

INTELLECTUAL PROPERTY PROTECTION FROM A SHARIA PERSPECTIVE

BASHAR H MALKAWI*

I INTRODUCTION

The concept of intellectual property is not new. Protection for creative works was granted under the British Statute of Anne 1710 and the Statute of Monopolies 1623.¹ In the 19th century, the term intellectual property began to be used.² Over the subsequent years, many of the legal principles governing intellectual property evolved.

Poetry was deeply respected in the pre-Islamic era and authors enjoyed an enhanced social standing and esteem. As recognition of the value of their works, poets were compensated for the publication and distribution of their work.³ Some lesser poets were tempted to resort to various forms of theft in order to enhance their standing and wealth. However, such poets were generally cast from cultural society.⁴ In pre-Islamic societies, works of the mind were valued matters and may have qualified as a form of intellectual property – especially moral rights – though this recognition was rudimentary.

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* Bashar H Malkawi is Associate Professor of Law at the University of Sharjah, UAE. He holds an SJD in International Trade law from Washington College of Law and an LLM in International Trade law from the University of Arizona. Heartfelt thanks to the anonymous reviewers of this paper for their invaluable suggestions. The paper has benefited from their comments. Thanks to my wife Sana for her forbearance during a year in which a great many evenings and weekends were devoted to this article.

1 See Sherman Brad and Lionel Bently, *The Making of Modern Intellectual Property Law: The British Experience* (Cambridge University Press, 1999) 207. The origins of copyright and patent law are now seen as located in the British Statute of Anne 1710 and the Statute of Monopolies 1623: *ibid.*

2 See Mark A Lemley, 'Property, Intellectual Property, and Free Riding' (2005) 83 *Texas Law Review* 1031, 1035.

3 See Amir H Khoury, 'Ancient and Islamic sources of Intellectual Property Protection in the Middle East: A Focus on Trademarks' (2003) 43 *IDEA: The Journal of Law and Technology* 151, 153.

4 *Ibid* 154.

Early Muslim-Arab society continued the practices of the pre-Islamic period and even broadened them. Sharia law includes several considerations whose effects are similar to those of modern intellectual property laws.⁵ For example, the Caliphs – religious and political leaders who are successors of the Prophet Muhammad (s.a.w) – would buy books they considered important and make copies of them after paying an adequate compensation to the author.⁶

The purpose of this article is to elucidate the extent to which Sharia law acknowledged or developed means to protect intellectual property.⁷ The analysis presented in this article approaches this subject historically, and in particular, elaborates on the legal concepts that may provide the basis for intellectual property protection in Sharia through an analysis of present day challenges of incorporating new types of intellectual property rights under Sharia. The article also examines the reasons for the lack of sufficient protection for intellectual property rights in Arab countries, considering that Sharia – the seal of religions – recognises them in some form. The article concludes by arguing, that although intellectual property enjoyed no explicit legal protection in Sharia, it was protected through norms and concepts equivalent to today's laws and rights. This proposition is to refute any argument that Islamic law and intellectual property cannot coexist and a response to the myth that Islamic law is passé.⁸ However, there are challenges involved in intellectual property protection in Arab countries due to religious beliefs, traditional societal culture, a lower degree of economic development, and higher poverty levels. Moreover, the expansion of intellectual property rights and the challenges associated with new innovations render their protection under Sharia more complicated.

The vast majority of the discussion in this article relates most closely with copyright law. However, examples are mentioned from other intellectual property areas such as patents, trademarks and trade secrets. Additionally, discussion of intellectual property and its relevance will be limited to Sharia law and Arab countries.⁹ Thus, it is helpful to provide a background of Sharia

5 Sharia is an Arabic word meaning 'way'. The Sharia was compiled during the first three centuries after Muhammad's (s.a.w.) death. See Ahmed Zaki Yamani, 'The Eternal Shari'a' (1979) 12 *New York University Journal of International Law & Politics* 205, 205–6.

6 See Heba A Raslan, 'Shari'a and the Protection of Intellectual Property – The Example of Egypt' (2007) 47 *IDEA: The Intellectual Property Law Review* 497, 499.

7 The author will employ intellectual property terms and concepts that are modern and new – such as, as economic rights, moral rights, and licensing – knowing that these terms and concepts as used in our time were unknown in early Islamic times.

8 See HS Shaaban, 'Commercial Transactions in the Middle East: What Law Governs?' (1999) 31 *Law & Policy in International Business* 157, 158.

9 For purposes of this article, Arab countries as existing today will be defined as: Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Oman, Gaza Strip and West Bank, Qatar, Saudi Arabia, Sudan, Syria, Somalia, Tunisia, United Arab

law and the lawmaking process followed in Sharia which, along with Jewish law, civil law, and common law, is one of the world's major legal systems. Understanding Sharia law and its sources is important to extracting evidence on the relationship between intellectual property and Islam.

II THE FRAMEWORK OF LAW IN ISLAM

Islam is a religion of laws in every dimension. Islamic laws address matters ranging from the timing of daily prayers, fasting, and prohibitions against eating certain foods to marriage, inheritance, and commerce.¹⁰ Islam acquired its characteristic as a religion uniting itself in both the spiritual and temporal aspects of life and seeking to regulate, not only the individual's relationship to Allah, but human relationships in a social setting as well.¹¹ Thus, there is an Islamic law governing virtually all aspects of a Muslim's life.

The law in Islam may be thought of as being composed of at least two parts: revealed and non-revealed. The revealed form of Sharia has two proper sources: the Qur'an (the holy book) and the *sunna* (traditions based on the *hadith*, sayings and actions of the prophet).¹² Non-revealed sources of Sharia, developed by Muslim jurists after the revelation of the Qur'an and the *sunna*,

Emirates, and Yemen. For a discussion of Christian Biblical and Jewish law themes concerning intellectual property, see David L Lange and H Jefferson Powell, *No Law: Intellectual Property in the Image of an Absolute First Amendment* (Stanford University Press, 2009), 235–248; Roger Syn, 'Copyright God: Enforcement of Copyright in the Bible and Religious Works' (2001) 14 *Regent University Law Review* 1.

- 10 The Qur'an speaks much more explicitly and completely about personal status (marriage and inheritance), morality, and an individual's relationship with Allah (s.w.t) than it does about commerce. For an interesting general discussion of Islamic law, see M Cherif Bassiouni & Gamal M Badr, 'The Shari'ah: Sources, Interpretation, and Rule-Making' (2002) 1 *UCLA Journal of Islamic & Near East Law* 135, 149. [T]he Qur'an and the *sunna* contain the greater number of norms applicable to the areas of criminal law, family law, contracts and obligations, procedure, and inheritance law as compared to other subjects within the *mu'amalat* category – societal relations and individual interactions: *ibid*.
- 11 Muslims believe that Islam is the last religion. In Islam, unlike the Talmud for Orthodox Judaism or the Bible in Christianity, the Qur'an not only covers moral or spiritual teachings but also every aspect of life. See Hossein Esmaceli, 'The Nature and Development of Law in Islam and the Rule of Law Challenge in the Middle East and the Muslim World' (2011) 26 *Connecticut Journal of International Law* 329, 341–4. See also Mark L Movsesian, 'Fiqh and Canons: Reflections on Islamic and Christian Jurisprudence' (2010) 40 *Seton Hall Law Review* 861, 863. In Islam, a comprehensive body of law sacralises daily life and connects believers to God. In fact, many scholars maintain that nothing exceeds law's importance in the life of Islam. By contrast, Christianity does not express its faith through a body of law. Christianity's traditional discourse is theology, a reflection on God's nature, not His will. Unlike *Fiqh*, canon law serves an auxiliary function in the life of Christianity; it is facilitative, not constitutive, of the believer's relationship with God.
- 12 The Qur'an is divided into 114 chapters, known as *surahs*. Each *surah* is divided into verses, called '*ayas*' which mean 'signs', referring to signs from and of Allah. There are roughly 6000 verses. See Raj Bhala, 'Theological Categories for Special and Differential Treatment' (2002) 50 *University of Kansas Law Review* 635, 680.

include *ijma* (consensus of Muslim scholars on a point of law) and *qiyas* (a sub-*ijtihad* species of strict analogical reasoning). These are the authoritative sources of jurisprudence (*usul al-fiqh*).¹³ *Usul al-fiqh* incorporates both deductive (from broad general principles in the law to a particular case) and inductive (from a particular case to general principles) methods of reasoning.

Other sources of non-revealed Sharia include *ijtihad* (individual intellectual effort and wider independent reasoning), *istihsan* (equity or juristic preference), *istishab* (presumption of continuity), *istislah* or *maslaha* (opinion based on public interest), *darura* (necessity), *urf* (custom), and *fatwa* giving (*responsa*) of *muftis* (*jurisconsults*), such as the Egyptian grand *mufti* Muhammad Abduh.¹⁴

To establish direct support for a legal proposition, a Muslim legal scholar should be able to pinpoint to a verse of the Qur'an, or at least a tradition or *hadith* of the Prophet Muhammad (s.a.w). While the Qur'an provides the written law, the *sunna* supplies a sort of case law or supplement consistent with the Qur'anic text. The *sunna* embodies the application of the Qur'an's written law to concrete disputes and hypothetical questions that arose during the prophet's life. Some *sunna* cases simply explain the Qur'anic principles and rules. Some cases interpret the Qur'anic text by providing new insights into the written law. Some provide new principles and rules, supplementing the Qur'an's protected knowledge.

If direct support of a legal proposition in the Qur'an and *sunna* is not possible, then a Muslim legal scholar seeks an instance when all legal scholars or jurists

13 See William M Ballantyne & Howard L Stovall, *Arab Commercial Law: Principles and Perspectives* (American Bar Association, 2002), 28–30. See also John Walbridge, 'Logic in the Islamic Intellectual Tradition: The Recent Centuries' (2000) 39(1) *Islamic Studies* 55, 68. Islamic law is divided into two disciplines: *fiqh*, which the content of the sacred law, and *usul al-fiqh*, the principles by which it is deduced. *Usul* is a system of rules by which new law is derived from a fixed body of source materials: *ibid*.

14 See Hasbullah Haji Abdul Rahman, 'The Origin and Development of Ijtihad to Solve Modern Complex Legal Problems' (1999) 43(2) *The Islamic Quarterly* 73, 75–6; *Ijtihad* must not be exercised as to the existence of Allah, the truism of the prophets of Allah, and the authenticity of the Qur'an. To exercise *ijtihad*, a Muslim has to be knowledgeable of the Qur'an, *sunna*, and *usul al-fiqh*. A Muslim also must be a good Muslim, pious and law-abiding, and not influenced by heresy, just, and reliable: *ibid*. See also Muhammad Khalid Masud et al eds., *Islamic Legal Interpretation: Muftis and their Fatwas* (Harvard University Press 1996), 4–32, 286–96. A *fatwa* is a nonbinding advisory opinion to an individual questioner (*mustafti*) in connection with ongoing human affairs. A *fatwa* may cover issues concerning mosques, intergenerational transmission of property, and marriage of children, and banking operations and interest. *Fatwa* began as a private activity that was independent of any state control before being transformed into a mechanism of religious legitimisation. The formulation of *fatwa* is patterned after a question-answer model. Important *muftis* in the pre-modern era were *Mu'adh b Jabal*, *Ibn 'Abbas*, and *Ibn Rushd*. Modern era muftis include *Muhammad Sayyid Tantawi*, grand *mufti* of the Egyptian Republic and head of *Dar al-ifta'*, *Makhluf* (*Fatwa* Office), *al-Qaradawi*, and 'Abd al-'Aziz b. 'Abd Allah Ibn Baz: *ibid*.

agree on a particular point of law or interpretation. Consensus may be relied upon as a valid source of law. Use of analogical reasoning, *qiyas*, is quite strict. First, one must find a verse in the Qur'an, a *sunna* of the prophet, or a rule on which consensus was achieved as the point of departure. Then, the direct cause, purpose or rationale, narrowly conceived, must be determined, and the relationship between the two concerns, the one in which there is a rule and the one to which one is considering extending the rule, must be elucidated in such a way as to demonstrate that the rule should be extended. For example, the Qur'anic prohibition of drinking wine extends to other alcoholic beverages without concern about gray areas. On the other hand, the relaxation of the duty to fast in cases of illness and traveling cannot be extended so easily.¹⁵ Applying the concept of hardship to the deliberation is not helpful because travelers would not always find fasting a hardship. Moreover, *hardship* is a very broad and fuzzy concept. The divine purpose or cause of the rule is not mere hardship, and so extension of the relaxation would not be discrete or defined.

