may also increase sales, because gamers are curious and want to play the most renowned mods. Some fans even improve games by fixing errors or supporting the community if the original developers are no longer in existence. *Vampire: the Masquerade Bloodlines* has an active community of just such fans, who keep the game running even though the developer, Troika, has long since been liquidated (see, e.g., Ridgeley, 2009). Linden Labs allows its *Second Life* players to create in-game objects to sell, meaning that the company has to spend very little time generating interesting content or researching to see what the market likes. Any model that utilises crowdsourcing or open source approaches must have a filtering process in place to protect

against malicious or bad content; either through in-game filtering (bad *Second Life* products won't sell) or through more general gate-keeping (Valve deciding which mods to promote).

7. CONCLUSION

This limited study sought to prove that game piracy should not be perceived as a negative act committed by ignorant and malicious gamers who only seek to undermine game developers and obtain free content; rather, that piracy is a symptom of a deeper underlying problem that relates to outdated business practices, over-complex legal controls and marginalisation of gamers. As a whole, this thesis has been successful in demonstrating this statement. This data has proven that piracy is an extremely complex and involved act, and that there is no one clear understanding – or even legal definition – that fully encapsulates it. As Benkler argues, media producers prioritise their own financial interests over customers' convenience and satisfaction (2006: 442). It has been shown here, especially in Chapter 6, that co-option and cooperation are much more successful strategies than starting a full-scale legal and moral war against media consumers. Virtually all evidence presented by theorists like Jessica Litman, Yochai Benkler, James Boyle, Siva Vaidhyanathan (and others) points to the excessive standpoint taken by intellectual property protectionists, to the detriment of the free spread of culture, the public domain and access to information.

The approach to games, copyright and piracy has been mixed. Gamers and game developers often have contradictory and clashing views about topics like game content, cost, DRM and distribution. Some game companies choose to tighten security, impose harsher penalties and protect themselves against the onslaught of piracy. Others take a more open approach and attempt to co-opt the file-sharing model into a viable strategy. Gamers, developers, publishers and scholars argue for both sides of the debate on the morality, legality and effects of piracy, with little neutral ground between the two camps. This thesis seeks to have proven that piracy in games is a complex social, economic and cultural phenomenon that cannot easily be dismissed or explained. This thesis explained and described current worldwide copyright regimes and their inherent problems and challenges. It then explored the problems and solutions relating to copyright and piracy in other forms of media, focusing especially on the positive outcomes of opening up current business models. The thesis then delved into the field of games and copyright, spelling out the pertinent debates and setting up the problems that were inherent in the field. After this, the thesis expounded the valuable research that this project has unlocked, demonstrating the vagaries of the field of study, especially as it applied to the local South African context. The data confirmed the following hypotheses: that gamers pirate for reasons other than obtaining free games, that gamers feel strongly about DRM, that gamers sometimes express social activism through piracy, that they often justify their acts of piracy and that South African gamers are not unique in their behaviour and thoughts around games, copyright and piracy. The hypotheses that all gamers pirate without moral considerations and that South Africans are well-informed about the legalities of piracy were disproven. Finally, having expounded the problems and

worries surrounding the protection of copyright in games and other media, the thesis proposed several important alternative models – distributing content for free to generate later sales, crowdsourcing, or removing DRM to appeal to users, each of which offer a new and open approach to games, markets and distribution.

For now, this research has provided valuable insights into the ever-widening field of gaming studies, by providing an analysis of a specific spatial and temporal cultural phenomenon: that is, the perceptions and behaviour around copyright infringement by contemporary South African gamers. This study therefore adds to the growing corpus of contextualised gaming studies and enriches a section of it that has received fairly little attention – few studies on infringing behaviour have been performed outside of the most active gaming zones (the US, Europe and Asia). This new perspective confirms that South African gamers share many similarities with their worldwide counterparts, which may suggest that the commonalities of the shared hobby and similar patterns of interaction (for example, spending significant time online) inform copyright infringement more than other factors (such as physical location or cultural disparities). The results of this thesis suggest several future avenues of study. First, more transparent research needs to be done on the true effect of piracy on media markets and profits, taking into account all factors, including online sales and accurate measurements of so-called 'lost sales'. Second, it would be interesting to test gamers' piracy motives over a much wider range of participants from various countries and backgrounds to see where commonalities and divergences are, and to see what behaviours, ideas, trends or means of interaction unites gamers. Third, research on evolving digital distribution trends, free media distribution and sales would be useful to prove the repeatability and profit potential of models that rely on giving media away for free. Finally, an in-depth appraisal of copyright law and its future evolution, as well as suggestions for loosening limits in the digital age, would be highly useful.

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