# JUSTIFICATIONS FOR COPYRIGHT: THE ECONOMIC JUSTIFICATION\*

Sadulla Karjiker†
Senior Lecturer, Faculty of Law, Stellenbosch University

#### 1. Introduction

In the first part of this article, two of the moral justifications for copyright protection, namely, the labour-based theories (natural rights theory and the reward theory) and the personality theory, were considered. As demonstrated in the first part, the aformentioned moral justifications failed to provide an adequate justification for modern copyright law. If copyright as an institution is justifiable, it has to be principally on the basis of the utilitarian theory or the economic theory, both of which will now be considered. The basis of copyright law in the United States of America (US) and the United Kingdom is more economic or utilitarian rather than being based on author's rights, which is the prevalent justification in civil law jurisdictions.<sup>2</sup>

The utilitarian justification for copyright is also one of the moral justifications, but it is being discussed with the economic justification for a specific reason: it is sometimes claimed that the law-and-economics approach to the analysis of law is simply a form of utilitarianism, and, therefore, subject to the same criticisms. It is submitted that the economic and utilitarian justifications are distinct justifications. As will be demonstrated, the economic justification is not a utilitarian justification, and this is borne out by the fact that while some social institutions, such as copyright protection, cannot be adequately justified on a utilitarian basis, there may nevertheless be sound economic reasons for their existence.

After an introduction to the economic analysis of law, an argument will be made in support of the economic pursuit of efficiency (or wealth

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<sup>†</sup> BSc LLB (UCT) LLM (London) LLD (Stell).

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<sup>2</sup> EF Judge & D Gervais 'Of silos and constellations: Comparing notions of originality in copyright law' (2009) 27 Cardozo Arts & Ent. L.J. 375 at 399; I Harding & E Sweetland 'Moral rights in the modern world: Is it time for change?' (2012) 7 Journal of Intellectual Property Law & Practice 565 at 566.

maximisation),<sup>3</sup> which is advocated by economic analysts, and why it is considered to be a superior norm for legal theory than utilitarianism.

#### 2 Utilitarian Justification

Utilitarianism is the third moral justification for copyright protection – the other two being the labour-based theories and the personality theory – and is claimed to be the 'predominant justification' for intellectual property rights. <sup>4</sup> The utilitarian justification of copyright protection has been very influential in the evolution of copyright protection in Anglo-American systems of intellectual property, and is said to form the basis of copyright law in the US, having been enshrined in the constitutional foundations of US intellectual property law. <sup>5</sup>

A utilitarian approach to matters advocates that an act or institution is preferred if it is likely to maximise social happiness or utility, namely, the extent by which pleasure exceeds pain.<sup>6</sup> The appropriate course of action or policy requires a calculation of the associated benefits and costs. Russell states that '[i]n its absolute form, the doctrine that an individual has certain inalienable rights is incompatible with utilitarianism, i e with the doctrine that the right acts are those that do most to promote the general happiness'.<sup>7</sup> There are, therefore, no inalienable, or a priori, rights; whether a right or institution is recognised is simply a function of its outcome. A particular course of action is correct because of the result achieved, rather than because of any other justification. In other words, utilitarianism is an outcome-based, or consequentialist, morality.

The utilitarian justification of copyright protection is, thus, premised on the fact that the copyright works are beneficial to society and their production should be encouraged. As a moral justification, the utilitarian justificatory approach is, therefore, fundamentally different to the labour-based or personality justifications for copyright protection. The utilitarian justification is concerned with social utility: it is the public interest that is

- 3 When referring to efficiency in this work, we will be concerned with allocative efficiency the aggregate of the costs and benefits of a particular situation. In other words, we are interested in how society can get the most out of particular resources. The accepted standard for efficiency in economics is the pursuit of Kaldor-Hicks efficiency, aggregate, not individual, wealth maximisation. A given situation is Kaldor-Hicks efficient provided aggregate wealth is increased, and those who have benefitted can, in theory, compensate those who have lost. JL Harrison Law and Economics in a Nutshell 1 ed (1995) 27–35; and AM Polinsky An Introduction to Law and Economics 3 ed (2003) 7–11.
- 4 SE Trosow 'The illusive search for justificatory theories: Copyright, commodification and capital' (2003) 16 Can J L & Juris 217 at 226.
- 5 SP Calandrillo 'An economic analysis of intellectual property rights: Justifications and problems of exclusive rights, incentives to generate information, and the alternative of a government-run reward system' (1998) 9 Fordham Intell Prop Media & Ent LJ 301 at 310; EC Hettinger 'Justifying intellectual property' (1989) 18 Philosophy and Public Affairs 31 at 47; and AD Moore 'A Lockean theory of intellectual property' (1997) 21 Hamline L Rev 65.
- 6 RA Posner 'Utilitarianism, economics, and legal theory' (1979) 8 The Journal of Legal Studies 103 at 111.
- 7 B Russell *History of Western Philosophy* 1 ed (2005) 572.

of primary importance, not the interests of individual authors.<sup>8</sup> Any form of restriction on personal liberty, which is what copyright protection amounts to by restricting use of copyright works, can be justified if it achieves some greater social purpose.<sup>9</sup> In other words, the primary motivation for awarding copyright protection is 'to encourage the production and dissemination of intellectual works' and not to reward authors.<sup>10</sup> Copyright protection is simply a means to an end: by granting authors property rights in their creations, authors are encouraged to produce sufficient works, which serves the public interest.<sup>11</sup> The utilitarian justification of copyright is, therefore, instrumental (or outcome-based), rather than rooted in notions of the natural, or inherent, rights of authors.<sup>12</sup> This state of affairs is troubling for those who adopt a principled stance to copyright protection or those who consider rights to be divorced from 'considerations of utility maximization or promotion of the social good'.<sup>13</sup>

As utilitarian analysis occurs at the institutional, or societal, level rather than being concerned with the position of individual authors, <sup>14</sup> the implication is that if the property rights afforded to authors do not serve to maximise social utility their grant cannot be justified, and copyright as an institution should be abolished. <sup>15</sup> Utilitarian arguments can serve to justify the institution of copyright or to undermine it should it not benefit society. The utility costs of awarding private rights might outweigh the utility benefits. <sup>16</sup> Utilitarianism, thus, mandates periodic reviews into whether property rights of the kind copyright grants to authors and the types of works protected is the most efficient way of ensuring the production of socially beneficial works. <sup>17</sup> It may be the case that some types of work should no longer be protected, while new types of work should receive copyright protection.

As the focus of this work is the economic analysis of copyright protection, and given the fact that the utilitarian justification has significant problems (as will be discussed below), no purpose would be served by engaging in an investigation of the utility calculus of copyright protection. Moreover, as will be demonstrated, such calculation can amount to no more than guesswork.

<sup>8</sup> HB Abrams 'The historic foundation of American copyright law: Exploding the myth of common law copyright' (1983) 29 Wayne L Rev 1119 at 1120; Hettinger (n5) 48; and T Hill 'Fragmenting the copyleft movement: The public will not prevail' (1999) Utah LR 797 at 800.

<sup>9</sup> S Breyer 'Copyright: A rejoinder' (1972) 20 UCLA L Rev 75.

<sup>10</sup> Abrams (n8) 1123.

<sup>11</sup> Hettinger (n5) 48.

<sup>12</sup> Moore (n5) 66.

<sup>13</sup> Ibid.

<sup>14</sup> Moore (n5) 68.

<sup>15</sup> Moore (n5) 66.

<sup>16</sup> TG Palmer 'Are patents and copyrights morally justified? The philosophy of property rights and ideal objects' (1990) 13 Harv J L & Pub Pol'y 817 at 849.

<sup>17</sup> A Ng 'Copyright's empire: Why the law matters' (2007) 11 Marq Intell Prop L Rev 337 at 338.

#### 2.1 Criticism of the utilitarian justification

Before dealing with the criticisms of the utilitarian justification, it is important to emphasise that utilitarian theory does not provide an a priori (or unequivocal) case for or against copyright. Whether copyright protection should be provided is a contingent matter: it depends on issues such as the state of technology and social practices. There are 'powerful' objections to utilitarianism which are directed at both its substantive merits due to its consequentialist nature and the practical (or technical) difficulties when attempting to apply it in any particular situation. The provided is a priori consequential or technical difficulties when attempting to apply it in any particular situation.

First, although the economic justification for copyright protection is also an instrumental justification, rather than providing an unequivocal case for copyright protection, the guiding moral principle of maximising utility and calculating public utility (the 'felicific calculus') is a particularly unsatisfactory basis for the determination of what is socially beneficial. The determination of utilitarian public policy, as will be demonstrated below, is based on no more than guesswork as to what maximises happiness. Second, from a moral perspective, particularly in the case of a morality that is grounded in individual liberty, utilitarianism can easily justify morally repugnant conduct. After all, disregarding the happiness of the individual at the expense of the community is perfectly justifiable on the basis of utilitarianism. <sup>20</sup> Third, not only can it justify the violation of the rights of individuals – if there can be anything such as the 'rights' of individuals under utilitarianism - individuals can be forced to act against their own interests if it is deemed to benefit others to a greater extent. Fourth, the idea of a narrow concept of utilitarianism is anachronistic under any type of constitutional order which enshrines fundamental rights, as does the South African Bill of Rights<sup>21</sup> because it 'can neither provide a theory of moral rights nor take either moral or legal rights seriously'. 22 It condones the violation of such rights or freedoms if it maximises utility.