All Muslim scholars agree that the Qur'an is the core of Islamic law. However, there is disagreement among them about the rank of other sources of Islamic law. Consequently, there have arisen four main schools of law in *Sunni*: the Hanafi, Maliki, Shafi'i, and Hanbali.¹⁶ Hanafi scholars rely on reason and opinion, using analogy and equity as sources of law. The Maliki School requires strict application of the *sunna* of the Prophet and minimises the role of opinion. The Shafi'i School has tried to reconcile the Maliki and Hanafi principles.¹⁷ The Hanbali School is well-known for its strict adherence to the text of the Qur'an and the *sunna*. Analogy is recognised as a source of Hanbali law.

The Sharia tries to describe all possible human acts, and to classify them as obligatory, recommended, neutral, objectionable, or forbidden by Allah (s.w.t), the supreme legislator.¹⁸ Prayers and paying *Zakat* are obligatory actions while

15 See Gamal M Badr, 'Islamic Law: Its Reaction to Other Legal Systems' (1978) 26 *American Journal of Comparative Law* 187, 189.

16 See David Bonderman, 'Modernization and Changing Perception of Islamic Law' (1968) 81 *Harvard Law Review* 1169, 1174. Schools of law in *Sunni* appeared in the first and second centuries of Islam. They developed initially due to geographical separation – one at Medina, one at Kufa in Iraq, one in Syria – for example. After a few centuries, each school became personalised and took the name of its leading scholar. Each school developed its own body of legal doctrine, but they were similar in broad precepts. They disagreed as to particular points of law: *ibid*.

17 Al Shafi'i, the founder of al-Shafi'i law school, is known as the founder of Islamic jurisprudence. He was the first jurist to compile and systematise Islamic sources of law.

18 See Knut S Vikør, *Between God and the Sultan: A History of Islamic Law* 37 (Oxford University Press, 2005).

making a will is recommended.¹⁹ Other actions such as consuming alcohol and eating non-halal food are forbidden.²⁰ The Quran and other sources of Sharia are silent on other actions. In this case, these actions are permitted on the ground that everything is permitted unless expressly prohibited by Allah. In general, protection of intellectual property is acceptable because of the lack of any express statement(s) in the Qur'an or other Sharia sources against it. Allah's representative among his people, the Caliph, or in more modern terms, the government, is free to act provided the laws enacted do not run afoul of Sharia rules.²¹ The classification of acts into categories proves the degree of flexibility and pragmatism employed by Islamic law.

III INTELLECTUAL PROPERTY RIGHTS AS CITED IN SHARIA

Islamic law did not regulate intellectual property rights per se by having detailed and precise rules, such as in the case of spiritual duties or inheritance. However, the different sources of law in Sharia contain many rules and examples which help in drawing the connections between intellectual property and Islamic law. The following section examines the birth and development of intellectual property norms meeting the needs of that time and analyses the arguments and counter-arguments for providing intellectual property protection under Sharia.

A *Intellectual Property as Extension of Real Property*

Muslims believe that all property belongs to Allah (s.w.t).²² The private owner of property acts as a trustee or agent for Allah (s.w.t), the ultimate owner. Nevertheless, Islam cherishes the inviolability of private property. The Qur'an states:

And do not eat up Your property among yourselves For vanities, nor use it As bait for the judges, With intent that ye may Eat up wrongfully and knowingly A little of (other) people's property.²³

Prophet Muhammad (s.a.w) in his farewell pilgrimage said 'No property of a Muslim is lawful to his brother except what he gives him from the goodness

19 See Quran, 2:43, 149, 180.

20 See Qur'an, 5:3. For meat to be halal, it cannot be of certain types of animals and must be butchered in a certain manner. See Rain Levy Minns, 'Food Fights: Redefining the Current Boundaries of the Government's Positive Obligation to Provide Halal' (2001) 17 *Journal of Law & Politics* 713, 717.

21 James ND Anderson & Noel J Coulson, 'The Moslem Ruler and Contractual Obligations' (1958) 33 *New York University Law Review* 917, 929-31.

22 The Qur'an states 'Unto Allah belongeth whatsoever is in the heavens and whatsoever is in the earth'. See also Qur'an 3:129.

23 See Qur'an 2:188.

of his heart, so do not wrong yourselves'.²⁴ Sharia, thus, takes a middle way between communal property rights and personal rights and property based on Western ideas, English and North American, in particular.²⁵

As to the recognition of intellectual property as specie of property, most schools of law in Sharia are in agreement about this issue. The exception is the Hanafi School which varies on how it thinks of property. This is primarily the result of a disagreement about the proper criterion for what could be considered *mal* (money). According to the Hanafi School line of thinking, *heiaza* (physical possession) is the only acceptable criterion for money.²⁶ They accept only tangibles as *mal* and eventually property.²⁷ Thus, the Hanafi School concentrates, in absolute terms, first and foremost on material objects as property that can be experienced by one of the five senses. Because of the nature of ideas as incorporeal objects, there can be, according to Sharia no legal rights to them as intellectual property. On the other hand, the Malki, Shafie, and Hanbali Schools all agree that the proper criterion should be *manfa'a* (usefulness).²⁸ These latter schools accept both tangibles and intangibles as property. Property can be anything that is useful and of value. It follows then, that protection of intellectual property would fall into the category of permitted action.

Under Sharia, ownership of real property can be acquired through contractual agreements or by appropriation.²⁹ Under the appropriation right, one may

24 See Muhammad Al-Ghazali, *Understanding the Life of the Prophet Mohammad* (International Islamic Federation Student Organization, 1997), 457.

25 See Wei Shi, 'Cultural Perplexity in Intellectual Property: Is Stealing a Book an Elegant Offense?' (2006) 32 *North Carolina Journal of International Law & Commercial Regulation* 1, 9. Confucian ethics places a relatively low value on terms based on individuals and profit, but it does place value on the concept of communal property. In contrast, the Western concept of property is closely associated with the philosophy of natural law originating with the Greek Stoics and later interpreted and codified by Roman philosophers and jurists: *ibid.* By using the term 'Western', the author does not exclude West Asia (Arab Asia) and North Africa which was influenced by the Western heritage and sources. See Khalil 'Athamina, *The Influence of Western Legal Heritage on Islamic Religious Laws in Modern Times* 20–22, available at <<http://www.qsm.ac.il/mrakez/asdarat/jamiea/9/2--khaleel%20athamneh.pdf>> at 12 February 2013. The majority of Arab and Islamic countries in the Middle East were influenced by Western norms. Laws of European origin today form a vital and integral part of the legal systems of most Middle Eastern countries. The pure *Sharia* in its traditional form, was generally confined in the Middle East to the realm of family law, *ibid.*

26 See Muhammad Wohidul Islam, 'Al-Mal: The Concept of Property in Islamic Legal Thought' (1999) 14 *Arab Law Quarterly* 361, 363.

27 The reason for excluding intangibles from property is to avoid the hardships that people would have to face if intangibles are used as objects of contracts and dealings among them: *ibid.*

28 *Ibid* 364.

29 See Steven D Jamar, 'The Protection of Intellectual Property under Islamic Law' (1992) 21 *Capital University Law Review* 1079, 1084; this article provides a detailed explanation of the concept of appropriation by developing vacant property, called *Mawat*.

acquire title to vacant real property by developing it and making it productive. Ownership of personal property can be also acquired through extracting and possessing materials from the earth or public land.³⁰ This resembles Locke's labour theory and 'sweat of the brow' standard in intellectual property rights.³¹ As such, ownership is rewarded to an individual who exerts efforts in developing materials and so they are thus entitled to the fruits of their labour. The Prophet Muhammad (s.a.w) was reported to have said:

Nobody has ever eaten a better meal than that which one has earned by working with one's own hands. The Prophet of Allah, David used to eat from the earnings of his manual labor.³²

An individual who spends time and energy creating new works – physical or otherwise – should be entitled to the value of their works.

Sharia accepts the concepts of separation of title and third party use.³³ These concepts can be construed as to allow a titleholder to divide ownership and use by granting a third party the right to use the property without transferring ownership. Separation of title for property in Sharia parallels the current practice of licensing intellectual property rights.³⁴

Although Sharia does not explicitly protect intellectual property, the protection of intellectual property can be inferred through it not being prohibited. Indeed, there are no express provisions in the basic texts of Sharia that limit ownership to tangible objects. Terms such as property in Sharia can have more than one meaning and one must look beyond classical definitions. Sharia can evolve to accommodate new realities by affording protection to intellectual property.

30 Ibid 1085.

31 See Donna M Byrne, 'Locke, Property, and Progressive Taxes' (1999) 78 *Nebraska Law Review* 700, 703. Locke reasoned from the premise that individuals own their own labor, and that mixing labour with a previously unowned resource entitles the individual to own the resulting product. In this way, once upon a time, natural resources originally became subject to private ownership: *ibid*. See also Abraham Drassinower, 'From Distribution to Dialogue: Remarks on the Concept of Balance in Copyright Law' (2009) 34 *Iowa Journal of Corporation Law* 991, 1000. The sweat of the brow standard used in justifying intellectual property rights is composed of two related aspects. One is that the author is entitled to the value she originates. The other, implicit in the first, is that the author is an originator of value: *ibid*.

32 See Sahih Bukhari, *The Hadith Book –Sales and Trade*, Topic 34, available at <http://www.searchtruth.com/book_display.php?book=34&translator=1&start=0&number=281> at 12 September 2012.

33 See Nora El-Bialy and Moemen Gouda, 'Can Shari'a be a Deterrent for Intellectual Property Piracy in Islamic Countries' (2011) 14 *Journal of World Intellectual Property* 441, 454.

34 See Elizabeth I Winston, 'Why Sell What You Can License? Contracting Around Statutory Protection of Intellectual Property' (2006) 14 *George Mason Law Review* 93, 99 (2006); R Justin Koscher, 'A Patent Pool's White Knight: Individual Licensing Agreements and the Precompetitive Presumption' (2009) 20 *DePaul Journal of Art, Technology & Intellectual Property Law* 53, 61, 72.

B The Permissibility of Gaining Profits

Traditionally, intellectual property protection has been about incentivising innovation. The economic incentive theory allocates to the authors or inventors for a limited period of time the exclusive right to make copies of their works.³⁵ Intellectual property owners are entitled to fully enjoy the benefits of their creativity. Holders of intellectual property rights may sell their right to others who may value them more. Nevertheless, the economic incentive theory is only partially true. There is a strong aspect of natural rights in intellectual property as well. A person who labours upon resources that are either un-owned or held in common has a natural property right to the fruits of his or her efforts and the state has a duty to respect and enforce that natural right.³⁶ For instance, the assignment of a patent right to an inventor recognises that the invention would not have existed at all without the efforts of the inventor, and limits access by other persons to the invention. Access or use of the invention by others is contingent upon the approval of the patent holder.

Moving from the justification based on property and hard work, intellectual property can also be justified on the basis of trade and making profits. Trade not only involves physical products but also includes trading in intellectual property products for the purpose of making profits. Sharia encourages trade subject to some exceptions.³⁷ Making profits apply to all sorts of trade and apply to intellectual property as well. Creators should be able to have a tangible return on their investment of time and labour. Making profit does not justify intellectual property per se but allows it. Indeed, making profit is consistent with the economic incentive theory of intellectual property.

