

THE IMPORTANCE OF THE COMMONS IN THE CONTEXT OF INTELLECTUAL PROPERTY

AJ van der Walt

B Jur et Art Honns (BA) LLB LLM LLD

Professor of Law and South African Research Chair in Property Law, Stellenbosch University*

M du Bois

LLB LLD

Senior Lecturer in Intellectual Property Law, Department of Mercantile Law, UNISA

1 Introduction

An important part of intellectual property scholarship involves discussion about the interaction of intellectual property law with the notion of the public domain or intellectual commons. This important debate has been driven by concerns that intellectual property law (particularly in American law) may be extending its reach to include new types of intellectual activity as well as by extending existing intellectual property rights.¹ This article does not purport to question the legitimacy of the intellectual property system as a whole, but merely to note some aspects of the commons which have to be considered while revising or developing any areas of South African intellectual property law.² Three important questions need to be addressed in this regard. Firstly,

* The South African Research Chair in Property Law is hosted by Stellenbosch University, funded by the Department of Science and Technology and administered by the National Research Foundation

¹ F Macmillan “Altering the Contours of the Public Domain” in C Waelde & H MacQueen (eds) *Intellectual Property: The Many Faces of the Public Domain* (2007) 98 98-99 Also see *Eldred v Ashcroft* 123 S Ct 769 (2003) (United States of America case upholding the constitutional validity of the copyright term extension); PH Haggerty “Comment: The Constitutionality of the Sonny Bono Copyright Term Extension Act of 1998” (2002) 70 *U Cin L Rev* 651; B Depoorter “The Several Lives of Mickey Mouse: The Expanding Boundaries of Intellectual Property Law” (2004) 9 *V JL & Tech* 4 Also see the recent United States Court of Appeals case which allowed a patent over certain DNA molecules that do not exist in nature: *Association for Molecular Pathology v United States PTO* 2011 US App LEXIS 15649; 99 USPQ2D (BNA) 1398 Comparative law is becoming increasingly important and it would be natural for South African courts and legislators to look to American law for guidance on developing intellectual property law, since America is viewed as a leader in the field of intellectual property For this reason it is also necessary to consider the undesirable developments in order to avoid the same pitfalls while developing South African intellectual property law

² Intellectual property law may be classified into broad categories, notably copyright, patents, trademarks, industrial designs and trade secrets In South African law, they receive *sui generis* protection in the form of property rule-type protection Private law honours this position and as such intellectual property rights are considered property rights in private law, even though the rights and remedies are provided for in specific legislation W Cornish & D Llewelyn *Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights* 6 ed (2007) 6 state that “[i]ntellectual property protects applications of ideas and information that are of commercial value ... One characteristic shared by all types of [intellectual property rights] is that they are essentially negative: they are rights to stop others doing certain things – rights, in other words, to stop pirates, counterfeiters, imitators and even in some cases third parties who have independently reached the same ideas, from exploiting them without the license of the right-owner” They also explain that while creators do not need an intellectual property right to exploit the creation, it is also true that an intellectual property right does not entitle the right-owner to ignore the rights of other individuals or public liabilities

where did the notion of a commons originate and how is it applicable to intellectual products? Secondly, what exactly is the commons (or the public domain, as it is more often termed when referring to intellectual products)? Finally, how could the idea of the intellectual commons develop further?

The concept of the public domain in intellectual space depends profoundly on Roman law concepts that govern physical space. These concepts acknowledged different non-exclusive, but not necessarily public, uses of property. The concepts of *res communes*³ and *res publicae*⁴ have been used most often in the debate about intellectual property and the public domain.⁵ The notion of *res communes* refers to things that are by their nature incapable of being owned, while the notion of *res publicae* refers to things that are open to the public due to the working of a law even though their nature allows them to be appropriated.⁶ These Roman law concepts have been translated into the modern concepts of the commons and the public domain in the current debate about intellectual property, but the two original concepts are often confused or used interchangeably, which has not helped to simplify the interaction between intellectual property law and the notion of intellectual public space.⁷

Intellectual property law excludes certain parts of intellectual space from being exclusively owned; and in doing so acknowledges the importance of the commons.⁸ It is not always clear whether these parts are excluded because they are incapable of being owned by virtue of their legal nature⁹ or whether they should be kept in the public domain as a matter of policy.¹⁰ For example, certain innovations are not patentable since they are excluded by statute. Examples would be discoveries and scientific theories.¹¹ Copyright¹² does not protect ideas (which should remain in the commons), but the distinction

³ CM Rose “Romans, Roads and Romantic Creators: Traditions of Public Property in the Information Age” (2003) 66 *Law & Contemp Probs* 89 93-96

⁴ 96-100

⁵ Macmillan “Altering the Contours of the Public Domain” in *Intellectual Property* 99-100

⁶ Macmillan “Altering the Contours of the Public Domain” in *Intellectual Property* 99-100 See Rose (2003) *Law & Contemp Probs* 93-100

⁷ Macmillan “Altering the Contours of the Public Domain” in *Intellectual Property* 99-100 See Rose (2003) *Law & Contemp Probs* 93-105

⁸ Macmillan “Altering the Contours of the Public Domain” in *Intellectual Property* 100-101

⁹ This relates to what Gray would refer to as legal non-excludability: K Gray “Property in Thin Air” (1991) 50 *Cambridge LJ* 252 273-274

¹⁰ Gray terms this moral non-excludability: Gray (1991) *Cambridge LJ* 280-283

¹¹ Macmillan “Altering the Contours of the Public Domain” in *Intellectual Property* 101 S 25(2) of the Patents Act names specific exclusions from the concept of an invention for purposes of patents, namely a discovery; a scientific theory; a mathematical method; a literary, dramatic, musical or artistic work or any other aesthetic work; a scheme, rule or method for performing a mental act, playing a game or doing business; a program for a computer; or the presentation of information See s 25(2)(a)-(g) of the Patents Act 57 of 1978 Also see TD Burrell *Burrell’s South African Patent and Design Law* 3 ed (1999) 1-24; A van der Merwe “The Law of Patents” in HB Klopper, T Pistorius, B Rutherford, L Tong, P van der Spuy & A van der Merwe (co-ordinating ed) *Law of Intellectual Property in South Africa* (2011) 271-276 S 25(4) of the Patents Act names further exclusions from patentability, namely inventions that promote offensive or immoral behaviour; and any variety of animal or plant, or any essentially biological process for the production of animals or plants that is not a microbiological process

¹² OH Dean *Handbook of South African Copyright Law* (RS 14 2012) 1-1 describes copyright as “the exclusive right in relation to work embodying intellectual content (i e the product of the intellect) to do or authorise others to do certain acts in relation to that work, which represents in the case of each type of work the manners in which that work can be exploited for personal gain or profit” The essential object of copyright law is to grant the essential right to control the use of the work fully

between unprotected ideas and protected expressions is vague and not always applied consistently by the courts.¹³ Copyright also prevents exclusive control over certain rights in the case of the exceptions.¹⁴ These two examples from copyright law also demonstrate how it is difficult to pinpoint why a particular aspect of intellectual work should be excluded from exclusive ownership. The reason why certain aspects are excluded from private ownership pertains to their nature, but the issue is also regulated by statutes and this increases the confusion.

Two major problems may arise when attempting to justify the recognition and protection of intellectual property, namely the nonexclusive character of intellectual property and its possible restriction of the free flow of information¹⁵ (not necessarily in the sense that the information is not made available, but that it is not always permitted to be used in future innovations). Hettinger explains the nonexclusive characteristic of intellectual property subject matter as follows:

“These objects are nonexclusive: they can be at many places at once and are not consumed by their use. The marginal cost of providing an intellectual object to an additional user is zero, and though there are communications costs, modern technologies can easily make an intellectual property object unlimitedly available at very low cost.”¹⁶

The nonexclusive character of intellectual property constitutes an example of what Gray would refer to as a physically non-excludable resource.¹⁷ However, the physical non-exclusivity of intellectual property does not imply legal non-exclusivity – the intellectual product may still be legally excludable when legislation enables the creator of the intellectual product to protect the creation. If the protection granted by legislation is not utilised, the intellectual creation would also be legally non-excludable and no property protection would be afforded.