As a possible defence to some of these criticisms, it is worth bearing in mind that legal doctrine is marked by instances of exceptions to established rules and norms. Acceptable doctrine does not require that every possible case comply with the strict requirements of the doctrine, 'but only that it should be true in an overwhelming majority of cases'. Thus, even within a utilitarian construct of the law, there may be exceptions which allow for personal liberty and issues of morality. The problem is of course to determine the circumstances in which it will be acceptable to deviate from the doctrine. Crucially, this determination cannot be made on the principles of utilitarianism.

Utilitarianism also has significant problems due to its inability to provide a workable basis for formulating public policy and legal rules. If one attempts

<sup>18</sup> Palmer (n16) 820.

<sup>19</sup> Ng (n17) 510-1.

<sup>20</sup> Posner (n6) 115.

<sup>21</sup> Ch 2, Constitution of the Republic of South Africa 1996.

<sup>22</sup> JL Coleman 'Efficiency, utility, and wealth maximisation' (1979–80) 8 Hofstra L. Rev. 509 at

<sup>23</sup> Russell (n7) 572.

to calculate whether public utility would be maximised by a specific course of action or policy, three problems immediately become apparent: the domain (or boundary) problem, the total-or-average utility problem, and the interpersonal-utility problem.<sup>24</sup> The domain problem itself gives rise to two issues. First, a determination has to be made of whether the utility of both humans and animals are to be considered. Second, even if we confine ourselves to consider only the utility of humans, we need to determine which groups should be considered: all humans or merely nationals of one state or a particular group.

The total-or-average utility problem requires a choice to be made about whether total utility is to be maximised, or whether average utility is sought to be maximised. In other words, does the distribution of utility matter? These two goals do not necessarily coincide: seeking to maximise total happiness may result in individuals being made worse off, and, conversely, improving average happiness may reduce total happiness.

The interpersonal-utility comparison problem requires us to determine whether 'a course of conduct or policy that makes some individuals better off and others worse off increases total utility, and if it does, by how much'. 25 While it may be possible to reasonably infer that the utility of a particular individual has improved or declined in different situations, it is not something that is, as yet, measurable. The problem of measurability becomes exponentially more difficult, given the range of human emotions and responses, when trying to compare the relative utilities of individuals in order to ascertain whether total or average utility has increased. Happiness is a relative concept and sometimes individuals derive pleasure in socially undesirable ways (if we can be permitted to make such an a priori moral judgement). Therefore, Posner refers to the 'monstrousness' of utilitarianism, which 'must logically ascribe value to all sorts of asocial behavior, such as envy and sadism, because these are common sources of personal satisfaction and hence of utility'. 26 Again, the determination of a particular boundary or a desired calculus for happiness cannot be done on principles of utilitarian theory.<sup>27</sup>

#### 3. Law and Economics

When the issue of the justification for copyright protection is raised, the standard response is inevitably an appeal to the notion that such protection is required to provide the necessary incentives for authors to create such works, and to do so others must be prevented from exploiting (or 'free-riding' on) the

<sup>24</sup> Coleman (n22) 511; Posner (n6) 112-3.

<sup>25</sup> Coleman (n22) 511.

<sup>26</sup> Posner (n6) 132.

<sup>27</sup> Posner (n6) 112-3.

efforts of authors by giving authors a 'monopoly' over their creations. <sup>28</sup> In fact, we have seen elements of this in some of the justifications already considered. These concepts and their analysis are familiar to economists, which makes copyright such a suitable subject for economic analysis. Given the fact that the primary focus of this article is on the economic justifications for copyright protection, it is necessary to provide a brief introduction to the discipline of law and economics, and the merits and advantages of economic analysis.

#### 3.1 What is law and economics?

The discipline of law and economics is an interdisciplinary subject concerned with the application of economic concepts and analysis to the study of legal issues. <sup>29</sup> In the US, until the 1960s, the use of economic analysis in law was confined to those areas where the legal norms were explicitly economic, such as competition (anti-trust) law, regulated markets, taxation and the quantification of damages. <sup>30</sup> Since then, economic analysis of law has been applied to a wide variety of legal subjects on the basis that everything we do has financial implications and, therefore, is potentially economically significant. The laws we create are no exception as they can affect markets. <sup>31</sup> There are now a number of journals and academics – including two Nobel laureates – dedicated to this field and area of research. <sup>32</sup> The significant impact of economic analysis has led to claims that it is 'the most important development in legal scholarship of the twentieth century'. <sup>33</sup> However, unfortunately, in South Africa, the use of economic analysis in law is still largely confined to competition law.

# 3.2 Why economic analysis?

Law is considered to be a fertile area for economics because both law and economics are, to varying degrees, concerned with incentives. From an economic perspective, legal sanctions resemble prices because laws have

- 28 The description of the rights afforded by copyright as monopoly rights is a misnomer and there is no cogent reason why there is so much emphasis on monopoly analysis of copyright. Copyright protection rarely confers monopoly power and the attendant social costs such as resource misallocation. While a monopolist is the sole seller of a product for which there are no close substitutes, as copyright does not protect ideas, but only a particular expression thereof, it generally allows the production of substitute goods. The copyright owner receives no more of a monopoly than any other property owner. The economic model which best describes copyright works is monopolistic competition, not the monopoly model. See M Boldrin & DK Levine Against Intellectual Monopoly 1 ed (2010); EW Kitch 'Elementary and persistent errors in the economic analysis of intellectual property' (2000) 53 Vand L Rev 1727; WM Landes & RA Posner 'An economic analysis of copyright law' (1989) 18 Journal of Legal Studies 325; E Mackaay 'Economic incentives in markets for information and innovation' (1990) 13 Harv J L & Pub Pol'y 867; SE Sterk 'Rhetoric and reality in copyright law' (1996) 94 Mich L Rev 1197.
- 29 F Parisi Positive, Normative and Functional Schools in Law and Economics 2 ed (2005) 58; I Ward Introduction to Critical Legal Theory 2 ed (2004) 23.
- 30 R Cooter & T Ulen Law and Economics 4 ed (2003) 1; and Posner (n6) 105-6.
- 31 Ward (n29) 123.
- 32 Cooter & Úlen (n30) 2. The two Nobel laureates are Ronald Coase and Gary Becker, who won the Nobel Prize for Economics.
- 33 Cooter & Ulen (n30) 2–3. Quoting Professor Bruce Ackerman of Yale Law School.

implicit associated prices (that is, costs or benefits) which alter the behaviour of individuals.<sup>34</sup> For example, if the law imposes a severe legal sanction on a particular act (for example, copyright infringement), the effect of such a law is analogous to the effects of increasing the price of such an activity. The legal sanction, by increasing the 'price' of such conduct ('good'), will result in individuals 'consuming' less of such 'good' ie avoiding the sanctioned activity.<sup>35</sup>

Knowing how human behaviour is altered by laws (or incentives, in terms of economics) can help lawmakers design laws in order to achieve their intended purpose, understand why the intended goals are not being achieved or if laws are the appropriate tool to achieve the intended goals. Economics, in particular microeconomics, is the study of how individuals make choices in cases of scarcity and how they respond to incentives. Scarcity in this context means any constraints on an individual, be it wealth, income, time, knowledge or information. As laws act as a constraint on individual behaviour, they too can be subjected to economic analysis. Thus, the economic analysis of law can be extremely useful in providing insights into the desirability of legal institutions – such as copyright.

The analytical technique of making simplified assumptions about a given situation, which is used by economists, is one that is unfamiliar to lawyers. Some of the assumptions economists make when analysing particular problems have been criticised or ridiculed, but much can be learnt from artfully chosen, relevant assumptions which help to simplify an otherwise complex problem.<sup>38</sup> The primary assumption in neo-classical economic models is that humans are rational maximisers of their own interests (or, in economics parlance, their 'utility'); they have to be in a world that has scarcity.<sup>39</sup> When economists refer to the notional 'rational' agent, this idealisation – if any form of efficiency analysis is to be plausible – requires that such agent consistently acts in a manner that evidences some appreciation of the scarcity of resources, no more. It is not a statement about the psychological state or the particular preferences of an agent.<sup>40</sup> Economic analysis is particularly insightful if it can identify such consistent behaviour in a large number of agents and when this reflects the general behaviour of individuals.<sup>41</sup> Economic analysis is simply concerned with the empirical question of what individuals will choose in a given set of circumstances, regardless of issues of morality.<sup>42</sup>

- 34 Cooter & Ulen (n30) 10.
- 35 Cooter & Ulen (n30) 3.
- 36 TJ Miceli *The Economic Approach to Law* 1 ed (2004) 15; and M Parkin *Microeconomics* 9 ed (2010) 2.
- 37 Miceli (n36) 15.
- 38 Polinsky (n3) 2-6.
- 39 Both utilitarianism and economic analysis, rather confusingly, use the term 'utility', but the different senses in which they are used will be distinguished below in order to clarify whether the term is being used in the utilitarian sense or in economic sense.
- 40 C Roederer & D Moellendorf Jurisprudence 1 ed (2006) 194.
- 41 Roederer & Moellendorf (n40) 195.
- 42 Ward (n29) 124-5.