The pursuit of profit is not inferior but an honourable matter. The Qur'an states 'there is no fault in you that you should seek bounty (honest profit) from your Lord'.³⁸ It also states 'O ye who believe! Eat not up your property among yourselves in vanities; But let there be amongst you traffic and trade

35 See William Landes and Richard Posner, 'An Economic Analysis of Copyright Law' (1989) 18 *Journal of Legal Studies* 325, 327. See also Daniel McClure, 'Trademarks and Competition: The Recent History' (1996) 59 *Law and Contemporary Problems* 13, 21–2. A right to exclude in intellectual property is somewhat different from the right to exclude in physical property. If one possesses physical property, no one else can possess it at the same time. In intellectual property, millions of people can possess it and not affect another's enjoyment of it: *ibid*.

36 In the field of intellectual property, facts and concepts seem in some sense to be 'held in common' and where labour seems to contribute so importantly to the value of finished products. See Justin Hughes, 'The Philosophy of Intellectual Property' (1988) 77 *Georgetown Law Journal* 287, 299.

37 There are some moral or religious strictures. The first limitation in Islam is the prohibition of illegitimate goods, those that are *haram* (forbidden) such as pork and alcohol. The other limitation on trade in Islam is *riba* (discussed below). See Qur'an 5:3, 2:219, 2: 275–8.

38 See Qur'an 3:194.

by mutual good will'.³⁹ The Qur'an also provides that: 'O my people! Give full measure and full weight in justice, and wrong not people in respect of their goods. And do not evil in the earth, causing corruption'.⁴⁰ These verses signify the possibility of generating profits.

By all estimates, many authors during the early Islamic period earned their living through their works. Caliphs would also hire authors to write books in return for payments.⁴¹ Emirs – a title of high office typically translated into English as prince – would pay poets who praised them.⁴² Those payments were legally binding – not an honorarium – for completing an intellectual work in a manner similar to the modern concept of works made for hire.⁴³ Dedications had a long tradition as well. Financially needy authors dedicated their works to Emirs or wealthy individuals in the hope of receiving a monetary gift or reward.⁴⁴ Financial motives were primary in that period.

The Maliki, Shafi'i, and Hanbali schools of law permit rewards for financial contracts, such as lease.⁴⁵ Intellectual property contracts include financial elements and holders of intellectual property rights can recover investments from their creations. However, scholars of the Hanafi school of law argue that knowledge or science cannot be equated with trade or industry.⁴⁶ A person should dedicate himself to spreading his knowledge without the expectation of financial reward. There should be no obstruction to the duplication of original materials, since the most widespread dissemination of knowledge is for the good of all.⁴⁷ In other words, these Hanafi scholars hold the view that certain kinds of idea-based property should be pure public goods and that knowledge, and its products, should be used for the benefit of all humankind. On the other hand, it is recognised that creativity does not flourish if a person is not compensated fairly for his or her efforts. Most Sharia schools of law recognise it as permissible to gain profit from one's efforts. Even the Qur'an, the *Sunna*, and the unique marks and symbols of faith such as mosque and the greeting of *assalam-u-alaikam* (peace be upon you), together constitute

39 See Qur'an 4:29.

40 See Qur'an 11:85.

41 See Raslan, above n 6, 500.

42 Emirs came to use such poets towards propagandistic ends. See Abdul-Fattah Kileto, *Writing and Tanasukh: The Concept of Author in Arabic Culture* (Casablanca: The Arabic Cultural Centre, 1982) (in Arabic), 34–5.

43 Emirs acquire ownership to the works of authors and poets: *ibid*.

44 The practice of dedications evolved, in time, into that of patronage: *ibid* 80.

45 Hasan M Buda, *Rights and Obligations of Author in Publication Contract in Light of Islamic Fiqh* (2005) (in Arabic), 88.

46 *Ibid* 94.

47 *Ibid*.

a unique form of intellectual property.⁴⁸ Therefore, the works of individuals ought to be protected and commercially exploited.

A question can be asked whether, under Sharia, an author or inventor can recover more than the initial investment on his work. Nobody can argue that an author or inventor cannot recoup his initial investment.⁴⁹ However, in some cases, holders of intellectual property rights could accumulate wealth excessively. This may lead to the issue of *riba*. Under Sharia, gaining profits without exerting efforts over extended periods of time is considered *riba*. The Qur'an states 'Allah has made buying and selling lawful and usury unlawful'.⁵⁰

The prohibition against *riba* is complicated. Does *riba* include interest in any form or usurious interest? *Riba* is translated into English as usury, which signifies only an extortionate interest.⁵¹ However, *riba* is of two kinds: *riba al-fadl*, in which a person acquires an unlawful, excessive profit, and *riba al-nasi'a*, a form of *gharar*, in which a person gains an unlawful advantage by speculating on uncontrollable risks.⁵²

Although the concept of *riba* arises generally in financial transactions, such as loans and derivatives, it can also be relevant to monetary transactions other than loans.⁵³ Hence, profits generated through licensing fees of intellectual property rights may be tantamount to *riba* so that the application of *riba* in the context of intellectual property could prove problematic with practical repercussions. Investing money leads to either an increase or decrease in the

48 See Ali Khan, 'Islam as Intellectual Property "My Lord! Increase me in Knowledge"' (2001) 31 *Cumberland Law Review* 631, 632–5, 649–50. There are differences between the well-known kinds of secular intellectual property rights, such as copyrights, patents, and trademarks, and knowledge-based Islam. The former is the product of human intellect, innovation, and effort. In contrast, Islamic assets cannot be created by human. Intellectual property is often commercial in nature and protected for a short duration. Unlike intellectual property, the protected knowledge of Islam is not for sale or commercial exploitation and it is timeless. The protected knowledge of Islam is universal free for the benefit of all. Copies of the Qur'an may be freely made and published without any prior permission and without paying royalties to any person, family, or nation. It has been copyrighted in perpetuity as Allah's authentic work. No individual, no family, and no nation can claim proprietorship of these assets. In fact, no concept of ownership applies to the knowledge-based assets of Islam, as it does to intellectual property: *ibid*.

49 See Alina Ng, 'Copyright's Empire: Why the Law Matters' (2007) 11 *Marquette Intellectual Property Law Review* 337, 353. The traditional justification for copyright law, based on law and economics reasoning, relies upon the rationale that a temporary monopoly right is necessary to encourage authorship to ultimately benefit society as a whole: *ibid*.

50 See Qur'an 2: 275–278.

51 See Jean-François Seznec, 'Ethics, Islamic Banking and the Global Financial Market' (1999) 23 *SPG Fletcher World Affairs* 161, 165.

52 *Ibid*.

53 See Mahmoud A El-Gamal, *Islamic Finance-Law, Economics, and Practice* (Cambridge University Press, 2006), 49.

principal value of the financial capital at stake. In the context of investing, increase is permissible. Under Sharia, an increase is not unacceptable per se. Rather, the moral issue appears in obtaining an increase without exerting effort or being exposed to business risk. Clearly, intellectual property holders invest time and money in producing their works and are thus entitled to reap any financial return.⁵⁴

Some classical Muslim jurists define *riba* broadly to include any increase in capital in excess of the original amount, however slight.⁵⁵ On the other hand, modernist jurists define it narrowly to include excessive interest or doubling only.⁵⁶ If the position of classical Muslim jurists is adopted, a holder of intellectual property rights cannot be compensated beyond his or her initial investment. However, it seems logical and in line with modernist jurists to allow a holder of intellectual property right to recover an amount that goes beyond their initial investment as long as that amount is fair and balanced with the time and effort exerted. In other words, the construction of interest and its application to intellectual property should not be too rigorous.

54 See Anne Layne-Farrar, 'An Economic Defense of Flexibility in IPR Licensing: Contracting Around "First Sale" in Multilevel Production Settings' (2011) 51 *Santa Clara Law Review* 1149, 1153, 1158. License fees received for a protected property should be the market determined value. This value should be computed without resort to the 'hold up' of any ex post irreversible investments a licensee or rights purchaser may have made. While neither copyright nor patent laws impose limits on what a rights holder can charge a user or licensee, the granted rights should enable the rights holder to earn enough of a financial return so as to provide strong incentives to create and innovate. When licensing just one party in the production chain – either the upstream component maker or the downstream assembler – the patent holder will set the royalty rate to maximise total licensing profits: *ibid*.

55 See Barbara L Seniaowski, 'Riba Today: Social Equity, the Economy, and Doing Business under Islamic Law' (2001) 39 *Columbia Journal of Transnational Law* 701, 707–20. Sayyid Qutb (1906–1966), a leader of the Muslim Brotherhood in Egypt, explains: 'Anyone who extends to me one dinar to receive a return of two dinars from me is my enemy; I will not wish him well, nor can I regard him in amity. Mutual support is one of the fundamental principles of Islamic society, but *riba* destroys this sentiment and weakens its foundation. For this reason does Islam despise *riba*': see Haider Ala Hamoudi, 'You Say You Want a Revolution; Interpretive Communities and the Origins of Islamic Finance' (2008) 48 *Virginia Journal of International Law* 249, 263.

56 Some of the modern jurists, like Abduh, Rashid Rida, Shaltut, Sir Syed Ahmed, Fazl al-Rahman, Tantawi and Qardawi have tried to legitimise interest. The modernists proposed a number of legal and non-legal arguments, such as the necessity of modern finance, necessary for efficient allocation of resources, commercial interest not being the *riba* prohibited in Islam, no violation of justice or exploitation these days and interest rates are not very high, to name but a few. See Mohammad, Nejatullah Siddiqi, *Riba, Bank Interest and the Rationale of its Prohibition* (Islamic Development Bank-Islamic Research and Training Institute, 2004), 55–6.

C Acknowledgement of Moral Rights

Moral rights of authorship are distinct from the bundle of rights that protect economic interests in creative works.⁵⁷ Moral rights consist of four basic rights: the right of attribution, right of integrity, right of disclosure, and right of withdrawal.⁵⁸ Economic rights can be transferred or assigned to others in return for royalties.⁵⁹ On the other hand, moral rights cannot be transferred.⁶⁰ Moral rights are inalienable and perpetual. In other words, moral rights always remain with the original author of the copyrighted work.

The basis for these rights is the personal linkage between the work and its author. The author has the right to claim/disclaim a work as his or her own (authorship) and to safeguard the work from distortion, mutilation, and other amendments that would be prejudicial to his or her reputation or honour (integrity).⁶¹ Based on moral rights, an author can prevent others from passing off his or her work as theirs or block usage of a work, such as in parody, which he or she feels will prejudice his or her honour.

Examining pre-Islamic and Islamic history for clues, one can trace early forms of moral rights. In the pre-Islamic era, a poet recited his poems in public and thus claimed their ownership.⁶² The poems recited in these local public performances would spread through the entire region bearing the name of the original poet.⁶³ The process of recitation and mentioning the name of the author constituted a basic form of moral rights. An unauthorised use could have been seen to show disrespect to the poet and, for this reason, might well have led to the public outcry. The process of public recitation in that era is akin to the present time right of disclosure.

Prophet Muhammad (s.a.w) stated ‘A Muslim who achieves something before other Muslim who has not achieved is entitled to that.’⁶⁴ Prophet

57 See Susan P Liemer, ‘On the Origins of Le Droit Moral: How Non-Economic Rights Came to be Protected in French IP Law’ (2011) 19 *Journal of Intellectual Property Law* 65, 70.

58 The right of attribution allows an author’s name to be properly associated with the author’s creative work. The right of integrity allows an author to maintain creative control over a work after selling it, so that a new owner can only modify the work with permission from the person who created it. The right of disclosure gives the author exclusive authority to determine when a work is finished and may be disclosed to the public. And conversely, the right of withdrawal allows an author to take a work back, withdrawing it from the world: *ibid* 71.

59 See Brian Angelo Lee, ‘Making Sense of “Moral Rights” in Intellectual Property’ (2011) 84 *Temple Law Review* 71.

60 *Ibid* 82.

61 See Lorie Graham and Stephen McJohn, ‘Thirty-Two Short Stories About Intellectual Property’ (2010) 3 *Hastings Science & Technology Law Journal* 1, 66.

62 See Hussein Othman Jamil, *Protection of Intellectual Property* (1995) (in Arabic), 5.

63 *Ibid*.