The sharing of intellectual property objects does not prevent or impair personal use by its creator, but prevents the creator from exclusively selling these intellectual objects to other persons.¹⁸ For example, the author of a book may provide a copy of such book to his friend (who may read the book and is entitled to certain fair uses of the book), but still be able to read his copy of the book (and in this sense the use is not exclusive). However, only the author has the exclusive right to make further copies of the book and sell such copies. The primary question which a justification of intellectual property

¹³ Macmillan “Altering the Contours of the Public Domain” in *Intellectual Property* 101 Although Macmillan bases this statement on United States law, examples of its truth may also be found in South African law See T Pistorius “Copyright Law” in HB Klopper, T Pistorius, B Rutherford, L Tong, P van der Spuy & A van der Merwe (co-ordinating ed) *Law of Intellectual Property in South Africa* (2011) 146-147; *Peter-Ross v Ramesar* 2008 BIP 306 (C); W Alberts “Copyright in Ideas” (2008) 16 *Juta’s Business Law* 48-50; Dean *Copyright Law* 1-25–1-27

¹⁴ S 12(1) of the Copyright Act 98 of 1978 provides for the fair dealing exception Further exceptions are s 12(3) (quotations), s 12(4) (illustrations for teaching), s 12(5) (ephemeral copies) and s 15(3) (reverse engineering of products) See Dean *Copyright Law* 1-92–1-109; Pistorius “Copyright Law” in *Law of Intellectual Property in South Africa* 211-222 on all the exceptions to copyright infringement

¹⁵ EC Hettinger “Justifying Intellectual Property” (1989) 18 *Phil & Pub Affairs* 31 34-35

¹⁶ 34

¹⁷ Gray (1991) *Cambridge LJ* 269-273

¹⁸ Hettinger (1989) *Phil & Pub Affairs* 34-35

needs to address is why one person should have the “exclusive right to possess and use something which all people could possess and use concurrently”.¹⁹ In the case of a physical object, its exclusive use may be justified where such exclusion is necessary for the person’s own use, but no such justification is available in the context of intellectual property.²⁰ However, in the context of intellectual property rights it is not the exclusive use right that constitutes the core property right, but rather the right to reproduce and sell the intellectual product. The nonexclusive feature of intellectual products is very important in the process of finding a balance between the correct level of incentive (in the form of property rule type protection) for continued production of intellectual products and the importance of preserving and promoting an intellectual commons so that the free flow of information is not stifled. Society places a fundamental value on freedom of expression and thought. Where private property protection is granted, one person’s freedom is improved to the detriment of all other persons’ freedom.²¹ The restrictions on the free flow of information that may result from granting of intellectual property rights may stifle individual growth and impede the general advancement of new technologies and knowledge.²² This is ironic, since the incentive theory is most often used to justify intellectual property,²³ but in fact the way in which intellectual property is developing (in the United States of America) creates the risk that it will have the opposite effect. South African law should take this into account while reviewing and developing intellectual property legislation in order to find the correct balance between incentives *via* intellectual property rights; and the public’s right to access information. When the negative consequences that intellectual property rights may have are taken into account, it becomes harder to justify stronger intellectual property rights, as it becomes more important to protect and promote the intellectual commons.

Aside from the incentive theory that is generally used to argue in favour of robust intellectual property rights, the economic theory is also a firm favourite. Boyle explains the basic economic theory as applied to intellectual property as follows:

“Information is a public good, non-excludable and non-rival. It is hard to stop one unit from satisfying an infinite number of users at zero or close to zero marginal cost. Under such conditions, producers of information and information goods will have inadequate incentives, leading to under-production. If I could create a useful digital restaurant guide at great expense but can sell only one copy before my whole market disappears, then I will hardly make the effort in the first place. The solution to this public goods problem is intellectual property. By creating a limited monopoly called an intellectual property right, we can give producers an adequate incentive to create.”²⁴

He states that this argument has been used to expand the reach of intellectual property. Especially in the area of the internet it is argued that the goods

¹⁹ 35

²⁰ 35

²¹ 35

²² 36

²³ 47

²⁴ J Boyle “Symposium: Taking Stock: The Law and Economics of Intellectual Property Rights: Cruel, Mean, or Lavish? Economic Analysis, Price Discrimination and Digital Intellectual Property” (2000) 53 *Vand L Rev* 2007 2012

become even less rivalrous and less excludable and for this reason intellectual property protection should be stronger. However, since an intellectual property right entails a monopoly and in economic terms monopolies may be seen as imposing losses, this argument in favour of stronger intellectual property protection is not so straightforward.²⁵ The format of this article does not allow a full discussion of the property theories utilised for the justification of intellectual property rights and the criticisms levelled against them. It suffices to say that there are serious questions regarding reliance on these theories to argue for the expansion of intellectual property rights, with the most important for purposes of this article being that these new (or stronger) rights encroach upon the intellectual commons.

Before discussing the intellectual commons or public domain any further, it is necessary to briefly discuss the commons in the context of tangible resources and particularly land, since this is where the current debate about how and why the commons should be protected originated. Thereafter it is possible to discuss the way that the concept of the commons may relate to intellectual property.

2 The development of the notion of the commons

In his 1968 article on the commons,²⁶ Hardin (a natural scientist) explains that the population-growth problem is resulting in the destruction of the commons. His article refers to the tangible commons of land, water and other natural resources. He proposes that there is no technical solution to the population problem, but that the solution lies in a fundamental extension in morality. Regarding the commons, he explains that the commons is being over-used and destroyed. Because of population growth, the commons will no longer be able to accommodate the needs of all entities. The commons is being eroded by persons taking from the commons, for example herdsmen grazing cattle on a common pasture. The commons is also being destroyed by people putting things into it, for example pollution into a river. Hardin proposes different ways in which the population growth may be regulated in order to spare the commons. However, he does not make use of the usual private property arguments to facilitate the conservation of the commons, but instead refers to wealth maximisation and morality.²⁷ Although there are obvious differences between the commons of land and the commons of intellectual property, it is possible that the intellectual commons may be depleted because

²⁵ 2012-2013 See S Ghosh "Decoding and Recoding Natural Monopoly, Deregulation, and Intellectual Property" (2008) 2008 *U III LR* 1125 1138-1139:

"A natural monopoly arises when the average costs of producing a product or service declines as more of the product or service is supplied to the market. Because of declining average costs, it is more efficient from the perspective of lowering the average cost of production to have one firm service the market rather than duplicate expenditures. Average costs are falling either because there are huge fixed costs to production or because the costs of producing an additional unit of the product or service are negligible."

See also SV Berg & J Tschirhart *Natural Monopoly Regulation: Principles and Practice* (1988) 12-24; DF Spulber *Regulation and Markets* (1989) 513-514; S Ghosh "The Intellectual Property Incentive: Not so Natural as to Warrant Strong Exclusivity" (2006) 3 *SCRIPT-ed* 97 101

²⁶ G Hardin "The Tragedy of the Commons" (1968) 162 *Science* 1243

²⁷ 1243-1248

of enclosure, in the same way as the commons of land.²⁸ Unlike land, it is actually possible to increase intellectual products, but this can only be done if a healthy intellectual commons remains intact for future uses in intellectual innovations. The trick is to provide enough intellectual property rights to ensure a continued incentive to create new products, but also ensuring that enough remains or is returned to the commons to have enough “raw material” available for creation. The intellectual products should also revert back into the commons for future creative use after a reasonable time.

In an article that interacts with Hardin’s notions of the “tragedy of the commons”, Ghosh suggests that Hardin’s solution of morality does not exclude the solution that property rights can provide, which is also a particular type of “social arrangement”.²⁹ This morality approach may be the answer to the question of how the notions of distributive justice should influence the way intellectual property law manages the intellectual commons. However, one must distinguish intellectual property from tangible property, which is the subject of Hardin’s³⁰ article. Use of the tangible property commons, through actions such as grazing and polluting, can lead to the commons being overused. In the case of intellectual property, on the other hand, use of the commons entails creative and innovative processes that may in fact expand the commons instead of overusing it.³¹ This assumes that the resource remains in the commons after it is used in the creation of an intellectual property work and is not perturbed and consequently removed from the commons. Ghosh further defines “distributive justice” simply as the way in which resources should be allocated among individuals in society, since he finds Hardin’s notion of distributive justice (or morality, as Hardin terms it) strained.