Although the assumption of the individual as a rational maximiser of utility, like some of the other assumptions employed in economic models, may not always be appropriate, it does explain a substantial spectrum of human behaviour from which useful conclusions can be drawn. It allows for an examination of how humans respond to incentives using theories such as game theory and provides insights which are more useful than mere intuition. It similarly, the pursuit of efficiency or wealth maximisation as economic goals has also been criticised, but they do provide more definable and measurable criteria than other norms usually employed in traditional legal analysis, such as fairness or the public interest. The case for efficiency or wealth maximisation as a normative goal will be considered below.

This is not to deny that laws may seek to promote morals or social norms such as justice or individual liberty, or that a fair distribution of wealth should be pursued. The law often pursues legal notions such as equity or justice despite the costs of doing so; it can never simply be concerned with the ruthless pursuit of efficiency. Even if these other norms are the primary goals of law, economic notions such as efficiency can still contribute to their achievement because it may indicate how they can be achieved in the least costly manner. No matter what policy is being pursued, wasteful activity can never be considered as socially beneficial. Thus, the economic goals of efficiency or wealth maximisation can be instrumental in pursuing moral goals or social norms such as justice or individual liberty.

The application of economic techniques to legal analysis has been beneficial as it has introduced greater analytical rigour when dealing with complicated legal issues, yielding critical insights which may have been overlooked in traditional legal analysis. Traditional legal analysis tends to be case-law based, involving a search for dogmatic consistencies in the legal system. <sup>51</sup> Often, despite our best efforts, doctrinal legal arguments fail to account for seemingly inconsistent decisions. However, these differences may be accounted for through legal analysis. Laws have important social goals, and it is important that they are placed in a proper context; they 'are not just arcane, technical arguments'. <sup>52</sup> Given the complexity of many legal issues, particularly copyright law, economic techniques can assist in unpacking the various aspects of a problem to be addressed. Economic analysis enables the

<sup>43</sup> P Drahos A Philosophy of Intellectual Property 1 ed (1996) 119.

<sup>44</sup> Cooter & Ulen (n30) 3-4.

<sup>45</sup> Ward (n29) 123.

<sup>46</sup> Again, not all human actions are done to maximise utility pursuant to pure rationality. For example, humans may perform certain acts because they cherish them out of a sense of duty, or for their intrinsic value, rather than to maximise their utility. The study of behavioural economics has brought about valuable insight into these distinct motivations for doing things.

Ward (n29) 126; R Watt Copyright and Economic Theory 1 ed (2003) 16.

<sup>48</sup> Miceli (n36) 3.

<sup>49</sup> Cooter & Ulen (n30) 4.

<sup>50</sup> Ward (n29) 127.

<sup>51</sup> Parisi (n29) 60.

<sup>52</sup> Cooter & Ulen (n30) 4.

issues to be addressed in a more manageable way, and, as will be demonstrated, provides us with a deeper understanding of the subject.<sup>53</sup>

Intellectual property law such as copyright law is particularly suited to economic analysis. <sup>54</sup> Intellectual property rights are economically significant because they affect the markets in information. <sup>55</sup> More specifically, the reason it makes obvious sense to consider copyright from an economic perspective is that copyright law is primarily concerned with providing an economic incentive for authors. <sup>56</sup> As indicated above, economists are concerned with the optimal allocation of scarce resources among alternative uses. In the case of copyright protection this means that we are interested in a positive analysis: we are concerned with ascertaining whether copyright protection promotes the efficient allocation of resources. <sup>57</sup> From an economic point of view, an analysis of copyright would, thus, involve a determination of whether it is efficient or wealth-maximising to grant property rights in respect of creative works. <sup>58</sup>

Without an examination of the economics of copyright as an institution it 'would remain an opaque institution'. <sup>59</sup> Even critics of economic analysis of copyright law concede that it is 'an important descriptive tool for understanding the operation of copyright law'. <sup>60</sup>

# 3.3 Distinguishing utilitarian theory from an economic analysis of the law

Before turning to the economic analysis of copyright protection, it is necessary to briefly address the issue of whether economic analysis of law is simply a specific form of utilitarianism. As already mentioned, the economic analysis of law is sometimes regarded as a form of utilitarian theory, but they can be distinguished. It is the case that neo-classical economics has its origins in the same moral and political philosophy which gave rise to utilitarianism. <sup>61</sup>

Economics, in its broader sense, seeks to find the most efficient way of satisfying human preferences in light of scarce resources. Adam Smith, the first and greatest theorist of capitalism, was a professor of moral philosophy and considered the market mechanism to be the most efficient way to distribute material wealth. The market mechanism was not considered as the best way of satisfying *all* human preferences, or the basis for other social institutions

- 54 Landes & Posner (n28) 325.
- 55 Drahos (n43) 5-6.
- 56 WJ Gordon 'An inquiry into the merits of copyright: The challenges of consistency, consent, and encouragement theory' (1989) 41 *Stan L Rev* 1343 at 1348.
- 57 Landes & Posner (n28) 325; and Watt (n47) 15.
- 58 Boldrin & Levine (n28) 5; M O'Hare 'Copyright: When is monopoly efficient?' (1985) 4 *Journal of Policy Analysis and Management* 407–409; Landes & Posner (n28) 326.
- 59 Drahos (n43) 7-8.
- 60 Gordon (n56) 1351.
- 61 Roederer & Moellendorf (n40) 187.
- 62 Roederer & Moellendorf (n40) 186.

<sup>53</sup> RA Posner 'Intellectual property: The law and economics approach' (2005) 19 Journal of Economic Perspectives 57.

– he was simply concerned with the distribution of wealth. When it comes to material wealth, individual self-interest is the most efficient method of distributing and maximising wealth because the lawgiver is 'not always wise or virtuous, and because human governments are not omniscient'. Material wealth, according to this broader conception of economics, is not the sole or even primary purpose of trading scarce resources in the market; it was simply considered the most efficient method of satisfying one of the components of overall utility – the distribution of wealth. Thus, to this extent, some of the economic justifications for intellectual property law that are based on wealth maximisation – as exemplified by Posner – resembles a utilitarian approach to intellectual property law.

Whereas the utilitarian approach considers the sole or principal purpose of intellectual property law – as with any law – to maximise aggregate utility, the economic approach confines itself to wealth maximisation. <sup>66</sup> The goal of wealth maximisation can be achieved by seeking an efficient allocation of resources and ensuring that any losses are minimised or adequately compensated by the associated benefits brought about by the legal rules. <sup>67</sup> As with utilitarianism, the wealth-maximising economic analysis of law does not claim to pursue objectively determinable norms. Depending on the economic consequences, there may be cases for or against intellectual property rights. <sup>68</sup>

In the case of wealth maximisation, we are not concerned with trying to quantify the extent of individual or aggregate utility (in the utilitarian sense of happiness). Economists are not concerned with what agents believe their preferences to be; they confine themselves to that which they actually do. 69 Economic analysis like Posner's restricts the concept of wealth to a monetary calculation and only takes into account

'what people are willing to pay for something or, if they already own it, what they demand in money to give it up. The only kind of preference that counts in a system of wealth maximization is thus one that is backed up by money – in other words, that is registered in a market'. To

Economic analysis is concerned with aggregate effects; it merely attempts to determine which set of alternative arrangements is preferred over another, rather than in the absolute or average quantities of each set. The analysis involves a comparison of the marginal efficiency (benefits and costs) of a given set of arrangements, that is, ordinal comparisons.<sup>71</sup> In other words, it is not

- 63 Roederer & Moellendorf (n40) 187. In contrast, the classical economists, like Marx and Ricardo, considered that the distribution of material wealth should be based on some objective norm, rather than based on the pursuit of personal satisfactions.
- 64 Russell (n7) 559.
- 65 Roederer & Moellendorf (n40) 193.
- 66 TG Palmer 'Intellectual property: A non-Posnerian law and economics approach' (1989) 12 Hamline L Rev 261 at 262.
- 67 Ibid.
- 68 Palmer (n16) 849.
- 69 Roederer & Moellendorf (n40) 195.
- 70 Posner (n6) 119.
- 71 Roederer & Moellendorf (n40) 193.

concerned with the intensity of individual preferences (cardinality).<sup>72</sup> More importantly, a utilitarian analysis and an economic analysis of a particular issue may result in different conclusions being reached on the appropriate course of action or policy.

By confining investigations to measurable transactions, whether based on voluntary transactions or hypothetical markets, it is considered more workable than a concept such as happiness or utilitarian utility.<sup>73</sup>

# 3.4 Wealth maximisation as a normative goal

While it is conceded that wealth maximisation does not necessarily result in the maximisation of happiness or welfare or that people are purely wealth maximisers, it is nevertheless claimed that wealth maximisation may still provide invaluable normative guidance: it may be the best evidence of what increases happiness. What could be of more persuasive proof of personal utility than voluntary interaction through market trades? Economists are not concerned with what people profess their moral preferences are; they confine themselves to the choices they make. Mat we pursue through our transactions is arguably of greater import than what we claim our ethical positions to be. Wealth maximisation is also considered to be a better tool in pursuing normative policies because wealth incentives are often more effective at achieving a desired social goal than appealing to moral values.