64 See Muhammad A Hussein, *Authorship Right: The Islamic and Legal Aspects According to the*

Muhammad (s.a.w) is also reported to have said ‘Who revives dead land, it is for him’.⁶⁵ These sayings of the Prophet, as quoted, indicate that land, among other things, is the end product of a person’s labour, and that the person who exerts effort in developing these things should have the results of their labour. Furthermore, at the Prophet’s time, religious teachings and many of the Prophet’s sayings were transmitted orally, and in order to ensure its exactness and authenticity these sayings needed to be attributed to the correct source.⁶⁶ Religious teachings and sayings of the Prophet were traced back to the Prophet Muhammad (s.a.w) establishing intermediate links to provide authenticity. These teachings and sayings had been handed down orally in an unbroken chain, *Isnad*, from witnesses who heard, saw or knew the Prophet.⁶⁷ The *Isnad*, or chain of transmission, creates a knowledge path taken by a text and determining if there were any gaps or weaknesses.

Any false attribution, especially to the Qur’an or Sunnah, is prohibited.⁶⁸ Many teachings were attributed to the Prophet Mohammed (s.a.w). Acknowledging the source of information or the chain of transmitters through which information was handed down through generations is the method Muslims have inherited through the system of Hadith preservation. Thus, Sharia demands both the right of attribution and the right of integrity whenever a person refers to Sharia.

As these rights of attribution and integrity have been recognised in relation to Sharia itself, the question that arises is whether these rights can be extended

New Intellectual Property Protection Law (Dar Al-jame’ah Al-jadedah , 2003) (in Arabic), 19.

65 See Sahih AlBukhari, *Kitab Al-Muzaraat*, (Al-majlis Al-A’ala Li-Sha’uan Al-Islamiyah, 2005) Vol 3 Chapter 15, 306. See also Imam Malik’s *Al-Muwatta*, *Book of Judgment*, (Dar Al-kutub Al-’Ilmiyah, 1951), 346.

66 See Irshad Abdal-Haqq, ‘Islamic Law: An Overview of Its Origin and Elements’ (2002) 7 *Journal of Islamic Law & Culture* 27, 47. The practices and sayings of Muhammad are commonly called *Hadith* or *Sunnah*. Scores of scholars compiled *Hadiths* of the Prophet over a period of three hundred years using varied methodologies. Concern about the accuracy and authenticity of the *Hadiths* resulted in the advent of the *sahih* movement (meaning authentic, sound or genuine), between 850 CE and 915 CE, during which time dedicated scholars attempted to authenticate each *hadith*. From this movement came *The Six Books*, six acclaimed *Hadiths* compiled by recognised scholars of high character. These compilers are: (1) Muhammad bin Ismail bin Al-Mughirah Al-Bukhari (called *Al-Bukhari*); (2) Abu al-Hasan Muslim bin al-Hajjaj (called *Muslim*); (3) Abu Dawud Sulayman bin al-Ashath (known as *Abu Dawud*); (4) Abu Isa Muhammad bin Isa (known as *al-Tirmidhi*); (5) Abu Abd al-Rahman Ahmad bin Shuaib (known as *al-Nasai*); and (6) Ibn Majah Muhammad bin Yazid. Of the six, the first two, Al Bukhari and Muslim, are the most highly regarded and their works are available in English. It took Al Bukhari sixteen years to comb through 600,000 purported *hadiths*, of which he determined 7,397 to be authentic, and half of those selected are repetitions: *ibid*.

67 See Sam Feldman, ‘Reason and Analogy: A Comparison of Early Islamic and Jewish Legal Institutions’ (2003) 2 *UCLA Journal of Islamic & Near East Law* 129, 139.

68 See Robert Platt, ‘A Comparative Survey of Moral Rights’ (2010) 57 *Journal of Copyright Society* 951, 976.

to individual authors. Nothing in Sharia prevents extending the right of attribution and right of integrity to individual authors. Indeed, in Islamic seminaries, the author had to authorise a copy of his book that was taught to students, who in turn were permitted to narrate and transmit that text without misrepresentation and to hold a copy of the book.⁶⁹ This shows that for Muslims, the publication of an unauthorised work or distortion of a work was considered at the very least morally dubious.

The hadiths imply that Sharia requires source attribution for individual authorship as well. Early Islamic authors did not have legally-protected moral rights and no cases are on record in which authors brought legal charges against other parties for violating their authorities or falsely claiming authorship of their works. However, interests of Islamic authors were protected by social norms governing ethics and honour. Any information passed must be trustworthy, that is, information should be preserved in the original format and protected from any distortion.

D *Transfer through Inheritance or Will*

Sharia incorporates an elaborate and quite complex inheritance regime. The deceased estate must be distributed according to rules of inheritance specified in the Qur'an.⁷⁰ Property is subject to these rules of inheritance.⁷¹ Prophet Muhammad (s.a.w) is reported to have said 'whoever (among the believers) dies leaving some property, then that property is for his heirs'.⁷² However, distribution of an inheritance in intellectual property rights in Sharia may pose problems, especially when dividing these rights into many divisions as mandated by inheritance rules.

69 See George Makdisi, *The Rise of the Colleges: Institutions of Learning in Islam and the West* (Edinburgh University Press, 1981), 231–3.

70 See Yasir Biloo, 'Change and Authority in Islamic Law: The Islamic Law of Inheritance in Modern Muslim States' (2007) 84 *University of Detroit Mercy Law Review* 637, 646. Two classes of relatives exist under Islamic inheritance law: the inner family and the outer family. The inner family consists of two sub-groups, the Qur'anic Sharers and the Agnatic Residuaries. All other relatives constitute the outer family. Within each group, an order of priorities operates to exclude some relatives at the benefit of others. Specifically, the Qur'anic Sharers take their allotted portions first and the Agnatic Residuaries take, as their title suggests, the residue of the estate, also working under operation of a system of priorities within their sub-group. If no Agnatic Residuaries exist, members of the outer family, in order of the closest such member, take the residue of the estate. There are twelve specific Sharers: the husband, wife, father, true grandfather, mother, true grandmother, daughter, son's daughter, full sister, consanguine sister, uterine brother and uterine sister. The Sharers have a Qur'anic share and their shares cannot be taken away for any reason, unless they themselves agree to give up their share for the benefit of another beneficiary: *ibid*.

71 *Ibid*.

72 See Sahih Bukhari, *The Hadith Book – Law of Inheritance (Al-Faraaid)* Topic 80, above n 32.

Heirs are entitled to inherit the economic aspects of the intellectual property rights of the deceased. For example, if the deceased has a patent licensed to a drug manufacturer, their heirs can inherit the license fees to be distributed according to the Sharia rules of inheritance. The present laws of Arab countries explicitly allow heirs to exploit economic rights of authorship.⁷³ If the work is produced by an individual and its author dies, or it is a joint work and one of the authors dies, their share is passed to those entitled to it according to the Sharia rules of inheritance.⁷⁴ If more than one author participated in the work and one of them died without leaving heirs, then their share in the work is reverted to the rest of the contributors equally.⁷⁵ The heirs of the author have exclusively the right to decide regarding the publication of any work that was not published during the life of the deceased, unless the author has directed in the will that it should not be published or has specified the time in which it may be published.⁷⁶ In such cases, the will of the deceased must be followed.

In Sharia, rules are different for authors who have no heir(s). For instance, in a case where there is more than one author involved, the share of the deceased who has no heirs will be transferred to the state.⁷⁷ On the other hand, as seen above, shares of the deceased without heirs in joint work will be transferred to their co-contributors. There is apparently some discrepancy between Sharia and secular laws of Arab countries. In Sharia, the state is the heir of a deceased who does not have heir.⁷⁸ Therefore, the law of Arab countries should be modified to comply with Sharia rules on this matter.

The author of a work can transfer his or her work by a will, *wasiyyah* in Arabic. However, a limitation is applied to the author's freedom to allocate their work whereby a will is limited to one third of the estate.⁷⁹ The rest of the estate is to be divided according to the Sharia rules of inheritance. The one-third criterion is intended to avoid eliminating those heirs from their legal shares in the estate.

Another issue arises in the context of inheritance and will as to whether moral rights can be transferred. There is a debate among Muslim scholars concerning

73 See Copyright Law of Jordan No 22 of 1999 as amended by Law No 52 of 2001, arts 21 & 22; Copyright Law of Saudi Arabia No M/41 of 2003, art 11; and Federal Law of UAE No 7 of 2002, arts 14 & 42.

74 Ibid.

75 Ibid.

76 Ibid.

77 See Raj Bhala, *Understanding Islamic Law (Shari'a)* (LexisNexis, 2011), 479–80.

78 Ibid 1130.

79 *Wasiyyah* may be made but are limited to one-third of the entire estate and may not be made to those specified heirs who will take under succession. See Zainab Chaudhry, 'The Myth of Misogyny: A Reanalysis of Women's Inheritance In Islamic Law' (1997) 61 *Alberta Law Review* 511, 528.

the moral rights of the deceased author.⁸⁰ Although a Muslim could introduce in their will that other persons were to inherit the work, this does not mean that he or she thereby granted them authorial rights to the work. Nevertheless, heirs, especially immediate family members, may have the right to defend the work of the deceased against distortion. The purpose of moral rights is to insure that the work is correctly associated to the rightful creator and to prevent any alterations by others to the work. It seems logical to grant heirs the right to defend the moral rights of the deceased.

E *Period of Protection*

Intellectual property laws grant individuals exclusive rights to their creations allowing them to control further reproduction, commercialisation and distribution, of their intellectual products.⁸¹ This right is subject to a number of limitations that are intended to preserve the public interest. One of these limitations is the duration of protection. All intellectual property laws include provisions limiting the individual's rights to a specific period of time.⁸² Intellectual property rights give the owner a monopoly over a work whether it is a major work of literature or a hastily scribbled verse and for inventions that may require millions of dollars of investment and years of research or for very simple innovations.⁸³ Intellectual property laws attempt to balance between the interests of holders and the society at large.

Under Islamic jurisprudence, the term of protection for *hekr* (monopoly rights) over *waqf* land or long-term lease of land expires sixty years after the death of the owner.⁸⁴ This term of protection in monopoly right over *waqf*

80 The Hanafis consider 'physical possession' as the only acceptable criterion for property. See Walid Muhaisen, *Shari'ah's Capacity to Accommodate Modern Intellectual Property Law: An Analysis of Copyright Law in Context* 143–8 (Unpublished PhD thesis, 2011).

81 See Thomas B Nachbar, 'Monopoly, Mercantilism, and the Politics of Regulation' (2005) 91 *Virginia Law Review* 1313, 1323–7, 1376.

82 See Caz McChrystal, 'The Dissonant Tune of International Harmonization and the Domestic Duration of Phonorecord Protection' (2006) 3 *Vanderbilt Journal of Entertainment & Technology Law* 523, 529. TRIPS mandates a minimum duration of protection of fifty years post mortem auctoris for literary and artistic works: *ibid.* See also David S Abrams, 'Did TRIPS Spur Innovation? An Analysis of Patent Duration and Incentives to Innovate' (2009) 157 *The University of Pennsylvania Law Review* 1613. Patent protection runs for twenty years from the application date: *ibid.*

83 See K Kalan, 'Property Rights, Individual Rights, and the Viability of Patent Law Systems' (2000) 71 *U Colo L Rev* 1439, 1446, 1453. One of the theories used to justify intellectual property rights is the 'reward by monopoly' thesis. Monopolies seek to maximise profits through predatory pricing. Monopolies can exploit people's need and charge high prices: *ibid.* See Giles S Rich, 'The Relation between Patent Practices and the Anti-Monopoly Laws' (2005) 14 *Fed. Cir BJ* 5, 13–14.

84 See Mostafa Morsi El Araby, 'The Role of the State in Managing Urban Land Supply and Prices in Egypt' (2003) 27 *Habitat International* 429, 444 See also Timur Kuran, 'The Provision of Public

land can be extended to intellectual property rights – especially copyright. The period of protection granted by current copyright laws – fifty years *post mortem auctoris* for literary and artistic works – runs similar to the maximum period of protection known in Islamic jurisprudence in monopoly right.