Ghosh questions the reasons why the metaphor of the commons is so important in intellectual property debates when the rationale of intellectual property differs so radically from the concept of the “tragedy of the commons” (as borrowed from Hardin). A revision of the notion of the commons is necessary in order to afford room for the rationale behind intellectual property.³² Rose describes the “tragedy of the commons” as follows:

“When things are left open to the public, they are thought to be wasted by overuse or underuse. No one wishes to invest in something that may be taken from him tomorrow, and no one knows whom to approach to make exchanges. All resort to snatching up what is available for ‘capture’ today, leaving behind a wasteland. From this perspective, ‘public property’ is an oxymoron: things left open to the public are not property at all, but rather its antithesis.”³³

²⁸ J Boyle “The Second Enclosure Movement and the Construction of the Public Domain” (2003) 66 *Law & Contemp Probs* 33 33-36 Also see J Boyle *The Public Domain: Enclosing the Commons of the Mind* (2008) 42-53; T More *Utopia* (1947) 32; JA Yelling *Common Field and Enclosure in England, 1450-1850* (1977) Compare M Rose “The Public Domain: Nine-Tenths of the Law: The English Copyright Debates and the Rhetoric of the Public Domain” (2003) 66 *L & Contemp Prob* 75

²⁹ S Ghosh “The Fable of the Commons: Exclusivity and the Construction of Intellectual Property Markets” (2007) 40 *UC Davis L Rev* 855 857

³⁰ Hardin (1968) *Science* 1243-1248

³¹ Ghosh (2007) *UC Davis L Rev* 857-861

³² 858-861

³³ CM Rose “The Comedy of the Commons: Custom, Commerce, and Inherently Public Property” (1986) 53 *U Chi L Rev* 711 712 Also see CF Runge & E Defrancesco “Exclusion, Inclusion, and Enclosure: Historical Commons and Modern Intellectual Property” (2006) 34 *World Development* 1713 1714-1717

The modern doctrines do not explain why and under which circumstances property rights may appear to vest in the public at large or what Rose calls the “unorganised public”.³⁴ Instead, she turns to the older doctrines of “public trust”, “prescription” and “custom” in order to find insights into the nature of “inherently public property”. She notes:

“[S]ervice to commerce was a central factor in defining as ‘public’ such roads and waterways. Used in commerce, some property had qualities akin to infinite ‘returns to scale’. Consequently, here the commons was not tragic, but comedic, in the classical sense of a story with a happy outcome.”³⁵

This is the case not only because the commons may infinitely expand wealth, but also because it could socialise the members of an otherwise atomised society. In essence, inherently public property may be described as resources of which the value is increased by open use, in contrast to the “tragedy of the commons”, where open use destroys the value of the resource. For inherently public property the threat of destruction lies in the possibility of a monopoly over these resources rather than in open use.³⁶

John Locke³⁷ justified property on the basis that every person has a property in his own person and also his own labour and works created with his labour. However, what is commonly overlooked is the way in which his theories also justify the existence of the commons. The basic idea of Locke’s proposition is that by “mixing” one’s labour with land or other tangible property, one acquires a “natural right” to the property.³⁸ This principle that a person should have property in that which he has created by his own intellectual effort and exertion played a large role in the recognition of intellectual property rights.³⁹ The problem that Locke attempted to address was that the earth belonged to “Mankind in common”,⁴⁰ which raises the question how individuals could have property in things. Since natural law proclaimed the existence of a commons, it was problematic for the same natural law to also explain private ownership.⁴¹ The solution to the problem, according to Locke, was that “every Man has a ‘Property’ in his own ‘Person’. Where a person mixes his own labour with something which had previously been in the commons, the thing becomes his property”.⁴²

Locke placed two provisos on the justification of a property right based on labour. The first one is that “enough and as good [must be] left in the commons

³⁴ Rose (1986) *U Chi L Rev* 722

³⁵ 723

³⁶ 711-781 Also see Rose (2003) *Law & Contemp Probs* 93-100

³⁷ J Locke *Second Treatise of Government* (1690 GW Gough (ed) 1976) ch V para 27

³⁸ See T Ciro “The Scarcity of Intellectual Property” (2005) 1 *JILT* 1 3

³⁹ F Mostert “The Development of the Natural-law Principle as One of the Principles Underlying the Recognition of Intellectual Property – A Historical Survey from Roman Law to Modern-day Law” (1987) 104 *SALJ* 480 494-495

⁴⁰ Locke *Second Treatise* ch V para 25

⁴¹ P Drahos *A Philosophy of Intellectual Property* (1996) 42 Also see SR Munzer *A Theory of Property* (1990) 254-291

⁴² Locke *Second Treatise* ch V para 27 See Drahos *Philosophy of Intellectual Property* 43 Also see J Hughes “The Philosophy of Intellectual Property” (1988) 77 *Geo LJ* 287 297, where he states that Locke’s discussion begins with the description of “a state of nature in which goods are held in common through a grant from God ... The individual must convert these goods into private property by exerting labor upon them This labor adds value to the goods, if in no other way than by allowing them to be enjoyed by a human being”

for others”.⁴³ This is often interpreted to mean that “[a]s long as one does not worsen another’s position by appropriating an object, no objection can be raised to owning that with which one mixes one’s labor”.⁴⁴ Hettinger⁴⁵ argues that patent law does not honour this proviso, since the original inventor is granted the exclusive right to manufacture, utilise and sell the creation. He further points out that independent inventors who come up with the same invention suffer a great loss, since they are not even permitted to use their own invention. Hughes states that the “enough and as good as” condition is usually understood as descriptive of the commons.⁴⁶

Locke’s⁴⁷ second proviso to the labour theory pertains to the prevention of spoilage. According to Locke, one must not take more than one is able to use. Hettinger⁴⁸ argues that intellectual property will never be able to meet this proviso entirely, since intellectual property is nonexclusive. He states that the benefit of the products would determine how wasteful it is for the owner of intellectual property to prohibit other persons’ use of the creation. Here it is necessary to add the qualification that the intellectual property rights granted by statutes do not have the purpose of granting exclusive use rights, but rather the exclusive right to prohibit third persons from doing certain acts with the work. For example, the copyright in a book does not give the exclusive right to read the book. Anyone who is willing to buy the book or prepared to pay a fee to read an electronic copy is allowed to read it. It is only when third persons wish to copy and distribute the book that copyright becomes relevant. Copyright grants the holder the negative right of preventing third persons from copying and distributing the book and taking away the remuneration to which the copyright holder is entitled. In the context of copyright, it is not exclusive personal use and enjoyment of the product that is protected, but rather the right to exploit the product that is reserved exclusively for the copyright owner. These property rights may be justified by the labour theory without contravening the two provisos.

Locke⁴⁹ implies that the common stock of mankind is increased by granting property to people who created things by their own labour. The obvious problem with this justification is that the common stock is not increased as long as the new wealth remains the property of the labourer, but if anyone could appropriate the new wealth there would be no motivation for the labourer to create new wealth that might increase the common stock.⁵⁰ These two goals need to be balanced; an example would be the way that the idea/expression dichotomy aims to balance the need to reward creators with the

⁴³ Locke *Second Treatise* ch V para 27

⁴⁴ EC Hettinger “Justifying Intellectual Property” (1989) 18 *Phil & Pub Affairs* 31 44 Also see Drahos *Philosophy of Intellectual Property* 42-43

⁴⁵ Hettinger (1989) *Phil & Pub Affairs* 44

⁴⁶ Hughes (1988) *Geo LJ* 297

⁴⁷ Locke *Second Treatise* ch V para 27

⁴⁸ Hettinger (1989) *Phil & Pub Affairs* 44-45

⁴⁹ Locke *Second Treatise* ch V para 27

⁵⁰ Hughes (1988) *Geo LJ* 299

need to have free access to ideas.⁵¹ Hettinger⁵² describes intellectual products as “fundamentally social products”, since creators rely strongly on information that already exists in order to create something new. The first argument is that if a labourer should be entitled to the market value of the intellectual product he created, this value should be distributed among all the contributors. There is no logical reason why the last contributor should be entitled to the full value and therefore the market value could be of little assistance in determining the value of a creator’s contribution. Furthermore, the market value is greatly dependent upon different social factors. As a consequence, the argument that full market value in the form of property rights should be conferred because of own labour would fail. It is a myth that a labourer has a natural right to receive the full market value of the creation.⁵³

Nozick,⁵⁴ on the other hand, views the state as an invention; the main purpose of which is to protect property rights and therefore the state should not interfere with those rights.⁵⁵ Drahos⁵⁶ cautions that this sort of theoretical approach may lead to the conclusion that intellectual property rights should be held in perpetuity and any instances where the duration of intellectual property is limited by way of statute or where compulsory licenses are introduced would constitute “theft” of the intellectual property.⁵⁷ This would be a radical result. One has to keep in mind that the historical tradition of natural property rights does not establish the sanctity of property rights; they remain a phenomenon that is subject to regulation.⁵⁸ The government has the power to regulate property, but must do so in line with the purposes of natural law, as Locke⁵⁹ states.