Even if policy decisions are based on moral or ethical principles, an economic analysis can still add to the debate by illustrating the economic consequences of any proposed policy. To the extent that the moral arguments are influenced by economic considerations, 'the economist has a role to play in the formation of ethical judgments'. There are very few matters of policy that are devoid of economic considerations. In other matters of policy, economic considerations may be the basis of such decisions, which makes the economic analysis decisive. Thus, normative analysis does not require that efficiency needs to be validated as a normative basis before it can be used to provide normative guidance.

However, Posner goes further and suggests that ethical principles such as economic liberty, keeping promises, telling the truth and altruism can be derived from the principle of wealth maximisation. He claims that not only has it been empirically established that economic liberty leads to wealth maximisation by encouraging productive capacities, but that these other ethical principles reduce transaction costs, which is an economising principle.

<sup>72</sup> Roederer & Moellendorf (n40) 196.

<sup>73</sup> Posner (n6) 130. Hypothetical markets arise where a problem of high market transaction costs prevent voluntary exchanges, resulting in resource allocation outside the market.

<sup>74</sup> Posner (n6) 120-2.

<sup>75</sup> Roederer & Moellendorf (n40) 194.

<sup>76</sup> Posner (n6) 122.

<sup>77</sup> Posner (n6) 109.

<sup>78</sup> Posner (n6) 110.

<sup>79</sup> Posner (n6) 109.

Also, the pursuit of utilitarian happiness is arguably a more selfish and less socially beneficial norm than actions based on market forces. For example, whereas the economically unproductive activity of a thief (willing to suffer the disutility of imprisonment) may be justifiable on the grounds of utilitarianism based on increasing happiness, this would not be the case with respect to wealth maximisation as a normative value.

Unlike utilitarianism, the economic approach does not yield 'results violently inconsistent with our common moral intuitions'. The pursuit of lawful wealth requires cooperation between individuals because market transactions are the consequence of mutually beneficial exchanges. Such exchanges can only materialise if self-interest is constrained and sufficient altruism is exhibited. The market system serves as a constraint on wealthy sadists who seek personal pleasure — 'utility monsters' — by requiring the sadists to seek and obtain the consent of their victims, which will only be achieved by paying the demand level of compensation. It is also more unlikely that minorities will be oppressed or persecuted in a system of wealth maximisation than in a utilitarian system because it will be 'rare that the ostracism, expulsion, or segregation of a productive group' will lead to wealth maximisation.

Wealth maximisation is also a more sound theoretical basis for the establishment of exclusive rights (a theory of rights) – not just property rights but also so-called 'natural rights' like life, liberty and property – and their initial assignment (which could be determinate in the presence of transaction costs) than utilitarianism. Not only can wealth maximisation account for the initial vesting of rights (when there are transaction costs inhibiting exchange), it also provides an explanation for limitations on exclusive rights in cases of conflict, corrective justice and distributive justice. <sup>86</sup>

#### 4. Economics of Copyright

Before considering the economic justifications for copyright protection, it is necessary to consider the economic nature of copyright works. We will see why it is claimed that the nature of copyright works creates difficulties which may prevent their creation at a socially-desirable level in a free market without the legal protection afforded by copyright.

Literary works will primarily be used when discussing issues or to illustrate the points made. It is the most widely-used copyright work to illustrate the issues of copyright for two reasons: it was historically the first type of protected work and it is the most familiar type of copyright work. Also, the

<sup>80</sup> Posner (n6) 123.

<sup>81</sup> Posner (n6) 122–3.

<sup>82</sup> Posner (n6) 131–2.

<sup>83</sup> Posner (n6) 132.

<sup>84</sup> Posner (n6) 131-2.

<sup>85</sup> Posner (n6) 133-4.

<sup>86</sup> Posner (n6) 125.

term 'author' should be assumed to mean, collectively, the creator of the copyright work, the owner of the copyright and the person who commercially seeks to exploit it (such as a publisher), unless a distinction is drawn between any of them. This accords with the notion of the author as being the central figure in copyright legislation.<sup>87</sup>

#### 4.1 Market failure

We will now consider the economic nature of copyright works and why it is claimed that their nature leads to market failure without the legal protection afforded by copyright.

#### 4.1.1 Public goods

Due to their intangible nature, copyright works, like other intellectual property, are regarded as *public goods* in economics.<sup>88</sup> Tangible property, such as a surfboard, is generally considered to be a private good because it can be physically controlled (excludable), and enjoyed by only one person at a time (rival). A public good (or service)<sup>89</sup> is one that is both *non-rival* and non-excludable. It is the public-good quality of copyright works that makes it a particularly 'interesting case for economists and lawyers to debate'.90 Unlike a private good, a non-rivalrous good can be consumed or enjoyed by an additional person without diminishing the enjoyment of others, at negligible or no extra cost. 91 For example, the *contents* of a book or the code of a computer program can concurrently be used and enjoyed by more than one person, without any adverse effects on any of such users. 92 It should be borne in mind that a copyright work – eg the code of a computer program or the content of a book – must be distinguished from the physical medium on which it may be conveyed. The copyright work transcends the particular mode of delivery.<sup>93</sup> The non-rivalrous nature of copyright works – the fact that they can be enjoyed by others at no (or negligible) cost – raises the issue

- 87 The term 'author' in copyright law has a technical meaning as legislation defines who the author is in respect of each type of eligible work. This means that the person who is considered to be the author of a copyright work, as that term is ordinarily understood, may not always be the person recognised in law as the author. As with authorship, copyright law deems certain persons to be the owner of copyright works. These specific legislative provisions can, arguably, more plausibly be explained on the basis of economic considerations such as who has assumed the financial risk in relation to the creation of a particular copyright work rather than as a consequence of the effort expended.
- 88 In economics goods can be classified as private goods, common goods (common-pool resources), natural monopolies or public goods, depending on 'the extent to which people can be *excluded* from consuming them and in the extent to which one person's consumption *rivals* the consumption of others'. (Emphasis added.) See Parkin (n36) 394.
- 89 For convenience, this chapter will simply refer to 'good,' rather than repeatedly having to refer to 'good or service'. Thus, any reference to 'good' should be understood to be applicable to a 'service' as well, unless it is stated otherwise.
- 90 Watt (n47) 3; Landes & Posner (n28) 326.
- 91 Boldrin & Levine (n28) 156.
- 92 Moore (n5) 77.
- 93 Watt (n47) 4.

of whether it is socially beneficial to prevent such use by others. After all, if it costs nothing for others to utilise and enjoy a copyright work, why should they be prevented from doing so? On a crude utilitarian basis such use by others should not be prevented, and for copyright law to do so is socially detrimental.<sup>94</sup>

The claimed non-excludability of copyright works means that persons cannot be prevented from using or enjoying it. A well-known example of a nonexcludable service is a free-to-air broadcast; no individual can be prevented from enjoying such a good if they have a radio and individual freedom. 95 Gordon states that whether a good is excludable depends on whether it can be concealed, allowing the creator to prevent use by non-purchasers. <sup>96</sup> Palmer, on the other hand, is of the opinion that whether a particular good is a public good, and, therefore, excludable, cannot be determined from the nature of the good itself. Rather, whether a good is public good depends on the institutional context and the prior policy considerations. A system can require that a good should be accessible to others or that it be produced for public benefit, in which case it will be more similar to a public good. Alternatively, the system may avoid introducing any mechanisms to assist the producer of a good to exclude others from the benefit of the good but leave it up to the producer to determine whether it will restrict public consumption by incurring the necessary costs to achieve that purpose. The cost of providing the good would thus include the cost of providing an exclusion mechanism. 97 Trosow correctly sums up the position in relation to intangible property when he states that the non-rivalrous nature of information is an intrinsic quality of information but its excludability depends on 'various extrinsic factors' such as the legal position relating to such property. 98

# 4.1.2 Positive externalities and free riding

The non-excludable nature of public goods gives rise to the so-called free-rider problem: non-paying users of the public good. The reason for non-paying users is that a public good creates benefits which others can enjoy without the ability of the producer of the good to prevent such enjoyment. In economic jargon, this effect of public goods is said to be a consequence of the *positive externalities* they create. Indeed, it is axiomatic that a public good, because of its non-excludable nature, produces positive externalities. This results in market failure because, despite the enjoyment of the good by a large number of people, they have no incentive to pay any amount for such benefit. What makes positive externalities economically significant, causing market

- 94 Moore (n5) 69.
- 95 Drahos (n43) 121; and Watt (n47) 3-4.
- 96 Gordon (n56) 1466.
- 97 Palmer (n66) 284.
- 98 Trosow (n4) 228.
- 99 H Demsetz 'The private production of public goods' (1970) 13 *Journal of Law and Economics* 293; Mackaay (n28) 882–3.

failure, is the fact that the producer of the good, who has created the positive externality, is unable to charge a price from all those benefiting from the good which reflects the benefit they derive from the good.<sup>100</sup>

In terms of simple allocative efficiency, once a public good exists it is futile to then insist on the exclusion of free-riders; 'it is inefficient to expend resources to exclude non-purchasers if the marginal cost<sup>101</sup> of making a given good available to one more person is zero (or less than the cost of exclusion)' because doing so simply reduces consumption of the good.<sup>102</sup> While the cost of providing the good to an additional person may be zero (or negligible), the cost of exclusion in the case of public goods is not negligible.<sup>103</sup> Although these free-riders do not impose a direct additional cost on the producer of the public good, because of its non-rivalrous character, it is claimed that they have a definite deleterious effect on such producer, who seeks to charge for the good to recover his costs of creation.