Islamic jurisprudence did not clearly explain whether the divergence between social and private interests is a sufficient condition for limiting duration of protection for intellectual property rights. Under Sharia, legal rights or *haq* are not absolute in nature. The Prophet Muhammad (s.a.w) forbade monopolies warning: ‘Whosoever monopolizes is a wrongdoer’.⁸⁵ However, no other legal texts defined monopoly, leaving the matter to juristic efforts of the Prophet’s Companions – those who saw the Prophet and talked with him – and later Muslim scholars. A survey of jurists’ views reveals that unlawful monopoly includes withholding commodities in a way that harms the general public so as to put it in a position of financial hardship.⁸⁶ For monopoly to be unlawful, the product concerned must be a necessity or a major convenience and the monopolistic action must put the general public in a position of financial hardship by which jurists mean a significant increase in price.⁸⁷

Providing protection for intellectual property has a monopolistic aspect. Intellectual property rights give innovators temporary legal monopoly – often for a certain number of years depending on the creative work – on the use of their products. Do intellectual property products meet the criteria set for unlawful monopoly under Sharia? If the product is not a necessity or a major convenience, then the first criterion is missing, and that particular monopoly is permissible since the innovator attempts to recoup his or her investment. If the product involved is a necessity, it becomes an open question. One can argue that an intellectual property product does not put the public in financial distress. However, if the product is for cure of a disease, for example, then a different scenario can be imagined. The government, as an exception, may need to purchase the patent for that product or medicine at fair price so as to ensure it is available to the public at reasonable price.

Sharia promotes the concept of *su isti’ mal al-haq*, which refers to cases where the exercise of the rights itself per se valid and lawful but may cause harm and damage to others. Furthermore, the principle of *maslaha* demands that

Goods under Islamic Law: Origins, Impact, and Limitations of the Waqf System’ (2001) 35 *Law & Society Rev.* 841, 849.

85 See Sahih Muslim, Hadith No. 3012, available at <http://www.searchtruth.com/book_display.php?book=10&translator=2&start=0&number=0> at 12 October 2012.

86 See Muhammad Nejatullah Siddiqi, *Encyclopedia of Islamic Economics: Principles, Definitions and Methodology* (Encyclopedia of Islamic Economics, 2009), 97.

87 No classical jurist applied unlawful monopoly to supplements: *ibid* 101–5.

in a situation where procuring one interest implies the loss of another, then the greater interest should be pursued in preference to the lesser.⁸⁸ In other words, *maslaha* – the general good or public interest – can apply when two rival interpretations of the sources are possible; in this case, the one most conducive to human welfare is to be chosen. In more complicated situations, which call for new rules that cannot be clearly traced back to any of the sources, a public interest argument is possible on the premise that the basic purpose of legislation in Sharia is to secure the welfare of the people by promoting their benefits or protecting them against harm. The main goals of Sharia are often considered to be the protection of faith, life, intellect, and wealth.⁸⁹ Sharia requires protection of wealth and people's property from transgression or wrongful appropriation by any party. Thus, it is mandatory for Muslims to uphold this objective by enforcing the law against wrongful or illegal appropriation of others' property.

Under Sharia, private property is limited only by the realisation of others' rights and public interest. Basically, *maslaha* is about securing greater interest. Easing intellectual property protection and distribution of intellectual property products for the public can be the most important objective of exchange in Shariah. However, the principle of *maslaha* cannot be drawn too broadly as it could open the door to many claims. Some factors have emerged that point towards a more cautious analysis of *maslaha*, for instance: the public interest must be a genuine one and it must be publicly acknowledged, it must not contradict the sources of Sharia and it must be rationally acceptable.⁹⁰ It can be presumed that such criteria apply in the context of intellectual property rights. Property rights are the basic incentive of private economic activity and the starting point for transactions because resources are shifted to their most valuable use. Because the economics of trade have been gradually shifting from industrial to information economies the expansion of intellectual property rights is a natural consequence.⁹¹ It is extremely costly and risky for individuals and companies to develop their products. Thus, some level of

88 See Mohammad Fadel, 'The True, the Good and the Reasonable: The Theological and Ethical Roots of Public Reason in Islamic' (2008) 21 *The Canadian Journal of Law & Jurisprudence* 5, 26, 50–2.

89 Shariah has laid down the main objectives for Sharia. Wealth circulation among the people is necessary either for the purposes of consumption or investment. Moreover, the acquisition of property must be free from any encumbrances and ambiguity in order to avoid disputes among the parties concerned. See Yusuf Hamid al-'Alim, *Al-maqasid al-'ammah li al-Shari'ah al-Islamiyyah, [General Goals for Islamic Law]* (Riyadh: Al-Dar al-'Alamiyyah li al-kitab al-Islami, 1994) (in Arabic), 497–519.

90 Ibid 521.

91 See Ruth L Okediji, 'Development in the Information Age: Issues in the Regulation of Intellectual Property Rights, Computer Software and Electronic Commerce' (2004), 11–12, available at <http://www.iprsonline.org/unctadietds/docs/CS_Okediji.pdf> at 10 December 2012.

intellectual property protection should be provided. The period of protection is often necessary to recoup the large upfront costs of developing these products. Nonetheless, the period of protection for intellectual property products ought to strike the appropriate balance between incentivising innovation and ensuring availability of less expensive products.

F *Infringement and Remedies*

Under Sharia, the individual's right to property is not only recognised but it is considered sacred. Hanbali jurist Ibn Taimiya considered the protection of property was the first duty of the state.⁹² Expropriation is only allowed in two instances: in the execution of judgment against a debtor, and for the purposes of public utility.⁹³ Hence, trespass of a property is a sin and a violation of Sharia.

The Qur'an condemns theft of another's property. The Qur'an states:

And do not consume one another's wealth unjustly or send it [in bribery] to the rulers in order that [they might aid] you [to] consume a portion of the wealth of the people in sin, while you know [it is unlawful].⁹⁴

The Prophet Muhammad (s.a.w), in the farewell pilgrimage sermon, stated “No property of a Muslim is lawful to his brother except what he gives him from the goodness of his heart, so do not wrong yourselves’.⁹⁵ Property rights, including intellectual property rights, should not be violated.

In addition to evidence derived from Qur'an and Sunna, a *fatwa* (religious opinion) came from Al-Azhar, the most respected Sunni authority among Sunni Muslims. The *Fatwa* Committee of Al-Azhar, in a number of opinions issued on April 20 2000 and August 16 2001, clarified that Islam gives the owner the freedom to dispense of the property owned thereby as he or she wishes; no other person may dispose of, copy, enjoy, use, or attribute such property thereto without the prior consent of the owner, whether for a compensation or not.⁹⁶ In another *fatwa*, the *Fatwa* Committee of Al-Azhar provided that copying others' writings and presenting them as one's own thoughts is a kind of plagiarism that is unlawful both in Sharia and man-made law.⁹⁷ As such,

92 See Richard E Vaughan, 'Defining Terms in the Intellectual Property Debate: Are the North and South Arguing Past Each Other when we Say "Property"?' A Lockean, Confucian, and Islamic Comparison' (1996) 2 *ILSA Journal of International & Comparative Law* 307, 356.

93 Ibid.

94 See Qur'an 2:188.

95 See Al-Ghazali, above n 24, 457.

96 See Islamic Fiqh Academy, *Resolutions and Recommendations of the Council of Islamic Fiqh Academy 1985–2000*, Resolution No 43 (Research and Training Institute, 2000).

97 See Khaled Fahmy, 'The Anatomy of Justice: Forensic Medicine and Criminal Law in Nineteenth-

holders of intellectual property rights are protected and free to dispose their rights in the way they see fit, as long as it conforms to Sharia.

Thieves cannot obtain good title, but become trustees of the property and are liable for any damage or loss incurred on the true owner.⁹⁸ Therefore, stealing property does not affect the owner's title. Forgery of creations is considered a wrongful act under Sharia and constitutes a serious crime. Such a crime justifies civil and criminal remedies. In Sharia, the Islamic term used for the punishment of 'Uqubat', issued for violating people's rights, is 'Hadd'.⁹⁹ The word *Hudud* is limited to the punishment of crimes mentioned in the Qur'an or the *Sunna* of the Prophet Muhammad (s.a.w). Meanwhile, other punishments are left to the discretion of the *Qadi* (judge), or to rules that are 'Tazir' meaning discretionary.¹⁰⁰ *Tazir* punishments may include imprisonment, fine, or a combination thereof.¹⁰¹ Thus, *Tazir* punishments in Sharia are similar to civil law punishments.

The punishment for theft is determined in the Qur'an. The Qur'an provides 'Cut off the hands of thieves, whether they are male or female, as punishment for what they have done – a deterrent from God: God is almighty and wise'.¹⁰² A question arises as to whether intellectual property theft falls under the Sharia rule of cutting off the hand of a thief. In order for the *Hadd* of theft to be applied, in general, several conditions need to be met. Some of the conditions are related to the individual thief. He/she must be sane, adult, and must not have been compelled to commit theft.¹⁰³ Other conditions concern the stolen property, which should be met prior to hand amputation. The stolen property must have minimum value, be valuable, in custody, and owned by someone.¹⁰⁴ While some of these conditions can be applied to intellectual theft, other conditions cannot.

Sharia requires that, in order for the *Hadd* to be applied, the owner should place his/her property in custody. Applying this condition to intellectual property seems problematic. It is not imaginable that an intellectual creation could be placed in custody as such.¹⁰⁵ The value of any work of intellect derives from

Century Egypt' (1999) 6 *Islamic Law and Society* 224, 243.

98 See Vaughan, above n 92, 357.

99 The term '*hadd*' literally means limit and is called this because a guilty party has crossed the limit God set in the Qur'an. See Bhala, above n 77, 1175.

100 Ibid 1177.

101 Ibid.

102 See Qur'an 5:38.

103 See MA Naser and WH Muhaisen, 'Shari'a: Intellectual Theft or Intellectual Infringement?' (2009) 4 *Journal of International Commercial Law and Technology* 71, 73.

104 The minimum value is considered an amount equal to the essential needs of a person or family for one year: *ibid*.

105 Ibid 74.

the public's recognition, and insofar as the work could be acknowledged by the public, the work derives value and appreciation.¹⁰⁶ However, this justification seems unconvincing. A creative work may remain in the custody of the owner and still be protected. For example, copyright protection is granted once works are reduced to writing or other material form.¹⁰⁷ Additionally, a trade secret loses protection if divulged to the public.¹⁰⁸ Under all circumstances, the subject matter of a trade secret shall remain a secret.

The more convincing reason for not applying *hadd* to intellectual property theft lies in the fact that, for the application of this punishment, there should be a clear text in Qur'an or *Sunna* authorising it for such a theft. Throughout the history of Sharia, there is no precedent for applying *hadd* to intellectual property theft.¹⁰⁹ Moreover, some Islamic scholars argue that the Sharia rule of cutting off the hand of a thief does not apply to the theft of works, such as Hadith, science, or poetry.¹¹⁰ The argument is built on the viewpoint that these works are created and owned for knowledge and learning.¹¹¹ An author cannot prevent others from obtaining knowledge through use of their work.

It remains doubtful if intellectual property theft can be classified as *Hadd* crime. Rather, such a kind of theft may fall under *Tazir*. Thus, intellectual property theft can be subject to criminal penalties such as fines and imprisonment, which are in line with present day penalties.¹¹² These penalties seem reasonable in protecting intellectual property rights.

In addition to criminal penalties, the infringer should compensate the property holder for any resulting damages. The Qur'an and *Sunna* do not include direct texts for allowing damages in intellectual property cases. However, through the general rules of Islamic *Fiqh*, one can deduce the necessity of preventing harm and providing compensation for such harm. The Prophet Muhammad

106 Ibid.

107 See L Ray Patterson & Stanley F Birch Jr, 'A Unified Theory of Copyright' (2009) 46 *Houston Law Review* 259, 265.

108 A trade secret can be defined as any confidential business information that provides an enterprise with a competitive edge. See Scott M Kline and Matthew C Floyd, 'Managing Confidential Relationships in Intellectual Property Transactions: Use Restrictions, Residual Knowledge Clauses, and Trade Secrets' (2006) 25 *Review of Litigation* 311, 332.