In what he terms “the fable of the commons”,⁶⁰ Ghosh creates his own metaphor to contrast intellectual property with tangible property and the

⁵¹ 310-314

⁵² Hettinger (1989) *Phil & Pub Affairs* 38

⁵³ 36-37

⁵⁴ R Nozick *Anarchy, State, and Utopia* (1974) 174-178 This is probably where the American absolutist view of intellectual property originated or was at least strengthened. Similar arguments are being made in South African law regarding the view that intellectual property should not be affected negatively by legitimate government reforms. For example see OH Dean “The Case for the Recognition of Intellectual Property in the Bill of Rights” (1997) 60 *THRHR* 105. See M Kellerman *The Constitutional Property Clause and Immaterial Property Interests* LLD thesis University of Stellenbosch (2010) ch 5 for a discussion of the protection of and limitations on intellectual property in terms of the South African constitutional property clause (s 25 of the Constitution of the Republic of South Africa, 1996). See also M du Bois “Intellectual Property as a Constitutional Property Right: The South African Approach” (2012) 24 *SA Merc LJ* 177

⁵⁵ Here it has to be noted that property rights are not the only rights that the state is required to protect. The state also has the obligation to protect socio-economic rights, political rights and other fundamental rights that are as important as or more important than property rights. This entails a balancing of rights. For example, see *Laugh it Off Promotions CC v South African Breweries International (Finance) BV v/a Sabmark International (Freedom of Expression Institute as Amicus Curiae)* 2006 1 SA 144 (CC) where the court was required to balance the right to freedom of expression and the right to property.

⁵⁶ Drahos *Philosophy of Intellectual Property* 53

⁵⁷ These situations are foreseen in the constitutional property clause. Statutes such as the ones envisioned by Drahos *Philosophy of Intellectual Property* 53 would be allowed in South African law as long as the state complies with the provisions for deprivation and expropriation as set out in the property clause.

⁵⁸ Drahos *Philosophy of Intellectual Property* 53

⁵⁹ Locke *Second Treatise* ch VIII para 120

⁶⁰ Ghosh (2007) *UC Davis L Rev* 858

“tragedy of the commons”.⁶¹ He explains that if a person using the commons of land sees a new piece of land, that person and all the other users of the commons want to arrive at the land first. When they arrive, however, they still find the same tensions of overuse with which to struggle. By contrast, intellectual property is about the voyage and ultimately about exploring new areas in order to increase the existing commons. Yet there are also similarities between the intellectual commons and the traditional commons, in that both emphasise the dilemma of resource management.⁶² Intellectual property is similar to tangible property due to the reality that both these forms create an arrangement of rights that determines which uses of a resource are allowed and which are not.⁶³

The question that Ghosh attempts to answer is how notions of distributive justice should inform management of the commons through the construction of intellectual property law. He states that his “fable of the commons” could make use of technical, legal and social arrangements to regulate the creative and inventive processes. There are two normative principles that could guide the process of creating a regulatory system, namely “utilitarianism” and “distributive justice”. These correspond to Hardin’s⁶⁴ notions of “welfare maximization” and “morality”. Ghosh argues that these two notions must be used together, as alone they do not suffice. However, he is of the opinion that Hardin’s jump to morality was somewhat simplistic. He suggests that merely defining property rights appropriately and enforcing them accordingly can possibly solve the problem of resource allocation.⁶⁵

“Distributive justice” as a normative guide should be applied instead of wealth maximisation when defining these property rights. The problems standing in the way of the application of wealth maximisation are progress and markets respectively, so Ghosh submits. The notion of wealth maximisation can only determine that the commons should grow in line with progress, but not how that growth should take place. The basic problem of who should benefit from the progress is not answered by the notion of wealth maximisation. Merely allocating the resource to the highest bidder does not take notions of justice into account. Somewhere, “distributive justice” also needs to feature in designing a system to regulate the intellectual commons. Ghosh uses the example of the inventor of a new drug and asks how this new resource should be distributed between the inventor and persons who suffer from a life-threatening disease that could be cured by such drug. If the ill person is prepared to pay any amount because his life is at stake and the inventor is prepared to accept an amount that covers his expenses for creating the drug and some return on the investment, there is no problem. However, if the inventor wants more than the ill person is willing and able to pay, the

⁶¹ Hardin (1968) *Science* 1243

⁶² Ghosh (2007) *UC Davis L Rev* 861
⁶³ 863

⁶⁴ Hardin (1968) *Science* 1243-1248

⁶⁵ Ghosh (2007) *UC Davis L Rev* 864-866

welfare maximisation theory alone does not suffice. The structure of markets also determines how wealth is defined and allocated.⁶⁶

Ghosh proposes that intellectual property should be considered in terms of three distributional concerns, namely distribution among creators; distribution among creators and users; and intergenerational distribution.⁶⁷ In the context of intellectual property, goals of distributive justice may override claims that are based merely on welfare maximisation or wealth goals. The question must also be asked whether it is possible to decide these two concerns separately. The first distributional concern is distribution among creators.⁶⁸ Originality and full appropriability are the two intellectual property principles that determine how effort and talent of creators are rewarded. Works that are fully original, in other words created without using anything from the public domain, may be rewarded by the full social value of the work according to efficiency grounds. Ghosh levels some criticisms against this approach. His first objection is that partial appropriation would be more efficient as long as it is more profitable than alternative uses of the creator's time. Secondly, full appropriability would also undermine the market. He argues that full appropriability is therefore neither efficient nor just. Ghosh also states that originality is a strained concept because so much borrowing takes place during creation. The myth of the romantic author ignores the social context of creation. Requiring a clear author or set of authors for originality is not an argument of distributive justice, but rather one for efficient administration.

The second distributional concern is between creators and users⁶⁹ and this conflict is generally resolved by means of the market. Issues here relate to full appropriability and originality; the tension between willingness and ability to pay; and the problem of pricing. A supplier would not normally claim the full price of the product supplied, but merely the production and distribution costs. In the case of pharmaceuticals, the market mechanisms would also not ensure equitable distribution. There are two reasons why the price mechanism might not work in intellectual property markets. Although an intellectual property right is not meant to confer a market monopoly, substitutes for a product may not be homogenous as required for perfectly competitive markets. Quality of the product and other characteristics may be as relevant as the price. Furthermore, intellectual property markets do not only concern the transfer of goods and services, but also the licensing of rights, which may not lead to the most efficient or desirable distribution.

Intergenerational justice⁷⁰ is the third distributional concern and Ghosh argues that progress should be understood through this concept. Intergenerational justice in the form of changed technologies, markets and values influences the intellectual commons. Intellectual property rules need to be adapted in accordance with changed circumstances. A practical example of how the

⁶⁶ 867-870

⁶⁷ 866-870

⁶⁸ 871-876

⁶⁹ 876-879

⁷⁰ 879-880

law distributes resources for creative activity is fair use,⁷¹ which allows for copyright infringement to be justified under certain circumstances. Market failure is normally used as the theoretical basis allowing for fair use, usually under circumstances where licensing is not appropriate or feasible to allow the particular use. Ghosh concludes that there is nothing futile or inevitable about the intellectual property commons as envisioned by Hardin's conception of the commons. The only "tragedy" would be to ignore the distributional concerns. The three distributional concerns set out by Ghosh provide some guidelines to determine when and why particular resources should be categorised as part of the commons, which may also be relevant to South African intellectual property policy and law.

Although not written specifically in the context of the intellectual commons, Gray's⁷² formulation of the notion of particularly "moral non-excludability" also expounds the reasons why it is imperative for certain resources to remain in the commons, which is informative in the enquiry into the importance of the commons and helpful to determine when a particular resource should remain in or revert to the commons. The explanation of what he terms "excludability" sets out three grounds on which a resource may be deemed non-excludable, namely physical, legal and moral. Physical non-excludability entails that it is impossible or impractical for an owner of a particular resource to exclude third persons from the resource and for this reason the resource may not be classified as private property. Legal non-excludability envisions the instance where there is some form of legal protection available to the owner of a resource, which he failed to utilise and for this reason the courts will not protect the resource as property. The third form of non-excludability, which is the most important one for purposes of this article, relates to moral non-excludability. This refers to the situation where it is so important for a particular resource to remain in the commons that it would be against public morals to remove it from the commons by propertising it. As Gray so eloquently explains it:

"The notion of moral non-excludability derives from the fact that there are certain resources which are simply perceived to be so central or intrinsic to constructive human coexistence that it would be severely anti-social that these resources should be removed from the commons. To propertise resources of such social vitality is *contra bonos mores*: the resources in question are non-excludable because it is widely recognised that undesirable or intolerable consequences would flow from allowing any one person or group of persons to control access to the benefits which they confer. Following such an appropriation, there would not, in Locke's well known phrase, be 'enough and as good left in the common for others' ... It is in the definition of moral non-excludables that the law of property most closely approaches the law of human rights."⁷³

The exclusion of certain resources from the property concept on moral grounds recognises that there are certain human rights that are superior to any "property" claims. Certain freedoms of speech, belief, association, assembly and movement are frequently viewed as values higher than the property concept:

⁷¹ 881-883

⁷² Gray (1991) *Cambridge LJ* 268-283

⁷³ 280-281

“Here emerges again the important point that property rights are merely prima facie rights which may be abridged or overridden by other moral concerns.”⁷⁴

Although not specifically written about intellectual property, but rather about property in general, these statements are no less true for intellectual property than for tangible property. Where for example legislation is changed to include resources which were previously in the commons, this threatens the existence and quality of the commons and may affect human rights negatively.