Once intellectual property has been released to the public, it can generally be copied easily and inexpensively.<sup>104</sup> The fact that informational works such as copyright works are so easy to copy means that it is costly to exclude others from exploiting it, which, in turn, means that it is unlikely that authors will realise sufficient returns on their investment in creating the work.<sup>105</sup> The piracy of musical works is an oft-quoted example of such conduct. Purchasers of a public good (or those who contemplated paying for such good), who contribute to the cost of creation of the good, will soon consider it in their own interest also to not pay for the good and be free-riders. Consumers and competitors would prefer to wait for the product to be produced and then simply free ride.<sup>106</sup> In terms of game-theory analysis, this behaviour of consumers or competitors becomes the dominant strategy as all rational, self-interested individuals will prefer to free ride; 'they may receive the benefits of the good whether or not they pay for it'.<sup>107</sup>

# 4.1.3 Underproduction

The most significant problem faced by producers of public goods is that consumers – while enjoying the benefits of positive externalities and the

- 100 Mackaay (n28) 881; Palmer (n66) 276; J Sloman Economics 6 ed (2006) 302–3. Economics distinguishers between positive and negative externalities: negative externalities occur where a person's use of his property imposes a cost on others.
- 101 The marginal cost is the increase in total cost associated with an extra unit of production. A producer in a competitive market will be willing to sell an additional unit of output as long as the price offered for that unit is at least equal to the marginal costs of producing that unit. Harrison (n3) 10-3
- 102 Palmer (n66) 285. See also Demsetz (n99) 296.
- 103 Demsetz (n99) 296.
- 104 Watt (n47) 5.
- 105 MA Lemley 'Ex ante versus ex post justifications for intellectual property' (2004) 71 U Chi L Rev 129.
- 106 Palmer (n66) 298.
- 107 Trosow (n4) 228. In the technical jargon of game theory and economics, free riding is the Nash equilibrium for economic actors faced with this situation. RE Hawkins 'The economics of open source software for competitive firms: Why give it away for free?' (2004) 6 Netnomics 103 at 114.

associated non-excludability – will understate their actual price preferences for such goods, which will cause producers to receive skewed signals about the actual demand for such goods, resulting in an insufficient supply of such goods. The technical reason for the underproduction is that free riding prevents the establishment of a market for that particular good because of the unavailability of information concerning consumer demand: '[a] market is any arrangement that enables buyers and sellers to get information and to do business with each other'. 109

On the basis that copyright works are public goods, free-riding behaviour causes the economic value of a copyright work, from the author's perspective, to be eroded because he is unable to sell the work in sufficiently large quantities. This problem is only aggravated by the conduct of competitors. The costs of creating copyright works (fixed costs) are generally high when compared to the costs of copying such works. Copies can be made relatively inexpensively once the copyright works are made available to the public, which gives copiers a significant cost advantage over the author. For example, in the case of literary works, the free riding by a rival publisher causes the price of books to be driven down to the rival publisher's costs of production, which would inevitably be lower than the costs of the author because the rival publisher does not have the additional (fixed) costs of creating the work. At this lower price the author will not be able to realise a sufficient return. Naturally, if this happens, the author of the work may not be able to recover the costs of creating the work and will cease to produce such works.

More importantly, the possible scale of free riding might convince other prospective authors of copyright works not to create copyright works or not provide them at the socially optimal level because of the concern that they too will not be able to recover their costs. A free market requires that the actual supply and demand schedules be determinable in order to efficiently allocate resources. In contrast to public goods, private goods are optimally allocated in society through competitive markets because 'producers and consumers of private goods will disclose their preferences for how much a given good they will provide or buy at different levels of prices on the market. The nature of public goods means that a market – which would ensure the optimal production of such goods – is unable to develop because of free riding, and copyright works are examples of public goods. Thus, in short, it is claimed that the public-good nature of copyright works causes market failure because positive externalities and free riding mean that the authors are unable to charge

<sup>108</sup> Mackaay (n28) 882-3; Ng (n17) 353; Palmer (n66) 275; and Trosow (n4) 228.

<sup>109</sup> Parkin (n36) 44.

<sup>110</sup> Hettinger (n5) 34-5.

<sup>111</sup> S Breyer 'The uneasy case for copyright: A study of copyright in books, photocopies and computer programs' (1970) 84 Harv L Rev 281 at 282 & 294; Calandrillo (n5) 303–4; RM Hurt & RM Schuchman 'The economic rationale of copyright' (1966) 56 The American Economic Review 421 at 425; and Landes & Posner (n28) 326.

<sup>112</sup> Trosow (n4) 228.

<sup>113</sup> Ibid.

<sup>114</sup> Drahos (n43) 121.

users prices that reflect the value of the copyright works to users, which prices would allow authors to recover their costs.<sup>115</sup>

The value of intellectual property, such as copyright works, to society is considered to generally exceed the costs of their creation. It is because of this perceived social benefit of copyright works that it becomes necessary to address the problem of market failure which impedes or deters their creation. The possible alternatives to copyright protection to address the alleged market failure in the case of copyright works, such as contract, state-sponsored creation of such works or patronage, are regarded as not providing adequate solutions to the identified problem. Copyright law provides proprietary protection as the solution to the market failure. The purpose of property rights and, to a lesser extent, contract is to create exclusionary mechanisms, thus destroying the public nature of copyright works. Exclusionary mechanisms can also take the form of technological mechanisms, which have recently been reinforced by laws outlawing circumvention of such technological mechanisms. However, the use of technological mechanisms may not strike the appropriate balance between the social interests and those of authors. The purpose of property rights and those of authors.

#### 4.1.4 Economic justifications for copyright

The principal economic justification for copyright protection is to provide authors with the necessary incentives to create copyright works. Such incentives are necessary because in the absence of copyright protection authors, or a significant number of them, will not create copyright works (or create them in insufficient numbers) due to the public-good nature of such works. The reason for authors' unwillingness to create such works is the ease with which others are able to benefit from the efforts of authors, at the expense of authors. Protection, through the provision of property rights, is thus required to rectify this market failure because these works are considered to be socially beneficial and, therefore, their production should be encouraged. The literature on the economic analysis of copyright law contains various forms of this argument. For example, some commentators start by indicating that the nature of copyright works means that the market

<sup>115</sup> W Farnsworth The Legal Analyst: A Toolkit for Thinking About the Law 1 ed (2007) 110; Watt (n47) 3; and Palmer (n66) 275.

<sup>116</sup> Calandrillo (n5) 303.

<sup>117</sup> Trosow (n4) 228. See, for example, s 86 Electronic Communications and Transactions Act 25 of 2002 and ss 3 and 3A Computer Misuse Act 1990 ch 18.

<sup>118</sup> For example, the use of digital rights management and other technological protection mechanisms have meant that the public is unable to enjoy use of copyright works in accordance with the fairdealing exceptions.

<sup>119</sup> The property right is often described as a 'monopoly right', which, as mentioned in (n28), is incorrect. An alternate description for the property right might be 'exclusive rights'.

<sup>120</sup> Boldrin & Levine (n28) 135-6; Drahos (n43) 6; E Harison Intellectual Property Rights, Innovation and Software Technologies: The Economics of Monopoly Rights and Knowledge Disclosure 1 ed (2008) 21-2; Gordon (n56) 1345; Hurt & Schuchman (n111) 425; Landes & Posner (n28) 346; GS Lunney 'Reexamining copyright's incentive-access paradigm' (1996) 49 Vand. L. Rev. 483 at 492-3; and Watt (n47) 124-5 & 129-30.

cannot efficiently allocate resources, which results in market failure that needs to be addressed. However, the essence of the argument is as summarised here and will be expanded below. The economic justification for copyright is an ex ante justification: it is forward looking in that it seeks to influence future conduct, by granting legal rights on the basis that an individual engages in the desired creative activities rather than being primarily based on seeking to compensate authors for the damage caused by others.

A second economic justification approaches the problem of market failure from the opposite perspective: it focuses on the strategic behaviour of consumers and competitors in a free market rather than providing incentives to authors of works per se and the mutually destructive, free-riding behaviour that would ensue in the absence of copyright protection. Again, it is claimed that new works will not be created because of the ease with which others, particularly competitors, can benefit from free riding off such investment by others. This pattern of behaviour is said to conform, analytically, to the well-known prisoner's dilemma game analysed in game theory. As we have seen, the public-good quality of copyright works means that a likely response from consumers and competitors is to wait for the good to be produced and then to free ride. Copyright protection is thus a mechanism which can prevent such socially unproductive, parasitic behaviour.

