II. Copyrights in a Digital Age (3 - 5 pages)

**Question:** Consider the effect of digital technology on copyright protection. In what ways have digital technology proved problematic for existing copyright law? Do you agree with the Economist’s claim that copyrights have only succeeded until now because of weaknesses in copying technology? Evaluate the proposals outlined in the assignment sheet. In what ways these proposals address current weaknesses in copyright law brought about by digital technology? Do you think that major changes are necessary to address these problems, or can existing copyright laws simply be modified to be compatible with changing technology.

**Answer:** Copyright protection is one of the areas covered under the broader intellectual property right regime. The very basic theoretical justification for the introduction of the copyright regulation is to establish incentives for authors to create by enabling them to receive an appropriate return and to stimulate public dissemination of their works. The underlying assumption is that markets for these creations are not functioning properly and government intervention is warranted in presence of market failures (for more details on this see Question 1). Although there exist extreme views as for any issue, generally it is possible to say that there is little disagreement about these underlying basic principles – appropriate return and public dissemination. But disputes about the optimal scope of protection, type of works that merit protection, optimal duration and optimal tradeoff between duration and scope have been present for as long as there have been laws providing for protection of copyrights. The general trend has been that the scope, type of works and duration of protection has been extended gradually over the 20th century with the development of new media for expressing the outcome of creative activity.

In the past few years the discussion about these issues has intensified with the rapid development and increasing presence of digital technology. The effects of the technology on the copyright protection are multifaceted. On the problematic side the technology allows perfect copying of almost any recorded creation at virtually zero marginal cost. It also enables instant dissemination of copies to effectively unlimited number of recipients worldwide. These two features make the standard enforcement procedures for copyrights somewhat
obsolete, because of the inherent territoriality of the law and enforcement authorities. On the other hand, the same technology allows the copyright holder to impede reproduction of the protected material via sophisticated encryption tools. The technology has also given copyright holders access to a larger market, in many instances have eased and reduced costs of producing the copyrighted material. As a double sword edge – in some instances the technology enables the copyright holders to assess their audiences with great precision, which also has given them the ability to estimate the global level of copyright infringement more accurately. If applied to the entertainment and content industries, which are among the fiercest voices claiming inadequacy of the current legal protection, these aspects of technology have also contributed to large economic rents in these industries.

In assessing *Economist’s* claim that copyrights have only succeeded until now because of weaknesses in copying technology, I propose to look back at the origins of the copyright protection. The basis for these legal provision lie in the Article I, Section 8 of the U.S. Constitution, which grants the Congress power: “To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.” In 1790 the “limited period” was 14 years for copyrights with a right to renew the protection for another 14 years. Today the “limited period” is established at 70 years beyond the life of the author and 95 after publication, or at 125 years after creation for works made “for hire” and owned by corporations. The scope of the protection has also been extended considerably. I think it is valid to question whether the current length and scope of protection encourages socially optimal outcomes. With this I would argue that the copyrights (not looking only at the entertainment industry) have succeeded so far not because of the weaknesses in copying technology, but because the level of protection has been commensurate with the costs and benefits to the society. The claim expressed by the *Economist* holds if one looks only at the revenue generation aspect of the copyright and ignores other forms of reward (citations, publicity), which can also result in more indirect financial returns.

I now proceed to evaluate the potential solutions to the “digital technology problem” outlined in the assignment sheet:
• The use of sophisticated encryption technology to discourage reproduction of copyrighted materials. Many firms already make use of such technology.

In light of the above discussion, I believe that we can observe successful application of the encryption technologies today and this method is likely to be the most realistic and market friendly also in the future, requiring the least government intervention. The advantage of this proposal is that it foresees addressing the current weaknesses in copyright protection (caused in the first place by technological advancement) through adjustment in technology itself as opposed to changes in the policy. This approach would in fact foster innovation.

• Taxing Internet access and the equipment used for such access. Under this proposal, downloads of digital material would be tracked, and the revenues of the tax distributed to copyright holders.