3 The second enclosure and the public domain

In his article on the second enclosure movement and the public domain, Boyle describes the enclosure of common land, where the argument had been that private property would be better conserved by an individual owner than a commons would be protected by users sharing a resource.⁷⁵ Unlike with the suggestions put forward by Ghosh, which focus on resource allocation during the proprietisation process, Boyle focuses on the enclosure process, how to prevent it and why such prevention is necessary at all if private property is more efficient. Boyle states that the historical enclosure of common land is relevant to intellectual property, since there is a second enclosure movement taking place at the moment. He calls this “the enclosure of the intangible commons of the mind”⁷⁶ in terms of which things that were formerly regarded as being either common property or uncommodifiable are being added to the property regime. This is done by either granting new intellectual property rights or extending existing rights. Boyle refers to the example of the human genome to illustrate this tendency. He states that supporters of the enclosure movement would reason that patents should be granted to cover human genes. Only with the guarantee of property rights would there be investment in the production of drugs and gene therapies. In other words: private property saves lives. By contrast, persons opposing the enclosure movement would argue that the human genome is part of the “common heritage of mankind” and that it should and can therefore not be owned. Additionally, innovation may be slowed down by the state’s granting of monopolies to a few entities.⁷⁷

The most interesting example of inconsistent application of the “common heritage of mankind” concept is the decision in *Moore v Regents of University of California*,⁷⁸ a California Supreme Court case where it was decided that Moore did not have a property interest in the cells derived from his own spleen. The court found that the process in terms of which researchers share cell lines would be slowed down if private property rights were to be granted to “sources”. However, the doctors who invented the billion-dollar cell line from Moore’s spleen were granted a patent which could similarly slow down the sharing of knowledge. This was justified by the court on the

⁷⁴ 283

⁷⁵ Boyle (2003) *Law & Contemp Probs* 33-36 Also see Boyle *The Public Domain* 42-53; More *Utopia* 32; Yelling *Common Field and Enclosure* Compare Rose (2003) *Law & Contemp Probs* 75

⁷⁶ Boyle (2003) *Law & Contemp Probs* 36-37 Also see Boyle *The Public Domain* 42-53

⁷⁷ Boyle (2003) *Law & Contemp Probs* 37 Also see Boyle *The Public Domain* 42-53

⁷⁸ 51 Cal 3d 12; 271 Cal Rptr 146; 793 P2d 479 1991

strength that in the latter case property rights are a necessary incentive to encourage research.⁷⁹ Boyle adds that the human genome is not the only area being enclosed through the expansion of intellectual property rights; other examples include business method patents and trademark antidilution rulings in the American courts. The limits formerly imposed on intellectual property by the public domain are hence steadily being eroded. The point of departure regarding intellectual property has always been that intellectual property rights are the exception and not the norm, since their effect is so restrictive. Boyle correctly argues that the point of departure should still be that ideas and facts should not be propertised, but should remain in the public domain.⁸⁰

This concept has recently been questioned extensively. In the United States of America, patents are being stretched to cover ideas that were formerly not patentable.⁸¹ There have also been attempts to grant property rights over mere compilations of facts, which Boyle argues is even more troubling.⁸² One of the goals of intellectual property has always been to protect the commons to ensure access to materials. More recently the goal of intellectual property (visibly so in United States law) seems to be that there should be as much private property as possible. The assumption appears to be that any commons is wasteful or uneconomical in the sense that Hardin⁸³ described the commons as “tragic”. The ultimate question posed by Boyle is:

“How much of the intangible commons must we enclose [in order to ensure continued production of intellectual products]?”⁸⁴

4 The public domain or intangible commons

MacQueen and Waelde define the concept of the “public domain” in the cultural and scientific context as “a body of knowledge and information to which there is general access for use for purposes such as education (formal and informal) and the further development of knowledge, understanding, creativity and inventiveness”.⁸⁵ It is important to have a well-stocked public domain in order for innovation to continue in the cultural and scientific areas. This is at least as important as the incentive created by intellectual property’s reward of exclusivity and financial return. Both of these methods have the same goal, namely to encourage and enable ongoing innovation. Therefore it is equally important to define the public domain and determine what is required to guarantee its continued existence and to promote the growth and

⁷⁹ Boyle (2003) *Law & Contemp Probs* 37-38 Also see Boyle *The Public Domain* 42-53

⁸⁰ Boyle (2003) *Law & Contemp Probs* 38-39 Also see Boyle *The Public Domain* 42-53

⁸¹ Boyle (2003) *Law & Contemp Probs* 39 An example is the so-called “business method” patents, which cover such “inventions” as auctions or accounting methods; *State St Bank & Trust Co v Signature Fin Group Inc* 149 F3d 1368, 1373 (Fed Cir 1998)

⁸² Boyle (2003) *Law & Contemp Probs* 39 See the United States Collection of Information Antipiracy Act S 2291 105th Cong (1998); Database Investment and Intellectual Property Antipiracy Act of 1996 HR 3531 104th Cong (1996)

⁸³ Hardin (1968) *Science* 1243-1248

⁸⁴ Boyle (2003) *Law & Contemp Probs* 39-40 Also see Boyle *The Public Domain* 42-53

⁸⁵ H MacQueen & C Waelde “Introduction: The Many Faces of the Public Domain” in C Waelde & H MacQueen (eds) *Intellectual Property: The Many Faces of the Public Domain* (2007) xi xi

enforcement of intellectual property rights.⁸⁶ MacQueen and Waelde depart from the point where the public domain is perceived by lawyers as the opposite of property. However, they caution that this has the potential to be a serious over-simplification. They warn that “free use” does not automatically mean “use for free”.⁸⁷

“Free is often better understood as in free speech (or indeed, freedom) rather than as in free beer.”⁸⁸

In other words, works should be freely accessible, even though some fee may have to be paid for such access.

Boyle⁸⁹ explores this concept of “free”. He asks whether “free” means:

“Free trade in expression and innovation as opposed to monopoly? Free access to expression and innovation, as opposed to access for pay? Or free to innovation and expression, in the sense of not being subject to the right of another person to pick and choose who is given access, even if all have to pay some flat fee? Or is it common ownership and control that we seek, including the communal right to forbid certain kinds of uses of the shared resources?”⁹⁰

What the public domain means depends on “why we care about the public domain, on what vision of freedom or creativity we think the public domain stands for, and what danger it protects against”.⁹¹ The answer is that there is not only one public domain, but different versions thereof. The “commons” has frequently been used to refer to origins of creation that are outside of the intellectual property regime.⁹²

The question whether the public domain is a right or a liberty deserves some exploration. If the public domain can be described as a right, this will strengthen its position substantially. If the public at large have vested rights in the public domain, this strengthens the arguments brought against limiting the public domain by means of private contracts.⁹³ According to the structure of rights set out by Hohfeld,⁹⁴ every right has a corresponding duty. A privilege, on the other hand, imposes no correlative duty and as such there is no right. If this analysis is applied to the public domain, there has to be a corresponding duty on some person in order for there to be a right to the public domain. This would lead to the conclusion that individuals have a mere privilege to use objects in the public domain. When examining the statutory exceptions to intellectual property infringement, it appears that these are also privileges

⁸⁶ xii

⁸⁷ xiii-xiv

⁸⁸ As put by Richard Stalman – see R Stalman “What is Free Software?” (28-02-13) *GNU Operating System* <<http://www.gnu.org/philosophy/free-sw.html>> (accessed 19-03-2013)

⁸⁹ Boyle (2003) *Law & Contemp Probs* 62

⁹⁰ 62

⁹¹ 62

⁹² 62 See Gray (1991) *Cambridge LJ* 268-276 on excludability and specifically moral non-excludability

⁹³ J Cahir “The Public Domain: Right or Liberty?” in C Waelde & H MacQueen (eds) *Intellectual Property: The Many Faces of the Public Domain* (2007) 35 35

⁹⁴ Published in two articles: W Hohfeld “Some Fundamental Legal Conceptions as Applied in Judicial Reasoning” (1913) 23 *Yale LJ* 16 and W Hohfeld “Fundamental Legal Conceptions as Applied in Judicial Reasoning” (1916) 26 *Yale LJ* 710

and not rights.⁹⁵ However, in South African law, there are arguments that these should be treated as rights.⁹⁶

The same arguments regarding the intellectual commons are relevant for both copyright and patents. However, it is useful to examine some practical examples in order to demonstrate the importance of a vibrant, well-stocked intellectual commons to the continued production of valuable new intellectual works. Specifically in the context of copyright the public domain may be defined to include all literary and artistic works of which the term of protection has expired and which as such are no longer protected by copyright or other rights. At the end of such a term of protection, the work may be freely used, since it falls in the public domain. Once a work falls in the public domain, permission is no longer required to use the work and no remuneration need be paid. Furthermore, the work is no longer protected by the Universal Copyright Convention,⁹⁷ which acknowledges the public domain. A work would also fall in the public domain if it did not qualify for copyright protection in the first place, for instance if the work lacked originality or did not comply with one of the other requirements for the subsistence of copyright.⁹⁸ The option of a paying public domain is a different definition of the public domain, which entails royalties being collected after the expiry of a work's copyright term. These royalties payments, generally perceived as a form of tax,⁹⁹ would then be used for the benefit of living authors or for other cultural purposes.