# 4.1.5 Proprietary incentives

As discussed above, the claimed public-good nature of copyright works and market failure leads to a decrease in social welfare because copyright works are not produced at the socially-desired levels. It is thus necessary to incentivise authors to create such works by eliminating such free-riding conduct, and enabling them to realise a sufficient return on their investments. 125

Of course, it is true that copyright works such as literary and artistic works have been created through the ages, even before the introduction of copyright protection. Indeed, some of the most well-known and influential creations, such as Homer's *Iliad* and Leonardo Da Vinci's *Vitruvian Man*, were created without the incentives provided by copyright law. It is still the case that creative works, like those of Franz Kafka, may be created without any intention of publication or for non-commercial motives, such as pleasure, ideological reasons or establishing one's reputation. The authors of the latter types of work would also generally not object to the free and widespread dissemination of their works in the absence of copyright protection.<sup>126</sup> However, other copyright works will simply not be created if there is no reasonable prospect

<sup>121</sup> Watt (n47) 124-5.

<sup>122</sup> Lemley (n105) 129.

<sup>123</sup> WJ Gordon 'Asymetric market failure and prisoner's dilemma in intellectual property' (1992) 17 U. Dayton L Rev 853 at 859–60.

<sup>124</sup> Mackaay (n28) 882-3; Palmer (n66) 275.

<sup>125</sup> Mackaay (n28) 882-3; Palmer (n66) 275; Trosow (n4) 228; and Watt (n47) 3.

<sup>126</sup> Moore (n5) 96.

of an adequate return on the amount of the investment made in creating such works. This will particularly be the case where there are significant costs in creating such works or where they are created to generate an income for their creators, such as 'encyclopedias, almanacs, mass circulation periodicals, technical subscription services for professions (such as citators and digests for lawyers), and motion pictures'.<sup>127</sup>

In order to address an incidence of market failure, the proposed course of action must provide a practicable solution to the problem. If the purpose of the proposed mechanism is to provide authors with the necessary incentives by ensuring that they have an adequate opportunity to earn an adequate financial return, it must not be capable of being subverted through the actions of consumers or competitors. The relevant course of action will also not achieve its purpose of establishing a market if it too causes market failure by, for example, introducing other externalities or high transaction costs. For example, a system of compulsory licensing is considered inappropriate because of its high administrative costs. A system of compulsory licensing would fail to establish a market because of the necessarily large accompanying bureaucracy and potentially high and costly incidence of disputes concerning the appropriate levels of remuneration for authors, which would also discourage potential authors.<sup>128</sup>

The recognition of property rights is a well-known mechanism to address problems of inefficiency which arise in relation to the utilisation of common resources or to address other problems of externalities.<sup>129</sup> The rational-choice paradigm, which is central in microeconomics, considers it to be more efficient to rely on the recognition of property rights and the self-interested behaviour of individuals when allocating scarce resources rather than appealing to ideological or moral notions. This decentralised system based on property rights is considered to be superior to a publicly-funded system of providing copyright works.<sup>130</sup>

#### 4.1.6 Private property

Economically, the institution of private property is an instrument to address issues of resource allocation and use. It, like any other social institution, exists to make coordination of social and economic activities more efficient. Without the institution of property, individuals' lack of security would severely restrict

- 128 Gordon (n123) 859.
- 129 Parkin (n36) 378 & 400.
- 130 Palmer (n66) 276.

<sup>127</sup> Hurt & Schuchman (n111) 425–6. Critics like Plant suggest that books which are socially desirable and costly to produce – which are exceptional cases – should be subsidised by the state rather serve as the paradigmatic cases justifying copyright protection for *all* books. A Plant 'The economic aspects of copyright in books' (1934) 1 *Economica* 167 at 193.

<sup>131</sup> Efficiency is not the only explanation for the existence of social institutions such as property. Power relations also play an important role in the creation, and help determine whose efficiency and benefit will be prioritised – society's or those of politically powerful individuals. C May A Global Political Economy of Intellectual Property Right: The new enclosures? 1 ed (2000) 19.

social interaction. Insecurity and uncertainty would require individuals to dedicate large amounts of resources to seek bilateral undertakings to protect their interests. The resources dedicated to seeking such security are wasted if they could be employed more productively. Furthermore, the imperative of having to seek bilateral undertakings is not scalable and would have a debilitating effect on any society that extended beyond kith and kin.<sup>132</sup> The extent of valued interests in such a society would remain very modest – confined almost exclusively to the emotional and psychological – and individuals would forego any but the most essential social interaction in the absence of private property. For this reason Parkin considers property rights to be so critical to human progress that he suggests that without it 'we would still be hunting and gathering like our Stone Age ancestors'. <sup>133</sup>

The creation and recognition of property rights is considered by many to be the most effective device by which scarce resources are optimally utilised. It is claimed that the importance and benefits of individual control was already recognised under Roman law, which consequently developed the concept of 'dominium, or exclusive control over tangible objects'. Property rights provide people with the necessary security that their creations will not be appropriated by others. They prevent the arbitrary deprivation of property, and 'provides incentives to produce, accumulate, and trade'. It obviates the need to devote resources to protecting the products of one's labours, which resources could be employed more productively.

Property rights create the necessary incentives for people 'to specialise and produce the goods in which they have a comparative advantage'. By defining and protecting entitlements, the owner of such rights obtains the necessary security which allows him to value his interest and trade it for other entitlements. By improving or producing property, an individual can exchange his rights for that which he requires or sell it for profit. Property rights, therefore, allow individuals to appropriate value, which provides powerful incentives for investing in such protected subject matter.

Property rights, like other institutions, attempt to provide structures through which we can predict the behaviour of others, particularly in societies which extend beyond persons with whom we have a personal or familial connection. Property law thus reduces costs by providing the basis for patterned behaviour which can be easily understood and followed and which is enforced by the state.

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132 May (n131) 18.
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<sup>133</sup> Parkin (n36) 44.

<sup>134</sup> Hurt & Schuchman (n111) 422.

<sup>135</sup> Boldrin & Levine (n28) 123.

<sup>136</sup> Parkin (n36) 44. See also Gordon (n120) 1435.

<sup>137</sup> Parkin (n36) 44.

<sup>138</sup> Boldrin & Levine (n28) 123.

<sup>139</sup> Drahos (n43) 125-6.

<sup>140</sup> May (n131) 18.

<sup>141</sup> Ibid.

#### 4.1.7 Externalities

As we have already seen, what makes copyright works interesting are the positive externalities and the problem of free riding. If a good produces positive externalities, a non-altruistic creator will only be motivated to increase its production if he can capture – internalise – a sufficient part of those benefits. His willingness to create the good will be dependent on the expected return on his investment in creating the good. Private property is considered to be the best way in which the costs and benefits of externalities can be internalised; it internalises the costs and benefits of human behaviour by attributing it to the owner of the source. The success with which property rights serve to internalise externalities in relation to tangible property is generally recognised. Property rights can reduce the inefficiencies caused by externalities and correct market failure.

Property rights afforded by copyright law are similarly capable of internalising costs and benefits in relation to copyright works. An author, like a farmer, will not toil if others can simply reap the benefits, while he does not receive a sufficient financial return. This problem is particularly relevant in relation to almost all copyright works because it is easy and cheap to copy such works, while attempting to exclude others would involve expending substantial resources. Copyright law creates an artificial mechanism by which intangible copyright works become excludable, enabling a market to develop. The copyright works become excludable, enabling a market to develop.

By giving authors a property right (or exclusive rights) in their creations, copyright is able to address the underproduction of copyright works. The exclusive rights which copyright provides an author gives the author an artificial lead time to establish a market for his product, which should allow him sufficient time to earn an adequate return on his investment. Also, during such period of exclusivity, copyright protection serves to 'increase the cost of copying, raise the return on creative authorship, and, at the margin, encourage more people to create'. The rights which copyright creates force third parties to bargain with authors for the right to use their creations. Through such bargaining consumers (and publishers) reveal their true price preferences, which allows authors to internalise some of the social benefits created by their works and correct some of the market inefficiencies. Also, despite these restrictions, copyright, in general, leaves enough room for

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142 Gordon (n56) 1387.
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<sup>143</sup> May (n131) 18.

<sup>144</sup> Parkin (n36) 378; Sloman (n100) 312.

<sup>145</sup> Gordon (n56) 1389.

<sup>146</sup> Sterk (n28) 1207.

<sup>147</sup> Trosow (n4) 228.

<sup>148</sup> Sterk (n28) 1204.

<sup>149</sup> JH Reichman 'Charting the collapse of the patent-copyright dichotomy: Premises for a restructured international intellectual property system' (1995) 13 Cardozo Arts & Ent LJ 475 at 493.

<sup>150</sup> Sterk (n28) 1207.