For a tax to be efficient it needs to have a broad base and for it to be equitable it needs to be levied on those actually using the services. In addition, the tax will need to be administered and enforced. On all these counts this proposal scores low. If the tax would indeed be a payment for use of copyrighted works it would have to target only those users that access works that their authors have opted to protect and have decided to levy fee for their use. Thus the tax cannot simply be applied to every Internet user, because there are large amounts of freely accessible information on the WWW. The problems of accounting for the use of copyrighted material and the real global nature of access to Internet makes the problems related to the worldwide administration insurmountable at this point.

• Requiringcopyright holders to renew copyrights every five years. In addition, a “use it or lose it” provision would require copyright holders to make their work available to the public. Those unwilling to make work available to the public would be required to grant a license to those wanting to distribute the work.

This proposal involves three aspects – renewing long abandoned mandatory registration for obtaining copyright protection, significantly shortening the length of protection and introduction of compulsory licensing. These solutions go to the heart of copyright protection
principles and aim at altering them. Looking from policy horizon I regard these as appropriate in stimulating change in the industry and ensuring that changes produce more vitality in the system by reducing the temporary monopoly powers. Judging from the prospects and costs of implementation, the proposals score low, because it requires setting up a new worldwide legal framework, registration system and anticipating disputes over the compulsory licensing.

• Strengthening the copyright protection. Rather than allowing exemptions that make it unclear when copyrights are infringed, creators should be given the exclusive right of commercial exploitation of their work.

This proposal entails curbing all the “fair use” and private copying protections available under the current regime and declares the intellectual property simply a property. Evaluation of this approach requires recalling why those exemptions where included in the first place – to ensure that societal interests in dissemination of knowledge are observed. Key in this debate is understanding that copyrights were designed to provide protection to the expression of an idea, not the idea itself. Under this solution we move very close to protecting also the ideas. Even the much more tangible and easily enforceable real estate rights are typically not absolute, meaning that the legislation establishes situations and conditions for public use and other exemptions.

In essence the digital technology problem is the most acute for those industries in which the content is the only asset, such as entertainment industry. As regards the publications of the results of research, it seems that the digital technology problem is not such an issue, while the rate and level of diffusion of knowledge has been increased dramatically by means of this technology. Arguing in favor of strengthened and broadened copyright protection implies that there are additional market failures that the previously designed instruments are unable to address. This view seems unwarranted, since there is no other force apart from the self-interest in maximizing profits that drives the companies to use the Internet in offering their services. If the legal protection does not allow appropriating the returns using this media, companies would not pursue it. Assuming this, I would argue that the problem is not really related to science and technology and the inadequacy of the legal regime in ensuring fair
reward for creator, but is one of the business model, resistance to change and unwillingness to give up lucrative economic rents in the entertainment industry. In my mind the relevant question is not one of – how should the legal protection be strengthened and enlarged, but rather – what changes are needed to make the legal regulation supportive of more dynamic environment. With such a premise two of the above proposals are adequate – allowing the market to determine the appropriate level of encryption protection and shortening the period exclusivity and requiring the author to expressly apply for future protection after certain period of time has elapsed.

_this is an example of a well-written answer to question 2. The particular strength of this answer is that clear connections are made between arguments raised in each section. All of the analysis provided is important to lead up to the author’s conclusions, and this importance is clearly noted for the reader._

The author begins by making clear what the general role for copyright protection is, as well as the difficulty in striking a balance between appropriate return and public dissemination. This helps to set up the rest of the answer. For example, the author uses this tradeoff to take issue with the Economist’s claim that copyrights were only possible because of poor copying technology. Rather, the author argues that technology also can help – such as better encryption – and that the problem is that the level of protection is not properly set.

Another good example is on page 4, where the author writes that “(a)rguing in favor of strengthened and broadened copyright protection implies that there are additional market failures that the previously designed instruments are unable to address. This view seems unwarranted, since there is no other force apart from the self-interest in maximizing profits that drives the companies to use the Internet in offering their services. If the legal protection does not allow appropriating the returns using this media, companies would not pursue it.” Note how the author uses the earlier arguments about the reasons for copyright protection to provide support for his/her claim that major changes to copyright law are not needed.