According to Deazley, an understanding of the public domain for copyright needs to distinguish clearly between the two connected concepts of "access to" and "use of" a work. Copyright confers a bundle of rights upon the owner of the work, who is then able to prevent other parties from using the work without his permission. The public domain in the context of copyright accordingly allows use of a work without permission. The second consideration is that once a work is published, it enters a public space. This aspect refers to the work being accessible to the public; hence the owner is no longer the only person with control over access to the work as was the case before the work was published. The intellectual commons consists of two separate types of works, namely those protected by copyright and those falling in the public domain. These works would not fall into the intellectual commons until they are disclosed by being made available to the public through publishing.¹⁰⁰ These first distinctions are too simplistic, since the public domain must also

⁹⁵ Cahir "Public Domain" in *Intellectual Property* 39-40

⁹⁶ See Pistorius "Copyright Law" in *Law of Intellectual Property in South Africa* 211-212 where she submits that the copyright exceptions should be construed as rights

⁹⁷ United Nations *Universal Copyright Convention* (1952) 216 UNTS 132; 943 UNTS 194 <http://portal.unesco.org/en/ev.php-URL_ID=15381&URL_DO=DO_TOPIC&URL_SECTION=201.html> (accessed 26-07-2012) Art 7 states that "[t]his Convention shall not apply to works or rights in works which, at the effective date of the Convention in a Contracting State where protection is claimed, are permanently in the public domain in the said Contracting State" South Africa has not ratified this convention

⁹⁸ G Davies "The Public Interest in the Public Domain" in C Waelde & H MacQueen (eds) *Intellectual Property: The Many Faces of the Public Domain* (2007) 86-86

⁹⁹ 91-92

¹⁰⁰ R Deazley "Copyright's Public Domain" in C Waelde & H MacQueen (eds) *Intellectual Property: The Many Faces of the Public Domain* (2007) 21-22-24

include aspects of copyright works where permission is not required to use the work. This would be the case with the ideas within a copyright work. Such ideas are not protected by copyright and as a result may be used without prior consent of the copyright owner. The use exceptions, as set out in the Copyright Act 98 of 1978, would also fall into this category, even though they are for specific purposes and subject to certain conditions.¹⁰¹

The Copyright Act governs the law of copyright in South Africa. Certain conditions must be met before copyright protection will subsist in a work. There must be an eligible “work”¹⁰² and a “qualified person”.¹⁰³ Furthermore, the work must be original¹⁰⁴ and must exist in a material form.¹⁰⁵ Propriety of the work is also required and this is the only remaining common law requirement.¹⁰⁶ The Copyright Act prescribes no formalities for the acquisition of copyright in a work. Copyright comes into existence automatically, provided a work meets these specified conditions. The Copyright Act sets out certain statutory fair use exceptions where prior permission is not required to use the work. Dean¹⁰⁷ states that these exceptions are instances where it is considered to be in the public interest that the owner of the copyright should not have a monopoly where the performance of certain acts in relation to the copyright work is concerned. According to Dean these exceptions are based on the assumption that a copyright infringement has transpired and that this infringement is excused by virtue of the exemption.¹⁰⁸ Pistorius¹⁰⁹ disagrees with this view, maintaining that fair dealing is a right rather than a defence. She mentions that “[t]he general purpose of copyright exceptions and limitations is to balance the public’s right to access copyright works and the economic rights of copyright owners”. This seems fair and corresponds exactly with the general purpose of the public domain in the sense that intellectual property rights should be construed and developed in such a way that intellectual property works would still be readily accessible to the public and available for future creative use.

The first exception in the Copyright Act is the fair dealing exception:

¹⁰¹ 24-25

¹⁰² S 2(1) of the Copyright Act See Dean *Copyright Law* 1-6–1-20; Pistorius “Copyright Law” in *Law of Intellectual Property in South Africa* 155-160; M von Seidel *Intellectual Property: The John & Kernick Guide* (1998) 73-75 on the works eligible for copyright protection under the Copyright Act

¹⁰³ S 3(1) of the Copyright Act Also see Dean *Copyright Law* 1-28; Pistorius “Copyright Law” in *Law of Intellectual Property in South Africa* 165-166; Von Seidel *Intellectual Property* 75 on the concept of a qualified person

¹⁰⁴ S 2 of the Copyright Act Also see Dean *Copyright Law* 1-21–1-24; Pistorius “Copyright Law” in *Law of Intellectual Property in South Africa* 162-164; Von Seidel *Intellectual Property* 75 on the requirement of originality

¹⁰⁵ S 2(2) of the Copyright Act Also see Dean *Copyright Law* 1-24–1-27; Pistorius “Copyright Law” in *Law of Intellectual Property in South Africa* 164; Von Seidel *Intellectual Property* 75 on the requirement of material form

¹⁰⁶ See Pistorius “Copyright Law” in *Law of Intellectual Property in South Africa* 168-170 which sets out the history of this requirement and the widely differing opinions on how this requirement should be interpreted

¹⁰⁷ Dean *Copyright Law* 1-92 Pistorius “Copyright Law” in *Law of Intellectual Property in South Africa* 211 agrees that the exceptions curtail a copyright owner’s monopoly on the exploitation of a work

¹⁰⁸ Dean *Copyright Law* 1-92

¹⁰⁹ Pistorius “Copyright Law” in *Law of Intellectual Property in South Africa* 211-212

“Any fair dealing with a literary, musical or artistic work, or with a broadcast or published edition, does not infringe that copyright when it is –

- a) for the purposes of research or private study by, or the personal private use of, the person using the work;
- b) for the purposes of criticism or review of that work or of another work; or
- c) for the purposes of reporting current events –
 - i) in a newspaper, magazine or similar periodical; or
 - ii) by means of broadcasting or in a cinematographic film.”¹¹⁰

The exceptions relating to criticism or review; and the reporting of current events¹¹¹ also apply to cinematographic films, sound recordings and computer programs. Where a work deals fairly for the purposes of criticism or review; or for reporting current events in a newspaper, magazine or similar periodical,¹¹² it must be accompanied by an appropriate acknowledgement.¹¹³ Specifically, the source of the work as well as the name of the author (if it appears on the work) must be mentioned. “Fair dealing” is a rather vague concept, possibly in order to enable the court to take all circumstances into consideration when deciding whether an infringement may be excused.¹¹⁴ There are a number of further exceptions that will not be discussed at length for the purposes of this section. The purpose is merely to give a number of examples from South African copyright law where certain aspects of copyright works would fall in the public domain.¹¹⁵ The purpose of these exceptions appears to be in line with the reasons that Gray¹¹⁶ furnishes for certain resources being morally non-excludable, in other words it would be against public policy to proprietise these aspects of copyright works. From copyright it may be seen that there are at least three different scenarios where the public domain is relevant, namely where the copyright term has expired and the entire work falls into the public domain; where ideas embodied within the work remain outside of copyright and thus in the public domain; and where certain acts are exempted from infringement by the Copyright Act by reason of the public interest. This may also include instances where other fundamental rights may be considered more important than copyright, for example freedom of expression or the right to education.¹¹⁷ It becomes apparent that the public domain is vitally important to the continued production of intellectual products and it must be protected from enclosure that may possibly be effected by extensions of copyright terms and inclusion of materials and ideas that are currently not copyrightable. The same is true for the public domain relating to patents.