<sup>151</sup> Ng (n17) 346 & 354.

creativity. There is sufficient unprotected matter aside from the protected expression to encourage others to create their own copyright works.<sup>152</sup> Thus, in this way copyright law enhances the general welfare because it encourages the creation of copyright works which would not be created without such protection.<sup>153</sup> It does this because it facilitates the creation of a market through which authorship is rewarded and incentivised.<sup>154</sup>

But for something to constitute property in any meaningful sense and for a market to develop, it is not sufficient that others are prevented from appropriating or using someone else's creation; it has to have value and have the character of being transferable. By preventing unauthorised exploitation of copyright works, copyright law preserves the economic value of a copyright work, which would otherwise be eroded due to its public-good character. This creates the exchange-value of a copyright work, which copyright law then allows to be commoditised and tradable by providing for the transfer – assignment – of the rights afforded. As with tangible property, this ensures that copyright can be transferred to someone that values it higher, which is a socially more efficient (wealth-maximising) result. In this way, copyright law establishes a proprietary right, analogous to other forms of private property, which makes it tradable and allows a market to develop.<sup>155</sup>

While it is the case that copyright restricts individual liberty which would otherwise be enjoyed if no such protection existed, it is suggested that, morally, this is no different to the restrictions imposed by property rights in respect of tangible objects. <sup>156</sup> Copyright is simply an appropriation mechanism to encourage the creation of copyright works. Whereas appropriation of tangible property can be justified to address problems of scarcity of resources and the quest for its optimal utilisation, no such issue arises with intangible creations. Rather, the concern which copyright seeks to address is how best to incentivise creative efforts. <sup>157</sup> As we have seen in the first part of this article, the primary purpose of copyright cannot be to reward or to enrich authors. <sup>158</sup>

In fact, some would go a step further and argue that the aim of copyright is not only to produce the optimal amount of copyright works but also to ensure that the works are of the highest quality. This argument considers economic activity to take place at three progressive levels: consumption, production and innovation. By restricting competition (or granting property rights) at one level, economic activity is encouraged at the next level. Accordingly, 'ownership of goods may be described as a restriction on competition at the level of consumption in favour of competition at the level of production, and intellectual and industrial property may be viewed as a restriction on competition at the level of production in favour of competition at the level of

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152 Reichman (n149) 494.
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<sup>153</sup> Hurt & Schuchman (n111) 425.

<sup>154</sup> Ng (n17) 357.

<sup>155</sup> Gordon (n56) 1437; Trosow (n4) 228; and Watt (n47) 16.

<sup>156</sup> Gordon (n56) 1422 & 1425.

<sup>157</sup> Harison (n120) 28.

<sup>158</sup> SM McJohn 'The paradoxes of free software' (2000) 9 Geo Mason L Rev 25 at 42.

innovation.<sup>159</sup> It is this dual purpose of intellectual property that explains the difference between the property right afforded by copyright and the property rights in tangible property; the property right afforded by copyright is of limited duration. The protection afforded at the level of production is intended to be just sufficient to encourage the desired level of innovation. Perpetual protection would inhibit innovation rather than stimulating it.<sup>160</sup>

It is now generally accepted by economists that legal regulation in the form of copyright law overcomes the problems produced by the public-good nature of copyright works and incentivises authors (and others) to dedicate resources to their creation. <sup>161</sup>

#### 4.1.8 Prisoner's dilemma

As already mentioned, the second economic justification for copyright focuses on the harmful conduct of consumers and competitors in a free market in the absence of copyright protection rather than directly focusing on the incentives for authors to create copyright works. Like the previous economic justification, it too concludes that the strategic behaviour of consumers and competitors results in underproduction of copyright works. Again, because of the recognised social benefits of copyright works, it is considered necessary to address such harmful behaviour to ensure the creation of copyright works. The two approaches could rightly be considered to merely be opposite sides of the same coin: underproduction. However, there is still merit in considering the problem of underproduction from another perspective as it may provide greater insights into the nature of the problem and an additional reason for such underproduction. 162 We will principally be concerned with the free-riding behaviour of commercial rivals in this case, and, for convenience, will use the publishing industry to illustrate the issues. As will be demonstrated, the lack of production is not simply because of the potential free-riding behaviour of others, it is because there is a rational strategy of free riding by *all* individuals.

Game theory analyses the strategic behaviour of individuals in society when trying to determine what would be their most advantageous course of action, knowing that other individuals are engaging in the same strategic behaviour. It can suggest a pattern of behaviour when individuals are constrained by or face specific rules (or in the absence of rules), which pattern of behaviour can be used to assess the efficacy or social desirability of such constraints. The earliest forms of copyright protection, which only protected a work in its primary market (that is, preventing their unauthorised reproduction and did not extend to the protection of derivative works), is said to have been based

<sup>159</sup> HM Spector 'An outline of a theory justifying intellectual and industrial property rights' (1989) 11 EIPR 270 at 272.

<sup>160</sup> Spector (n159) 272.

<sup>161</sup> Reichman (n149) 485-6.

<sup>162</sup> Gordon (n123) 868.

<sup>163</sup> Farnsworth (n115) 100-1; and Gordon (n123) 860.

on the prisoner's dilemma model.<sup>164</sup> Creative adaptations of a copyright work were not protected. Current copyright protection, which provides authors with much wider protection than in their primary markets, is no longer comprehensively explained in terms of a prisoner's dilemma model.<sup>165</sup>

In the case of copyright works in general, the ease with which copies of such works can be produced creates a similar threat of strategic behaviour on the part of publishers if there is no copyright protection. For example, in the case of literary works, the first publisher of a work will necessarily incur (fixed) costs such as the payment of royalty fees to the author, editing, typographical layout and design and marketing the work, which can be avoided by a subsequent publisher of such work. Significantly, the first publisher assumes the business risk of determining the commercial success of the work. Only once it is established that a work is a success would a free-rider seek to profit by producing the work, which can be at a lower price than that charged by the original publisher because it avoids the associated fixed costs. <sup>166</sup> If publishers are reluctant to produce copyright works, authors will suffer as a result of the reduced royalty fees they can earn and be discouraged from engaging in creative endeavours.

These situations in which creators (and innovators) face the prospect of such parasitic, competitive conduct are said to 'generally conform to the dynamics of the prisoner's dilemma game'. The prisoner's dilemma describes situations in which the returns ('payoffs') a rational individual will receive causes such an individual to make choices which lead to the participants, as a whole, being made worse off. As a group, it would be in their interests to cooperate but such cooperation is, for some reason, made difficult or is unlikely to occur. In the economic context this is considered to lead to wasteful or inefficient behaviour. Cooperation in relation to copyright works means that parties choose to create their own works, while engaging in free-riding behaviour equates to the rational, but socially harmful, conduct. In the parlance of game theory analysis, this latter position is referred to as 'defection' – cheating.

Competitors faced with a choice of whether to create their own copyright works (ie to cooperate and incur the associated costs) or to appropriate

<sup>164</sup> The prisoner's dilemma concerns a hypothesised situation in which two suspects are questioned by the police about their involvement in a serious crime. These suspects are questioned separately, and are unable to communicate with each other. If both suspects refuse to cooperate (namely, confess to their involvement in the crime), the police will be unable to prove the most serious charges and both will receive relatively minor punishments. The proposition that is put to each suspect is that if he cooperates, while the other suspect refuses to cooperate, he will go free but the other suspect will receive the maximum punishment on the most serious charges. If both cooperate, they will receive stiffer sentences than if both refused to cooperate but less than the maximum punishment. The dilemma a prisoner faces is that, personally, the most advantageous strategy is always to cooperate with the police, irrespective of what his co-accused does. Yet, both suspects, as a collective, would be better off if neither of them cooperated.

<sup>165</sup> Gordon (n123) 865-6.

<sup>166</sup> Calandrillo (n5) 303; Hurt & Schuchman (n111) 427.

<sup>167</sup> Gordon (n123) 860; Mackaay (n28) 882.

<sup>168</sup> Farnsworth (n115) 100-1.

<sup>169</sup> Gordon (n123) 863.

another's creation, engaging in low-cost copying and undercutting the creator (on the assumption that the competitor had created the work and copying is permissible), will each defect and not invest in the creation of copyright works because of the prospect of financial failure as a result of free riding by their competitors.<sup>170</sup> In this way, free-riding behaviour – defection – becomes the dominant strategy, with the socially harmful consequence that not enough copyright works will be produced. Thus, it is claimed that, in the absence of copyright protection, the free-riding behaviour of competitors conforms to a multiple player version of the prisoner's dilemma.<sup>171</sup>

When situations exhibit the characteristics of the prisoner's dilemma game, the proposed solution is often legal intervention. In the case of copyright, it is considered necessary to counteract the 'powerful incentives not to create'. 172 Legal regulation is considered to be the best mechanism to harness the gains from cooperation, which can be achieved by adjusting the payoffs which participants will receive. As indicated, a prisoner's dilemma arises because parties do not cooperate due to some impediment; it may be because they are unable to communicate or that the other mechanisms usually employed to ensure mutual compliance, such as contract law, are not practicable in the circumstances. In the case of copyright works, mutual trust and cooperation could be achieved through contract: each party could agree not to copy the copyright works of another and undertake to pay penalties (royalties) in the event of a breach. However, the number of participants (and the threat posed by new competitors) makes such an option too costly and ineffective. This is another reason why the contractual approach is unsuitable. Thus, legal regulation is able to 'substitute for trust in situations too complex or dispersed for trust to arise, 173

# 4.1.9 Costs of copyright protection

As discussed, the economic argument suggests that if authors are not given legal protection in respect of their copyright works there is a problem of market failure; the free-riding behaviour of others will result in the underproduction of copyright works. However, any assertion that the grant of property rights to address such market failure is efficient must take into account the costs of such a measure. Copyright protection is not a costless institution and, therefore, its claimed benefits should be weighed up against the costs it imposes on society in order to determine whether it is socially beneficial. Accordingly, we will try to identify some of the costs associated with copyright protection. Although there is no empirical data available to quantify these costs (and the claimed benefits) at this stage, it is still worthwhile identifying these costs in order to fully appreciate its impact. When resources and technologies become available in the future these elements can be quantified to verify whether the

<sup>170</sup> Gordon (n123) 866.