109 See Naser and Muhaisen, above n 103, 74.

110 See Hussein, above n 62, 64.

111 Ibid.

112 A violator of intellectual property right can be subject to imprisonment and fine. Moreover, infringing products and instruments seized and destroyed. See Colin R Davies, 'Protection Of Intellectual Property-A Myth?' (2004) 68 *Journal of Criminal Law* 398; Candace S Friel, 'The High Cost of Global Intellectual Property Theft: An Analysis of Current Trends, the TRIPS Agreement, and Future Approaches to Combat the Problem' (2007) 7 *Wake Forest Intellectual Property Law Journal* 209, 245.

(s.a.w) said ‘Neither *ad-darar* (harming) nor *diraar* (reciprocating harm).’¹¹³ The words ‘*ad-darar*’ and ‘*diraar*’ are two words that have the same meaning, and they have been used together as a form of emphasis.¹¹⁴ A close examination of this *hadith* reveals that it is not correct for someone to harm another individual, whether they have harmed that person or not, except if they avenge themselves to the extent that justice allows them.

According to an Islamic *Fiqh* rule, harm should be removed.¹¹⁵ Applying this rule is not as easy as it sounds. A question arises as to how harm can be removed. For example, infringing goods can be destroyed or returned to the legitimate owner. However, financial compensation seems problematic. There is some debate among Muslim scholars as to which specific costs are compensable in this manner. Some stipulate that only actual damages are compensable.¹¹⁶ Others permit compensation based not only on actual damages, but also on any additional loss of income or profit resulting from the infringement.¹¹⁷ In line with Sharia, it seems logical to require the violator of intellectual property rights to pay damages that compensate the actual loss only. Compensation for loss of income equals opportunity costs and would look like interest which is prohibited under Sharia.

IV THE ROLE OF THE ISLAMIC STATE IN PROTECTING INTELLECTUAL PROPERTY

The Prophet Muhammad (s.a.w) and the four Rightly Guided Caliphs (*Al-Rashidin*) who succeeded him, regulated trade.¹¹⁸ The purpose of regulating trade in goods was to ensure one’s works and prevent unfair trade, deception

113 This Hadith is related by Ibn Majah, Malik, and others: see Al-Muwatta, Tradition No 1426, 529; first translated by E Ibrahim and D Johnson-Davis, *An-Nawawi’s Forty Hadith*, (The Holy Qur’an Publishing House, 1981), 106.

114 According to the scholars of the Arabic language, *ad-darar* refers to the noun and *ad-diraar* refers to the verb. The meaning of ‘*no darar*’ is that none of you should harm any other with something that they have not used to harm you first. The meaning of ‘*no diraar*’ is that none of you should harm any other at all. See Asifa Quraishi, ‘The Qur’an and the Constitution: Similarities in the Use of Text, Tradition, and Reason in Islamic and American Jurisprudence’ (2006) 28 *Cardozo Law Review* 67, 104, 110.

115 See Sina Ali Muscati, ‘Late Payment in Islamic Finance’ (2007) 6 *UCLA Journal of Islamic & Near East Law* 47, 58.

116 Ibid 59.

117 Ibid.

118 The Prophet Muhammad (s.a.w) objected to some cases of deception, known in Islam as *Najsh*, when one raises the prices of goods, in an auction, without the intention of buying. He considered the practice improper. Other example of objections involved alteration of measure and weight in goods. The Qur’an commands that full measure and weight be given fairly in trade. The Qur’an states: ‘Woe to those who when they have to give by measure or weight to men, give less than due’. Qur’an 83:1–3. The Prophet Muhammad (s.a.w) acted in determining the measures upon verse 83:3.

or fraud. Over the centuries, a special institution was developed, known as *al-hisba*, to regulate standards and measures of goods to prevent deception for consumers.¹¹⁹ Acts that are misleading as to the true origin of products were considered violations and can be pursued. The role of Muhtasib was supervision of honest trade.

The *Muhtasib* acted like a supervisor and inspector of markets and their duties included ensuring that traders used correct weights and measures and unaltered goods.¹²⁰ The *Muhtasib* essentially walked through the markets and streets of Muslim cities to seek out and deter wrongdoing,¹²¹ and had the role of ‘*commanding the good and forbidding the evil*’.¹²² Books on the duties of *Muhtasib* dealt with a trade or a profession, what professionals of this particular trade should do, what they should avoid, and the famous tricks that some of them used to employ.¹²³ The *Muhtasib*, therefore, were as much a part of the legal landscape as the better-known figures of judge and *mufti*.

Early Islamic mercantilists used marks to indicate conformity and attribute quality to products.¹²⁴ The *Muhtasib* used a seal to stamp on measures, scales and mints,¹²⁵ and imitating this seal was a serious crime. The seal was used by the *Muhtasib* to indicate a certain quality. This is akin to the current use

119 The Prophet Muhammad (s.a.w) used to visit the markets to check on business practices, and the Caliphs followed the same practice. As the state expanded, however, it became impossible for them to personally perform their visits. The strict rules in Sharia enjoining fair commercial dealings, combined with the state’s expansion, led to the establishment of the Hisbah Institution. See Abdull Fattah Al-Saifi, *Al-Hisba in Islam: Regulation, Fiqh, and Application* (Dar Al-matbia’at Al-jame’iah, 2010) (in Arabic) 41–52. However, it should be reiterated that the Muhtasib’s duties extended well beyond the mere inspection and certification of measures and weights. The Muhtasib inspected, as inculcation of a proper belief system, the eradication of *bid’ahs* related to marriages or funerals, the regularity of congregational prayers, maintenance of the mosques, and superintending public moral conduct in daily life. See Kristen Stilt, *Islamic Law in Action: Authority, Discretion, and Every Day Experiences in Mamluk Egypt* (Oxford University Press, 2012), 96–112.

120 See Sadiq Reza, ‘Islam’s Fourth Amendment: Search and Seizure in Islamic Doctrine and Muslim Practice’ (2009) 40 *Georgetown Journal of International Law* 703, 733. Muhtasib is translated in various ways – market inspector, ombudsman, religious policeman, morals enforcer – and the responsibilities of one who held the office included all of those duties: *ibid*.

121 *Ibid*.

122 See Qur’an 9:71.

123 The books are organised around actions taken by the *Muhtasib* in the areas of Muslim devotional and pious practice; crimes and offenses; the management of Christians and Jews; market regulation and consumer protection; the essential bread markets; currency and taxes; and public order. See Hashem Al-Mallah, *Al-Hisba in the Islamic Civilization: Historical-Fiqh Study* (The Arab Administrative Development Organization, 2007) (in Arabic), 195–227; Ayman Shabana, ‘Urf and ‘Adah within the Framework of Al-Shatibi’s Legal Methodology’ (2007) 6 *UCLA Journal of Islamic & Near East Law* 87, 95.

124 See Raewyn Anne Emmett, *The Politics of Knowledge and the Reciprocity Gap in the Governance of Intellectual Property Rights* (unpublished PhD thesis, University of Waikato, 2007), 152.

125 *Ibid*.

of trademarks used to guarantee quality and source.¹²⁶ The *Muhtasib* used his authority to secure fair trade practices.

Although the role of *Muhtasib* related more to trade rather than to property law, the functions of the *Muhtasib* leads indirectly to the protection of one's mark. A person cannot make copies of a work without the permission of the original author. These acts are misleading as to the true nature and origin of products in an attempt to deceive potential buyers. If these acts were discovered by the *Muhtasib* during his time, he would have pursued the violators. In contemporary times, Arab countries have established several authorities to protect fair dealing in the market and enforce intellectual property laws.¹²⁷ The functions performed by these authorities are comparable to the function performed centuries ago by the *Muhtasib*.

Besides the role of *Muhtasib*, Sharia adopted certain formalities. The purpose of such formalities is to protect the works of their creators and prevent passing off copies as the originals. For example, poems became too complex for a listener to easily grasp them through recitation. Therefore, Sharia encouraged authors to write down their poetry on papers so as to prevent others from copying them.¹²⁸

Moreover, Muslim scholars knew copying, *istinsakh* or *warraqah*, as a way to publish their works whereby they handwrote their works to make copies of the work.¹²⁹ Copying and publication had the effect of preventing distortion of the original work and put the public on notice as to its protected status.

During the period of Abbasid Caliphate when authorship flourished, Muslims adopted a system similar to deposit, called *takhleed*, where scientists or authors

126 See Joe Cole, 'Trademark Prosecution: Trademark Terms Under the Lanham Act and State Law' (2010) 19 *Journal of Contemporary Legal Issues* 70, 74–76. See also Tunisia L Staten, 'Geographical Indications Protection under the Trade Related Aspects of Intellectual Property (TRIPS) Agreement: Uniformity Not Extension' (2005) 87 *Journal of the Patent and Trademark Office Society* 221, 223, 237. Geographical indications, similar to trademarks, are source indicators. A certification mark is protected, like a trademark but is still a distinct kind of mark, which indicates to consumers that the goods or services, have met certain quality standards or originate from a particular region or were produced: *ibid*.

127 These entities include ministries of trade, industry, culture, and health. Further, several Arab countries established the office of the ombudsman. The jurisdiction of the ombudsman is to rectify the excesses of the government functionaries against the public. However, the services delivered by the ombudsman now are just a part of the traditional *Muhtasib*'s functions. See Al-Saifi, above n 119, 279–84.

128 It was reported that Prophet Muhammad (s.a.w) told Hassan bin Thabit to write his poetry on paper. See Hussein, above n 64, 120.

129 Authors and translators would have had scribes recording their work and producing multiple copies of each text: *ibid*.

submitted a copy of their work.¹³⁰ The House of Wisdom, *Bayt al-Hikmah*, in Baghdad was one of the well-known houses for authors and scientists to deposit their works.¹³¹ Deposit of works in those houses allowed authors and scientists to undisputedly claim ownership over their works.

At the present time, formal requirements such as registration of work or deposit in national libraries, are not required in order to grant copyright on a work.¹³² However, a number of countries have continued to attach some benefits to the registration. For instance, laws in the United States and Canada make statutory damages and attorney's fees only available for registered works.¹³³ Also, registration raises a legal presumption as to ownership of copyright and that there is copyright in a work. In other words, although registration and deposit can be helpful when bringing an action before the court or other enforcement proceedings, they are not linked to the existence of copyright itself. Works are protected without the need of registering or depositing them in a governmental entity.

V CHALLENGES

Due to the lack of sophisticated intellectual property rules and doctrines under Sharia, governments of Arab countries stepped in and enacted intellectual property laws that run in conformity with international standards including the World Trade Organization agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS). Nevertheless, these laws are considered to be relaxed and tend to be not enforced.¹³⁴ Several Arab countries have been on and off the Special 301 list issued annually by the United States Trade Representative (USTR).¹³⁵ For instance, Algeria remains on the Priority Watch

130 Ibid 125.

131 See Asma Afsaruddin, 'Muslim Views on Education: Parameters, Purview, and Possibilities' (2005) 44 *Journal of Catholic Legal Studies* 143, 146.

132 See John Tehranian, 'The Emperor has no Copyright: Registration, Cultural Hierarchy, and the Myth of American Copyright Militancy' (2009) 24 *Berkeley Technology Law Journal* 1399, 1442. In 1993, Representative William J Hughes of New Jersey introduced legislation – dubbed the Copyright Reform Act – that, inter alia, repealed the registration requirement for standing, statutory damages, and attorneys' fees. The House ultimately passed the bill on November 20, 1993 and again on September 20, 1994. However, the bill died when the Senate failed to act: *ibid*.

133 See Jane C Ginsburg, 'The U.S. Experience with Mandatory Copyright Formalities: A Love/Hate Relationship' (2010) 33 *Columbia Journal of Law and the Arts* 311, 315–17.

134 See Elizabeth Mirza Al-Dajani, 'Post Saddam Restructuring of Intellectual Property Rights in Iraq Through A Case Study of Current Intellectual Property Practices in Lebanon, Egypt, and Jordan' (2007) 6 *John Marshall Review of Intellectual Property Law* 250, 256. Intellectual property piracy runs rampant in the Middle East.