¹¹⁰ S 12(1) of the Copyright Act

¹¹¹ Ss 12(1)(b) and (c)

¹¹² Ss 12(1)(b) and (c)(i)

¹¹³ Ss 15(4), 16, 17, 18 and 19B

¹¹⁴ Dean *Copyright Law* 1-92–1-94. Also see Pistorius “Copyright Law” in *Law of Intellectual Property in South Africa* 212-213 on the concept of fair dealing

¹¹⁵ Further exceptions set out in s 12 of the Copyright Act include quotations (s 12(3)), illustrations for teaching (s 12(4)), ephemeral copies (s 12(5)) and reverse engineering of products (s 15(3)). See further Dean *Copyright Law* 1-92–1-109; Pistorius “Copyright Law” in *Law of Intellectual Property in South Africa* 211-222 on the exceptions to copyright infringement

¹¹⁶ Gray (1991) *Cambridge LJ* 280-281

¹¹⁷ S 16 (the right to freedom of expression) and s 29 (the right to education) of the Constitution of the Republic of South Africa, 1996. Although there has been no such case in South African law specifically regarding copyright, see *BVerfGE* 31, 229 [1971] (“*Urheberrecht* case”) (“the *Schoolbook* case”), a German case dealing with copyright and education

The Patents Act 57 of 1978 governs the registration of patents in South Africa.¹¹⁸ A patent grants, among others, the exclusive right to make, use or import products embodying the invention.¹¹⁹ The term of a patent is twenty years from the date of application.¹²⁰ A patent granted in South Africa is valid throughout the whole of South Africa for this limited period.¹²¹ Once the term has expired, the invention falls within the public domain or intellectual property commons and the public is free to make use of the invention, very similar to copyright works. In the case of patents for medicines, this implies that generic substitutes for the medicines may be placed on the market. The original medicine is no longer protected by the patent and the technology falls within the intellectual commons.¹²² The term of a patent limits the extent of the right granted, as such patent rights are not absolute. There are also certain situations where inventions are excluded from patentability and these also serve to limit rights.

The Patents Act describes which inventions are patentable.¹²³ A patent may be granted for a new invention that involves an inventive step and is capable of being used in trade, industry or agriculture. The Patents Act also names specific exclusions from the concept of an invention for purposes of patents. These are a discovery; a scientific theory; a mathematical method; a literary, dramatic, musical or artistic work or any other aesthetic work; a scheme, rule or method for performing a mental act, playing a game or doing business; a program for a computer; or the presentation of information.¹²⁴ The Patents Act names further exclusions from patentability, namely inventions which promote offensive or immoral behaviour,¹²⁵ and any variety of animal or plant, or any essentially biological process for the production of animals or plants that is not a microbiological process.¹²⁶ In some instances, the purpose of these exclusions appears to be that certain general information should remain in the public domain to be readily available for future inventions and should therefore not be propertised. Other exclusions are aimed at preventing immoral gains or exploitation or to exclude interests not suitable for patent protection, although they could be protected in other forms. These examples of exclusions and the reasons for them correspond loosely to Gray's moral non-excludability explanation.¹²⁷ There are also specific fundamental rights that

¹¹⁸ See Von Seidel *Intellectual Property* 15-30 for a basic overview of patents

¹¹⁹ W Alberts "What is Intellectual Property?" (2007) *De Rebus* 45 45 See s 25 of the Patents Act and Burrell *Patent and Design Law* 1-22-1-26

¹²⁰ S 46(1) of the Patents Act See Burrell *Patent and Design Law* 1-3; Van der Merwe "The Law of Patents" in *Law of Intellectual Property in South Africa* 298; Von Seidel *Intellectual Property* 27

¹²¹ Burrell *Patent and Design Law* 1-4

¹²² Alberts (2007) *De Rebus* 45 See Burrell *Patent and Design Law* 1-1 See further *Letraset Ltd v Helios Ltd* 1972 3 SA 245 (A) 249 where the court stated that a patent involves a *quid pro quo* where the *quid* is the monopoly conferred on the inventor while the *quo* is the new knowledge that the public may use freely after the patent has expired

¹²³ S 25(1) of the Patents Act

¹²⁴ S 25(2)(a)-(g) of the Patents Act See Burrell *Patent and Design Law* 1-24 S 25(3) states that "[t]he provisions of subsection (2) shall prevent, only to the extent to which a patent or an application for a patent relates to that thing as such, anything from being treated as an invention for the purposes of this Act"

¹²⁵ S 25(4)(a)

¹²⁶ S 25(4)(b)

¹²⁷ Gray (1991) *Cambridge LJ* 280-281

may be affected by the recognition of property rights in patents. The granting of “patents on life” may restrict access to new biological discoveries and their applications, which in turn may limit the acquisition of new knowledge. The public domain of knowledge about human, animal and plant¹²⁸ biology is changing shape entirely in the United States. Preference is being given to knowledge which may be patented and that which is communal is neglected, which may lead to damaging effects, particularly in developing countries.¹²⁹ Without the protection of intellectual property, companies will be unwilling to invest in developing a product for fear that other companies will copy the product.¹³⁰ Even though patents are mainly used to prevent the imitation of inventions and to secure markets, patenting has increasingly been driven by other motivations. These include “blocking competitors; increasing the company’s reputation and value; exchanging value with partners, licensees and investors; and controlling internal performance and motivations”.¹³¹ Patent holders may prevent other companies from using the particular, patented knowledge. Subsequently, these competitors are also barred from using the knowledge to make improvements on a particular product and from selling it in competition with the holder of that patent. In this sense knowledge is not non-rivalrous, as the use of intellectual products is usually described.

From this discussion, it becomes clear that there are at least two categories of patent-related aspects of intellectual creations that are relevant to the intellectual commons, namely where the term of a patent has expired and the creation reverts back to the commons; and where specific aspects are excluded from patentability by virtue of legislation, because they are deemed too commonplace or because patenting the specific aspect would be immoral. This would also include the cases where another fundamental right is deemed more important than a particular patent right.

A final, particularly problematic aspect of the public domain that requires attention is the interaction between the public domain and traditional knowledge.¹³² In contrast with copyright and patents that are already protected by property rights and where the danger lies in the encroaching of new or stronger property rights into the public domain, traditional knowledge is not yet generally

¹²⁸ In South African law, the Plant Breeders’ Rights Act 15 of 1976 provides for the protection of new plant varieties, therefore these are not protected under the category of patents. See DW Collier “Access to and Control over Plant Genetic Resources for Food and Agriculture in South and Southern Africa: How Many Wrongs Before a Right?” (2006) 7 *MJLST* 529 in general; P van der Spuy “Plant Breeders’ Rights” in HB Klopper, T Pistorius, B Rutherford, L Tong, P van der Spuy & A van der Merwe (co-ordinating ed) *Law of Intellectual Property in South Africa* (2011) 337 in general

¹²⁹ H Wallace & S Mayer “Scientific Research Agendas: Controlled and Shaped by the Scope of Patentability” in C Waelde & H MacQueen (eds) *Intellectual Property: The Many Faces of the Public Domain* (2007) 189

¹³⁰ 191

¹³¹ 197

¹³² SR Munzer & K Raustiala “The Uneasy Case for Intellectual Property Rights in Traditional Knowledge” (2009) 27 *Cardozo Arts & Ent LJ* 37 48 explain as follows:

“Traditional knowledge, more fully and carefully defined, is understanding or skill, which is typically possessed by indigenous peoples and whose existence typically predates colonial contact (typically with the West), that relates to medical remedies, plant and animal products, technologies, and cultural expressions. The term ‘cultural expressions’ includes religious rituals, sacred objects, rites of passage, songs, dances, myths, stories, and folklore generally. These forms of knowledge and cultural expressions are rarely frozen in time. Generally they evolve over decades and centuries.”

protected by property rights. Therefore the issues relating to the public domain are quite different for traditional knowledge in that traditional knowledge has always been exploited since it is considered part of the public domain. This link between traditional knowledge and the public domain has been explored by Gibson, who submits that historically, the appropriation of traditional knowledge by colonisers has been justified by the doctrine of discovery. The traditional knowledge was regarded as “natural” or as part of the global heritage of humanity and as a consequence it was there for the benefit of all. This formed an important aspect of the imperialist process, in terms of which colonised peoples’ culture and knowledge were dominated by the “superior” knowledge of the coloniser. In the current debate relating to the expansion of intellectual property rights, traditional knowledge is still treated as part of a common heritage instead of creative knowledge of the indigenous communities, according to Gibson.¹³³