<sup>171</sup> Mackaay (n28) 882.

<sup>172</sup> Gordon (n123) 860.

<sup>173</sup> Farnsworth (n115) 103.

current policy of providing copyright protection is indeed socially beneficial. It is suggested that this should be the real focus of research in relation to intellectual property rights.<sup>174</sup>

As stated above, unlike tangible property, the marginal cost of making a copyright work available to one more person is negligible (if not zero). It would, arguably, not be justifiable from a social welfare perspective to prevent the copying of copyright works – given the fact that they can be enjoyed by others at no (or negligible) cost – if it does not efficiently address the market failure faced by authors. But, as discussed, it is alleged that copying would be socially detrimental because it discourages the investment of resources in the production of copyright works. In other words, the costs of the proposed solution, which, inter alia, includes the prohibition of unauthorised use of copyright works, should not outweigh the benefits, particularly if it does not facilitate the emergence of a market and provide authors with the necessary incentives.<sup>175</sup>

The real issue is, therefore, whether copyright protection *is* socially efficient. Does it provide the ideal mechanism, not only for the production but also for the dissemination of copyright works?<sup>176</sup> In relation to the various types of copyright works (and works that are considered for protection in the future), it is important to consider what it is that copyright protects and whether it strikes an appropriate balance between encouraging investment in production and promoting social welfare. Does copyright law leave sufficient room for development?

Some commentators are critical of copyright protection, claiming that it 'is extremely costly' because, as we have already have seen, the public-good nature of copyright works means that they can be enjoyed by others without diminution of enjoyment, at no (or negligible) extra cost. The Given that such further use does not cost anything, those who advocate restrictions on such use by way of property protection are said to have the burden of justification. Whereas property rights in physical property are required to ensure that the owner's ability to use his property is not disturbed, no justification is necessary in the case of copyright works. The latter fact is considered to render it 'highly unlikely that any mechanism providing absolute protection would ever be socially optimal'. That is why copyright protection is of limited duration; arguably, it seeks to minimise the social cost of preventing unfettered access to copyright works.

<sup>174</sup> Boldrin & Levine (n28) 130; and Kitch (n28) 1732.

<sup>175</sup> Gordon (n123) 857-8.

<sup>176</sup> Watt (n47) 1.

<sup>177</sup> Hettinger (n5) 35.

<sup>178</sup> Hettinger (n5) 35.

<sup>179</sup> Watt (n47) 4.

<sup>180</sup> However, over time the period of protection has expanded. The last extension of the term of copyright protection from 50 to 70 years in the US pursuant to the US Copyright Term Extension Act 1988 has been severely criticised as serving no social benefit.

Copyright protection not only allows authors the possibility of earning greater, incentive-providing remuneration on their creations, it, ironically, increases the costs of creating copyright works. Depending on the scope of copyright protection, it may prevent use of certain elements contained in previous copyright works from being reused in subsequent creations. Authors may be required to expend resources to ensure that they avoid infringing other copyright works or to seek the necessary permissions to use the prohibited elements. Critics claim that the creation of similar, non-infringing copyright works is wasteful from a social perspective because the resources dedicated to the creation of such redundant works could be more beneficially used by improving the quality of existing copyright works. In other words, subsequent authors should not be concerned about whether they are infringing copyright but simply focus their efforts on improving existing works. However, copyright law minimises these costs or the possibility of other copyright owners withholding permission for the use of their work.

Copyright does not protect ideas or commonplace facts, so it leaves enough room for creativity. It is arguable that the creation of similar competitive works, which copyright law permits (rather than parasitic copying), has been responsible for the rate of innovation we have witnessed over the past 40 years, which may have offset any social costs associated with the creation of such works. Also, the fair-dealing exceptions such as use for study, review, criticism or reporting current events avoids the need for requesting permission in cases where the hold-out threat of a copyright owner may be most significant. 183 The fair-dealing exceptions are not considered as decreasing authors' incentives, and, if they do, these losses are considered to be more than offset by the social benefit of having these exceptions.<sup>184</sup> In addition, copyright law, unlike patent law, does not prevent independent creation. Again, criticisms that copyright restricts individual freedom because it prevents particular expressions of ideas, which would be a social cost, is probably overstated. In any event, if such costs do exist, they are significantly reduced if not eliminated by the fair-dealing exceptions.185

The proprietary system established by copyright, as with any proprietary system, has an associated administrative cost as it necessarily 'involves costs in defining the scope of the rights, detecting and preventing trespass, and in foreclosing particular productive opportunities that might be possible if the property system did not exist'. The latter costs arise because society is deprived of the improvements which free-riders may bring about. Imitators may increase efficiency through new innovations or forcing the author of the

<sup>181</sup> Lunney (n120) 495-6.

<sup>182</sup> Boldrin & Levine (n28) 97.

<sup>183</sup> S 12 Copyright Act 98 of 1978.

<sup>184</sup> Moore (n5) 98.

<sup>185</sup> Hettinger (n5) 35-6. The fact that advances in technology or specific social costs associated with copyright protection may require the introduction of further fair-dealing exceptions does not undermine the economic justification for copyright protection.

<sup>186</sup> Kitch (n28) 1732; and Drahos (n43) 23.

copyright work to reduce its costs through innovation. <sup>187</sup> It is not clear whether all these costs – institutional costs – outweigh the benefits of incentivising the production of copyright works. It is submitted that as copyright does not require registration, and given the comparatively few cases, these costs are easily offset by the creation of new works it incentivises. Copyright regulation probably reduces conflicts and encourages publication of creative works, from which society benefits.

An area where critics may have valid criticisms of the social costs imposed by copyright protection is in relation to the term of copyright protection. The duration of the protection – particularly in the US and the EU – appears to go far beyond that which is considered economically necessary to incentivise production. The extension of the copyright term to 70 years from the death of the author has not led to an increased output of literary works.

# 4.1.10 Moral rights

Even the aspects of copyright protection such as the moral rights – which would, at first sight, be attributable to the the moral justifications – could more plausibly be justified on a utilitarian or economic basis. Moral rights, such as the paternity right and the integrity right, protect the public as much as the author of a work. The public has an interest in being assured that the works they receive have been faithfully reproduced in their original form. <sup>190</sup> An author's moral rights are complementary to his proprietary rights and assist the author to assert the necessary rights to ensure that he gets the necessary recognition and that his work is accurately represented. <sup>191</sup>

### 5. Conclusion

As we have seen, the economic justification for copyright is based on the premise that in the absence of such protection authors will not be able to realise a sufficient return on their creations to incentivise them to create copyright works at the socially desirable level. The reason for this is the intangible nature of copyright works, which have a public-good quality, creates positive externalities and results in free-riding activities. What economic analysis allows which utilitarian theory does not is a more analytical assessment of the social benefit of copyright protection.

While it is not suggested that copyright protection is solely accounted for in terms of the economic justification, it is submitted that it is the principal justification for copyright law. This does not mean that the law is devoid of moral considerations. However, moral arguments are problematic because they tend to be incommensurate; there are moral arguments which could be used

<sup>187</sup> Boldrin & Levine (n28) 146.

<sup>188</sup> McJohn (n158) 38; and Sterk (n28) 1222.

<sup>189</sup> Boldrin & Levine (n28) 99.

<sup>190</sup> Palmer (n16) 848.

<sup>191</sup> OH Dean Handbook on South African Copyright Law 14 ed (2012) 1–111.

to both support and undermine copyright protection. That is why the moral justifications cannot be a suitable basis for copyright protection. The pursuit of a justification for copyright protection is not simply an esoteric matter. A sound theoretical justification for copyright is important to the determination of the appropriate scope (and the term) of copyright protection. Copyright law has to develop in the face of emerging technologies, and analysing vexing issues is best done if there is clarity on the purpose of copyright law. The need for a sound theoretical basis for copyright protection has become particularly poignant following the recent publication of the Department of Trade and Industry's document entitled Draft National Policy on Intellectual Property, which envisages a comprehensive review of our laws relating to intellectual property. Laws Amendment Act 28 of 2013 shows the need for a better understanding of the purpose of intellectual property such as copyright protection.