135 The USTR lists countries that it perceives having problems in enacting and enforcing intellectual property rights. See Robert J Pechman, 'Seeking Multilateral Protection for Intellectual Property: The United States "TRIPs" over Special 301' (1998) 7 *Minnesota Journal of Global Trade* 179, 196. Section 301 of the *Trade Act* of 1974 is the principal statutory mechanism by which the

List because copyright piracy and trademark counterfeiting are widespread.¹³⁶ Egypt, Kuwait, and Lebanon also remain on the Watch List because their domestic laws involve several obstacles to effective intellectual property protection and enforcement.¹³⁷ If Sharia recognises property rights, including intellectual property rights, albeit indirectly, the question then arises as to why there are many violations of intellectual property rights in Arab countries. This state of affairs may be due in part to religious beliefs, traditional societal culture, a lower degree of economic development, and higher poverty levels.

Still, some would argue that the Islamic legal system has an entirely different definition of property, one not compatible with intellectual property rights. The Islamic system regards property as communal and owned by Allah, thus piracy is not considered stealing.¹³⁸ The purpose of creativity and dissemination of knowledge is for the good of all. However, as we have seen earlier, many Muslim jurists have considered intellectual property as specie of the general norm of property. Moreover, as we have seen earlier, there have been many instances where Muslims throughout the ages have appreciated protection for their works in one form or another.

As to cultural factors impeding effective intellectual property protection, there is a sentiment for many Arabs that a religiously-based law is a necessary bulwark against Westernisation and the domination of Western culture.¹³⁹ There is mistrust among Arab countries of the West based on many years of experience, especially during colonialism.¹⁴⁰ Historically, Arab countries

United States protects US export of goods and services from foreign unfair trade practices. As part of the 1984 amendments to section 301, Congress required the executive branch to produce a report identifying barriers to US exports, including any actions deemed to deny protection for US intellectual property rights: *ibid*.

136 See United States Trade Representative, *2011 Special 301 Report 26 (2011)*, available at <http://www.ustr.gov/webfm_send/2841> at 3 July 2012.

137 These obstacles include inadequate enforcement efforts, failure to provide additional training for judges who preside over intellectual property matters, the judiciary's failure to impose deterrent penalties against violators, and lacking of *ex officio* authority for intellectual property agencies: *ibid* 34–7.

138 See Simon Buckingham, 'In Search of Copyright Protection in the Kingdom', 11 *Middle East Executive Report* (May 11, 1988), 5.

139 See John Carroll, 'Intellectual Property Rights in the Middle East: A Cultural Perspective' (2001) 11 *Fordham Intellectual Property Media & Entertainment Law Journal* 555, 574.

140 *Ibid* 590. See Kenneth M Setton, Norman P Zacour, and Harry W Hazard, *History of the Crusades: The Impact of the Crusades on the Near East* (University of Wisconsin Press, 1985), 134–48. See also, Mosad Zineldin and Valaintisna Vasicheva, 'A New Mindset to Change the Arab/Islamic-Western Relations for Peace' (2010) 15 *Journal of Peace, Conflict and Development* 75. Tension has been fuelled by colonialism that denied rights and opportunities to many Muslims and a Cold War in which Muslim majority countries were too often treated as proxies without regard for their own aspirations: *ibid*.

were well in advance of the Western world for many centuries.¹⁴¹ The recent events involving the Arab world have served to develop or affirm feelings of mistrust.¹⁴² Therefore, violating intellectual property rights could be seen as a means of revenge to balance the West's conquest of Arab countries, commercially or otherwise. It might be useful for Arab countries to employ strategies that emphasise the fact that the protection of intellectual property can be traced back to concepts found in Sharia and is not, as the common perception seems to show, a Western phenomenon. In this way, Arab countries may see a reduction in intellectual property violations and witness more public support for protection of intellectual property rights.

Another complex fact that hampers intellectual property protection in Arab countries lies in the nature of Arab culture. The culture in Arab countries is a collective culture.¹⁴³ Relationships in Arab countries are based on mutual cooperation and sharing in common.¹⁴⁴ As such, copying, for example, could be normal in a culture where modesty and loving others runs high. The traditional Arab culture tends to encourage open access to knowledge.

Protection of intellectual property rights depends upon the level of economic development. With the exception of Gulf countries, many Arab countries

141 However, the demise of Arab countries' status began from the 18th century. See Bernard Lewis, *The Arabs in History* (Oxford University Press, 1993), 158–64.

142 See Norvell B De Atkine, 'The Arab Mind Revisited' (2004) XI *Middle East Quarterly* 47, 51. See also Douglas Jehl, 'A Nation Challenged: The Arab View; Newspapers and TV Paint US Action as a Kind of Terrorism', *New York Times* (Nov. 11, 2001), 5. Suspicion, mistrust and hostility toward the West is nothing new in the Arab media; it reflects attitudes that permeate a region that sees itself as having been cheated, maligned, outsmarted and outmuscled by Westerners for much of its modern history: *ibid.*

143 The Arab cultural constructs are said to differ from the Western individualistic culture. See Frederick V Perry, 'Shari'ah, Islamic Law and Arab Business Ethics' (2007) 22 *Connecticut Journal of International Law* 357, 371–4. When viewing the Arab culture, it is important to understand the difference between group behaviour and individual behaviour, or what has been termed collectivism versus individualism. Individualism, in turn, gives rise to the idea of rights – particularly individual rights being more important than, in fact transcendent over, obligations. In Perry's view, few Americans talk of their obligations; all speak of their rights, and spend a lifetime defending them and clamoring about them. For the Arab, the individual is responsible for the common welfare and for the prosperity of his society. This responsibility is not only to the society but also to God. This gives the individual a feeling of inescapable responsibility: *ibid.*

144 A sense of communal cooperation, unity and collectivism grew up among the desert Arabs of the Arabian Peninsula. Cooperation became a way of life and a community and cultural value for the Arabs. Thus, while the Qur'an clearly permits ownership, economic activity and profit, those who profit from economic activity and those who are in possession of property must take into account the interests of society as a whole. For Arabs, personal relationships, honour and saving face for all concerned are of high importance, and they often take precedent over the business at hand: *ibid.* 3714. See also Donald B Marron and David G Steel, 'Which Countries Protect Intellectual Property? The Case of Software Piracy' (2000) 38 *Economic Inquiry* 159, 164. Individualist cultures naturally embrace individual ownership of intellectual property, whereas many non-Western countries have collective cultures that emphasize sharing over individual ownership: *ibid.*

still lag economically behind the rest of the world.¹⁴⁵ Economies of Arab countries continue to experience significant problems, such as poverty and high unemployment levels.¹⁴⁶ In terms of generating intellectual property, Arab countries also lag behind the rest of the world. The number of patents registered by Arab countries in the United States and European Union is far below that of other countries.¹⁴⁷ The attitude of people in Arab countries toward intellectual property is not limited to moral issues solely, but is a question of the market. There are different segments of Arab society that would be affected by the high cost of acquiring intellectual property products because intellectual property is based on individual rights and paid access for those who can afford it. To put the argument in currency terms, if the cost of Microsoft Word software is the equivalent of US \$351 in Jordanian currency, how many Jordanians would be able to buy it?¹⁴⁸ Individuals purchase products at prices they can afford.

Due to high prices of intellectual property products, adverse *fatwas* have been issued that permit Muslims to copy such products.¹⁴⁹ However, according to these *fatwas*, copying of intellectual property products is limited to cases of

145 The total value of non-oil exports from Arab countries is less than that of Finland. During the 1990s, the growth rate of exports from Arab countries was 1.5% per year. The average global growth rate was 6%. The export base of Arab countries is not diversified. See Raj Bhala, 'Discovering Great Opportunity in the Midst of Great Crisis: Building International Legal Frameworks for a Higher Standard of Living: Doha Round Betrayals' (2010) 24 *Emory International Law Review* 147, 180. In 2011, the GDP per capita of Gulf countries combined amounted to US\$ 247 billion: see The World Bank, 'GDP per Capita Data', at <<http://data.worldbank.org/indicator/NY/GDP.PCAP.CD>> at 11 January 2013.

146 See Michael Fakhri, 'Images of the Arab World and Middle East – Debates about Development and Regional Integration' (2010) 28 *Wisconsin International Law Journal* 391, 398, 412; Kevin J Fandl, 'Terrorism, Development & Trade: Winning the War on Terror without the War' (2004) 19 *American University International Law Review* 587, 592. The current economic crisis in the region is marked by severe unemployment and little or no opportunity for the development of competitive and sustainable industries. Unemployment rates are running at around 20% in many Arab countries: *ibid*.

147 Between 1963 and 2010, Israel registered 20,028 patents in the US, and South Korea registered 78,400 patents in the US. In that same period, Saudi Arabia led the Arab-Muslim world in registering patents in the US – with 390. Egypt had 132, Kuwait 132, the United Arab Emirates 72, Syria 20, and Jordan 22. See US Patent and Trademark Office, A Patent Technology Monitoring Team Report, at <<http://www.uspto.gov/web/offices/ac/ido/oeip/taf/cst/utl.htm>> at 20 August 2012. Further, between 2001 and 2010, United Arab Emirates registered 25 patents at the European Patent Office followed by Saudi Arabia 20, Jordan 16, and Egypt 8. See European Patent Office, Patents Granted 2001–2010, at <<http://www.epo.org/about-us/statistics/granted-patents.html>> at 20 August 2012.

148 See Suha Ma'ayeh, 'Improved IPR Enforcement Gets Mixed Reviews', *Jordan Times* (Jordan), 1 May 2001, 10. 'Without pirated software "my son could have not excelled in an Auto Cad program which I purchased for Jordanian Dinar 3"' said one Jordanian citizen, adding that "the price of the original software is way beyond his reach": *ibid*.

149 See Fatwa on Copying of Programs No 121287, available at <<http://www.islamweb.net/fatwa/index.php?page=showfatwa&lang=A&Id=121287&Option=Fatwa>> at 20 July 2012 (in Arabic).

necessity, personal use, and not for purpose of re-sale.¹⁵⁰ These limitations imposed by the *fatwas* are similar to the ones used in fair use exemption in copyright for instance.¹⁵¹ One solution to the high price problem would be pricing differentiation whereby intellectual property holders engage in agreements to sell their products at discounted prices. This solution seems reasonable, especially if the product is used for educational purposes. The solution would encourage individuals to buy legitimate product at a reasonable price without having to pay a large sum.

In addition to the challenge of intellectual property enforcement, there are challenges related to accommodating new inventions within the framework of intellectual property under Islam. For example, gene patents raise controversial issues. The biotechnology industry patents genes used for medical and research applications. Under current laws, patenting unique genes and organisms is legal.¹⁵² In the United States, patents have been awarded for a number of genetically altered genes.

Some Muslim scholars find nothing objectionable about genetic engineering so long as it is only of animals and plants.¹⁵³ Other scholars allow therapeutic uses of genetic engineering, for example gene therapy to cure anemia, while prohibiting use of genetic engineering to enhance a fetus by eliminating an undesirable physical or behavioural trait.¹⁵⁴ Contrary to Sharia rules, such engineering manipulates life forms. The Qur'an states 'And He created everything, and determined [each thing] precisely'.¹⁵⁵ The Qur'an also states 'Indeed, all things did We create [according to] a precise measure'.¹⁵⁶ Genetic engineering should not be used to tamper with the conception of human beings and their individual responsibilities, or to interfere with the structure

150 Ibid.

151 See David R Hansen, 'A State Law Approach to Preserving Fair Use in Academic Libraries' (2011) 22 *Fordham Intellectual Property Media & Entertainment Law Journal* 1, 11.

152 See Nicole Boutros, 'To the Cure: Why Gene Patents Pave the Way for Breast Cancer Research' (2011) 19 *American University Journal of Gender, Social Policy & Law* 1009, 1014. In 1980, the Supreme Court, in *Diamond v Chakrabarty*, held that nonnaturally occurring compositions, the products of human ingenuity, are patentable subject matter. The Court upheld the patentability of a combination of bacterium used to break down crude oil, determining that they contained 'markedly different' characteristics from their natural forms and had potentially significant utility. While the Court recognized the implications of its holding, specifically for genetic research, its failure to precisely define 'markedly different' left courts unclear as to its application: *ibid*.