More recently, on an international level, there have been calls for the protection of traditional knowledge as property as an integral part of the unity and dignity of indigenous communities. The position of traditional knowledge within the public domain as defined by modern intellectual property law is a very important aspect of the debate about the expansion of intellectual property rights. Currently, this construction of traditional knowledge as part of the public domain still enables the appropriation of traditional knowledge. This leads to arguments to the effect that access to traditional knowledge cannot be denied, because it is legally or morally impossible. The public domain is used by groups with commercial interests to gain access to these resources. Absurdly, these commercially interested groups sometimes argue that traditional communities are attempting to expand intellectual property rights by seeking to protect their traditional knowledge.¹³⁴ Therefore it appears that the two separate debates about the expansion of intellectual property rights and the protection of traditional knowledge sometimes get confused. The way in which traditional knowledge is construed as part of the international public domain does not account for cultural and political identity linked to the traditional knowledge. This does not consider the creative process that leads to the knowledge, which is treated as a mere product to be extracted by companies with commercial interests.¹³⁵ In the context of traditional knowledge, the distributive concerns considered by Ghosh¹³⁶ can be applied

CJ Visser “Making Intellectual Property Laws Work for Traditional Knowledge” in JM Finger & P Schuler (eds) *Poor People’s Knowledge: Promoting Intellectual Property in Developing Countries* (2004) 207-207 uses a wider definition, including “traditional and tradition-based literary, artistic, and scientific works; performances, inventions, scientific discoveries, and designs; marks, names, and symbols; undisclosed information; and all other innovations and creations resulting from intellectual activity in the industrial, scientific, literary, or artistic fields. So categories of traditional knowledge include agricultural knowledge; scientific knowledge; technical knowledge; ecological knowledge; medicinal knowledge, including knowledge relating to medicines and remedies; knowledge relating to biodiversity; and traditional cultural expressions in the form of music, dance, song, handicrafts, designs, stories, artworks, and elements of languages (such as names, geographical indications, and symbols)”

¹³³ J Gibson “Audiences in Tradition: Traditional Knowledge and the Public Domain” in C Waelde & H MacQueen (eds) *Intellectual Property: The Many Faces of the Public Domain* (2007) 174-174

¹³⁴ 175-178

¹³⁵ 178

¹³⁶ Ghosh (2007) *UC Davis L Rev* 888-889

fruitfully, since this is a prime example where justice would not be served by merely allocating the resource to the highest bidder.

Traditional knowledge is currently in the process of being integrated into the existing intellectual property categories under South African private law by way of the so-called Traditional Knowledge Bill.¹³⁷ Traditional knowledge already receives limited protection under patents,¹³⁸ but all other forms of traditional knowledge are still unprotected to date. If the Traditional Knowledge Bill¹³⁹ is passed (possibly an amended version) and the existing intellectual property categories are therefore updated to include interests in traditional knowledge as intellectual property rights, then these interests would be protected as property in South African private law, at least in principle. There are valid concerns that this Bill will not adequately protect interests in traditional knowledge¹⁴⁰ and these have now been noted by the president, who sent the original draft Bill¹⁴¹ back to Parliament due to concerns that it may be unconstitutional. There have also been calls for *sui generis* protection of traditional knowledge, in other words a separate piece of legislation catering exclusively for traditional knowledge rights.¹⁴² However, despite the difficulties in creating the appropriate kind of protection for traditional knowledge, it is clear that South African law does not view traditional knowledge as part of the commons; and correctly so. Protection for traditional knowledge should not be viewed as a negative development in intellectual property law in the sense of encroaching on the commons. Unfortunately, the Traditional Knowledge Bill¹⁴³ is currently the only example of South African intellectual property law legislation being revised. Therefore practical application of considering the commons while revising South African intellectual property legislation would only fully happen if there were calls for the extension of the duration

¹³⁷ Intellectual Property Laws Amendment Bill of 2007 (draft) in GG 33055 of 29-03-2010 and GG 31026 of 05-05-08 As at 22 March 2013: By resolution of the National Assembly adopted on 14 March 2013, the Bill has been referred to the Portfolio Committee on Trade and Industry for consideration and report The Bill has also been resubmitted to the JTM for reconsideration of its classification, and is to be referred to the National House of Traditional Leaders for comment

¹³⁸ Amendments to the Patents Act 57 of 1978 (ss 30(3A) and 30(3B)) have been drafted to incorporate the requirements of the Biodiversity Act 10 of 2004, in the Patents Amendment Act 20 of 2005 which came into force in 2007 These amendments require a patent application to include information about any traditional knowledge; or indigenous biological or genetic resource that was used to derive a patent or base it on

¹³⁹ Intellectual Property Laws Amendment Bill of 2007 (draft) in GG 33055 of 29-03-2010 and GG 31026 of 05-05-08 As at 22 March 2013: By resolution of the National Assembly adopted on 14 March 2013, the Bill has been referred to the Portfolio Committee on Trade and Industry for consideration and report The Bill has also been resubmitted to the JTM for reconsideration of its classification, and is to be referred to the National House of Traditional Leaders for comment

¹⁴⁰ OH Dean "Where Angels Fear to Tread" (2009) *Without Prejudice* 18-19; OH Dean "Red Card" (2009) *Without Prejudice* 17-20; LTC Harms "A Few Negative Trends in the Field of Intellectual Property Rights" (2009) 72 *THRHR* 175-191

¹⁴¹ Intellectual Property Laws Amendment Bill of 2007 (draft) in GG 33055 of 29-03-2010 and GG 31026 of 05-05-2008

¹⁴² Dean (2009) *Without Prejudice* 20

¹⁴³ Intellectual Property Laws Amendment Bill of 2007 (draft) in GG 33055 of 29-03-2010 and GG 31026 of 05-05-08 As at 22 March 2013: By resolution of the National Assembly adopted on 14 March 2013, the Bill has been referred to the Portfolio Committee on Trade and Industry for consideration and report The Bill has also been resubmitted to the JTM for reconsideration of its classification, and is to be referred to the National House of Traditional Leaders for comment

of intellectual property rights; or if a whole-scale revision of the legislation were to take place.

5 Conclusions

The intangible property commons or public domain is of particular importance for all categories of intellectual property, as was demonstrated by the examples of copyright and patents. Intellectual property rights are already protected as property in private law. The problem is that intellectual property rights could be expanded to encroach unduly upon the public domain and this should be prohibited by allowing any intellectual property right extensions only after careful consideration of all the relevant interests. The public domain consists of resources that may not be protected in terms of intellectual property rights because they are morally non-excludable; works of which the intellectual property protection has expired; and aspects of intellectual property works that are not covered by property rights (legally non-excludable resources). The public interest always has an influence where property rights are concerned. In the United States of America there are movements towards lengthening the terms of intellectual property protection as well as granting of protection to aspects of works that could not previously be covered by intellectual property rights.¹⁴⁴ In South African law this should be prevented and a balance must be found between the protection of private property rights and interests in the public domain.¹⁴⁵

The public domain should be protected as well as expanded. That which is in the commons must be protected from undue proprietisation so that it is still available for use in future intellectual works. During the creation of new intellectual property works, the “raw materials” in the commons should be used in such a way that it is still available for other uses as well. If the materials are taken out of the commons their use in the creation of new intellectual products can no longer be described as “non-rivalrous” and the same concerns as with the tangible commons become applicable. The expansion of the commons entails that intellectual creations should receive property rule-type protection for the minimum length of time necessary to ensure a continued incentive for the production of such works, so that these works are available as part of the intellectual commons as soon as possible to ensure continued creation of intellectual works.

¹⁴⁴ See Haggerty (2002) *U Cin L Rev* 651; Depoorter (2004) *V JL & Tech* 4; M Perelman “The Weakness in Strong Intellectual Property Rights” (2003) 46 *Challenge* 32

¹⁴⁵ See Kellerman *The Constitutional Property Clause and Immaterial Property Interests* 149-162

SUMMARY

The intellectual commons or public domain is an important part of intellectual property law scholarship. In this regard it is necessary to examine the origins of the commons, what exactly the intellectual commons is and how the notion of the intellectual commons may be further developed. Especially in the United States of America there are concerns that the intellectual commons is currently being enclosed by extending intellectual property protection to areas of intellectual activity that were previously excluded from proprietisation; and by extending intellectual property protection of existing rights. It may be argued that some intellectual products should remain in the commons or revert back to the commons in order to ensure that enough remains so that new intellectual products may be developed based on these existing products. However, there must also be enough of a property-right based incentive in order to ensure continued investment in the creation of new intellectual products. The important question is then, how may these two interests be balanced? This article examines the issues related to the commons in order to provide a framework which future revisions to intellectual property legislation may use as a point of departure to ensure that South African legislation does not encroach on the intellectual commons unduly. Examples from copyright law, patent law and traditional knowledge are used to demonstrate how the intellectual commons and intellectual property statutes interact.