153 See Dariusch Atiqhetchi, *Islamic Bioethics: Problems and Perspectives* (Springer, 2007), 105–12.

154 See Aftab J Ahmed, 'Gene Therapy Redux' (1995) 27 *Journal of the Islamic Medical Association* 93, 94 Genetic engineering has the potential to improve the health of the species, but the counter-argument is that, in time, people would fancy the use of technology for cosmetic enhancement and not merely to correct severe genetic defects.

155 See Qur'an 25:2.

156 See Qur'an 54:49.

of the human genome under the pretext of enhancing the human race.¹⁵⁷ It is immoral to own and sell the DNA which holds the keys to human life.¹⁵⁸ Any attempt to alter life forms is an attempt to change Allah's creation.

Although genetic engineering may enhance human life, an individual does not own his or her body, and thus, can only use their body in a manner permitted by Allah. Only Allah 'owns' the genes in the human genome and no company can own the genes of an individual.¹⁵⁹ Given the absence of a bright-line demarcating all the issues surrounding genetic engineering, it would be reasonable to adopt a cautious approach, especially where genetic engineering goes beyond therapeutic use.

The discussion of genetic engineering patents and Islamic law can benefit from the public order and morality exception in TRIPS which would accommodate the concerns being raised. TRIPS generally requires that patents shall be available for any inventions and patent rights are enjoyable without discrimination as to the field of technology. However, a country may exclude an invention from patent protection if prevention of commercial exploitation of that invention in their territory is necessary in order to protect *ordre public* or morality.¹⁶⁰ The TRIPS provides definition of the derogation – *ordre public* and morality – by providing a non-exhaustive list of acceptable justifications: protection of human, animal or plant life or health and avoidance of serious prejudice to the environment.¹⁶¹ An exclusion of an invention from protection

157 See Shahid Athar, 'Enhancement Technologies and the Person: An Islamic View' (2008) 36 *Journal of Law Medicine & Ethics* 59, 62–3. In 1998, the Fiqh Council of the Muslim World League made the following two resolutions: (1) It reaffirmed the previous resolution banning human cloning, (2) It permitted genetic engineering to prevent or cure diseases or minimize their harm, provided it does not do any other harm during the process. It also suggested that genetic engineering should not be applied to achieve evil or hostile ends of anything that is prohibited by Sharia: *ibid.* See also Stephen J Werber, 'Cloning: A Jewish Law Perspective with a Comparative Study of Other Abrahamic Traditions' (2000) 30 *Seton Hall Law Review* 1114, 1158–61. The Qur'an, in more than fifty places, invites human beings to research, work, and understand the universe and then to draw conclusions that enable them to adopt methods and technology that serve God. An Egyptian legist, Yusuf al-Qaradawi, maintains that the technology can be used to overcome certain hereditary diseases, such as infertility, as long as it does not lead to abuse in other areas: *ibid.*

158 See David B Resnik, 'DNA Patents and Human Dignity' (2001) 29 *Journal of Law Medicine & Ethics* 152, 156 (DNA patenting may threaten human dignity by taking us further down the path of human commodification).

159 See David C Hoffman, 'A Modest Proposal: Toward Improved Access to Biotechnology Research Tools by Implementing a Broad Experimental Use Exception' (2004) 89 *Cornell Law Review* 993, 1028–31 (describing biotechnological patents' inhibitive effects on subsequent research).

160 See Timothy G Ackermann, 'Disorderly Loopholes: TRIPS Patent Protection, GATT, and the ECJ' (1997) 32 *Texas International Law Journal* 489, 493, 508. The favoured interpretation of 'necessary' is that the measure used must be the 'least-GATT-inconsistent'. Restrictions could be considered to be 'necessary' only if there were no alternative measure consistent with the General Agreement: *ibid.*

161 *Ibid* 497.

complies with the terms of TRIPS if it falls within these restrictions. In light of the preceding, TRIPS provides an escape clause for some Arab countries who find it necessary to refuse to grant genetic engineering patents in order to protect ordre public or morality.

Patenting stem cell research is considered controversial, especially in the United States and Europe due to moral issues. What is morally unsustainable is the harvesting of stem cells by destruction of human embryos.¹⁶² From a Catholic perspective, life commences with conception,¹⁶³ and the Jewish law considers life as starting with tissue formation 40 days later.¹⁶⁴

In Islamic Law, the Qur'an states:

We created (khalaqna) man of an extraction of clay, then we sent him, a drop in a safe lodging, then We created of the drop a clot, then we created of the clot a tissue, then We created of the tissue bones, then we covered the bones in flesh; thereafter We produced it as another creature. So blessed be God, the best of creators (klaliqin).¹⁶⁵

162 See Joshua Whitehill, 'Patenting Human Embryonic Stem Cells: What is so Immoral?' (2009) 34 *Brooklyn Journal of International Law* 1045, 1054, 1059. The process of deriving stem cells from the blastocyst typically spells death for the embryo. Because any developing human embryo could ultimately result in the birth of a child, human embryonic stem cells (HESC) research has drawn its major opponents from religious groups, whose ethical convictions against HESC research mirror those held by groups against abortion. While the U.S. Patent and Trademark Office granted relatively quickly the Wisconsin Alumni Research Foundation patent for certain HESC, the European Patent Office (EPO) outright refused to examine the European application on the ground that the invention was contrary to morality. After years of appeals, the Enlarged Board of Appeal – the highest level of legal authority in the EPO, responsible for resolving the most important issues of European patent law – ruled on November 25, 2008, that European patent law banned the patenting of ESC inventions whose preparation necessarily involved the destruction of human embryos: *ibid.* See also Gregory R Hagen and Sebastien A Gittens, 'Patenting Part-Human Chimeras, Transgenics and Stem Cells for Transplantation in the United States, Canada, and Europe' (2008) 14 *Richmond Journal of Law & Technology* 11, 42. There are ethical controversies associated with the harvesting of human eggs and the destruction of human embryos. In the United States, human and part-human totipotent stem cells are patentable. The fact that Europe and Canada have concluded that human totipotent stem cells are unpatentable on the basis that they are stages of human development demonstrated the difficulty of arriving at a principled rule against patenting human beings: *ibid.*

163 See Shraga Blazer and Etan Z Zimmer (eds.), *The Embryo: Scientific Discovery and Medical Ethics* (S Karger Publication, 2005), 41–2. According to the Catholic Church, from the time that the ovum is fertilized, a life is begun which is neither that of the father nor the mother; it is rather the life of a new human being. The human being is to be respected and treated as a person from the moment of conception. The full human nature of the embryo, right from its zygotic stage, is testified by modern genetics, which demonstrated that from the first instant there is established the programme of what this living being will be: *ibid.*

164 At this stage, after 40 days, the embryo has a greater potential of becoming a full and complete human being: *ibid.* 37.

165 See Qur'an 23:12–14.

This verse indicates that a foetus is perceived as a human being only as the biological development progresses because of the Qur'an's use of the words: 'thereafter We produced him as another creature'. Moreover, according to Muslim scholars, life starts after 120 days of pregnancy have lapsed.¹⁶⁶ Therefore, under Sharia, the issue of patenting stem cell research is generally considered less problematic. Research, and thus patenting, on stem cells which is conducted on embryos during the 120 day period is permissible since they do not yet form human beings.

The final challenge relates to Arab countries adopting a development agenda in their intellectual property laws. Intellectual property laws in Arab countries ought to serve their development and social goals. For example, the limitations provided under the Copyright Law in Jordan are subject to rigid application and determined on a case-by-case basis.¹⁶⁷ Article 17 of the Jordanian Copyright Law, permits the performance or display of a work for educational purposes within a classroom or educational institution. The requirement that the performance or display be confined to the classroom is an obstacle to remote students who can only view their lectures using the Internet, as they live in rural areas.¹⁶⁸ In addition, article 34 mandates that any person who is interested in printing or publishing a work that has not already been printed, published or translated in Jordan, first needs to apply to the Minister of Culture to obtain a licence to do so. Such a requirement acts as a barrier by imposing an unnecessary administrative delay and cost on the ability of people to freely and easily use public domain works.¹⁶⁹

Against this backdrop, Arab countries must incorporate into their intellectual property laws a more comprehensive development approach to achieve social welfare and benefit the most vulnerable populations.

166 The embryo does not acquire the legal effects of being human from its very first creation. During the first 120 days of pregnancy, the embryo is not yet a human being; it belongs to its parents and they may do with it as they choose. The ensoulment of the fetus does not occur until the end of the 120-day period. See Abdulaziz Sachedina, *Islamic Perspective on Research with Human Embryonic Stem Cells*, in *Ethical Issues in Human Stem Cell Research*, Volume III, Religious Perspectives, G-4 (National Bioethics Advisory Commission, 2000) (quoting Sahih al-Bukhari [d 870] and Sahih al-Muslim [d 875], *The Book of Destiny* [quadar]). See also Blazer and Zimmer, above n 163, 58, 69.

167 See Rami Olwan, *A Pragmatic Approach to Intellectual Property and Development: A Case Study of the Jordanian Copyright Law in the Internet Age*, Program on Information Justice and Intellectual Property Research Paper No. 2012-07, (American University Washington College of Law, 2012), 48.

168 Ibid 49.

169 Ibid 51.

VI CONCLUSIONS

Islam is a religion of laws in every dimension. Islam acquired its characteristic as a religion uniting itself in both the spiritual and temporal aspects of life. Therefore, a Muslim must ensure that everything he or she does is consistent with Sharia. Understanding of the sources of Islam is crucial in deducing the concepts that support protection of intellectual property.

One cannot reduce millennia of reflection under Islamic law to a single formula. However, conceptually, it is fair to state that there is more confluence than conflict in the relationship between Sharia and intellectual property protection, particularly if one lookd at it with a historical perspective. Intellectual property is not alien to the Muslim world. Although there remains a debate among Muslim scholars, intellectual property has been interpreted as a part of private property. Sharia recognised some basic forms of intellectual property rights. Due credit is to be given to the source of the concept. Most Sharia schools of law permit gaining profit out of a person's efforts. An author or inventor can recoup their initial investment and beyond as long as that amount is fair and balanced with the time and effort exerted. Intellectual property protects the right to benefit commercially for a specified period of time. Criminal penalties such as fines and imprisonment are imposed in the case of intellectual property theft.

However, the fact of up to date intellectual property laws in compliance with the TRIPS agreement is not a panacea for the challenges of enforcement. Many of the intellectual property laws enacted by Arab countries remain largely unenforced. Religious beliefs, traditional societal culture, and economic problems contribute to this state of affair. Some would still argue that property is communal and owned by Allah, sharing intellectual property products is not considered a violation. The purpose of creativity is dissemination of knowledge for the good of all. In addition, some consider violating intellectual property rights as a means of revenge for the West's conquest of Arab countries, commercially or otherwise. Another complex fact which hampers intellectual property protection in Arab countries lies in the typical collective nature of Arab culture, making it difficult to introduce intellectual property concepts into a society with strong collective community values.

Arab countries can employ strategies that emphasise the fact that the protection of intellectual property can be traced back to concepts found in Sharia and is not, as the common perception seems to show, a Western phenomenon. Intellectual property protection is an internal concept found

in Sharia. By adopting this solution, Arab countries may see reduction in intellectual property violations and witness more public support for protection of intellectual property rights.

The questions that linger relate to incorporating new inventions and sophisticated forms of intellectual property – such as gene patents and stem cell research – within the framework of Sharia. Is there a need to create a new Islamic wheel to accommodate such developments? There can be some grey areas when analysing these new forms of intellectual property rights. The expansion of intellectual property rights and the challenges associated with new technologies and innovations render their justification under Sharia more complicated. However, the best approach is to combine Islamic principles as found in the letter of the law set out in religious texts and other sources of jurisprudence with a reasoning that captures the spirit of the law and modernity. Sharia maintains a dynamic, innovative, and adaptable nature. Some Sharia rules can be expanded to meet modern considerations while retaining core principles as static.

BOOK REVIEW
