Copyright and competition policy

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Abstract

This Chapter discusses the tensions between copyright law and competition and some of the ways through which copyright law itself works to advance competition policy goals. It shows how competition policy goals and anti-monopoly measures shaped the design of copyright since the Statute of Anne, and the notion of limited exclusive rights operating within a competitive market system is crucial to copyright law’s design.

The Chapter offers a three-dimensional framework, consisting of considering incentive sufficiency, relative capacity to innovate, and transaction costs, to explain some key elements of copyright law: the limited term of copyright, limitations on subject matter, fair use, and the first-sale doctrine. It shows how these limitations on copyright can ensure that the copyright may not result in excessive static losses resulting from unconstrained market power, and how they can minimize dynamic losses by ensuring that copyright is not used to hinder future innovation.
Despite the tension that exists between the goals of competition law and copyright law (and other forms of intellectual property) the modern view is that ultimately these two areas of law share the same long-term goals of promoting innovation to enhance consumer welfare (Bohannan and Hovenkamp, 2011). We tolerate some static inefficiency that may result from granting exclusive rights in order to promote dynamic efficiency and long-term growth. As Frank Easterbrook, echoing Schumpeter (Schumpeter, 1994), put it, ‘an antitrust policy that reduced prices by 5 percent today at the expense of reducing by 1 percent the annual rate at which innovation lowers the cost of production would be a calamity. In the long run a continuous rate of change, compounded, swamps static losses’ (Easterbrook, 1992: 119). The problem, of course, is that in formulating the optimal policies (optimal in the sense of second best) it is not clear how much static inefficiency we should tolerate in order to promote dynamic efficiency, and moreover, since today’s intellectual goods are inputs for those of tomorrow, there is no magic line that allows us to know whether when we sacrifice the static we promote the dynamic or, instead, we impede both.

How the law handles this tension in the application of competition law to intellec-
tual property has been the subject of extensive literature (for example, Lévêque and Shelanski, 2005; Boyer et al., 2009; Anderman and Ezrachi, 2011). In writing about copyright and competition policy, however, this chapter focuses on how copyright law itself applies competition policy goals from within. I will describe some features of copyright law (mostly American copyright law) that can be understood as either mitigating some of the static inefficiencies associated with copyright or ensuring that those inefficiencies do not translate into dynamic ones.

The chapter proceeds in four sections. It begins with the history and pre-history of copyright, and discusses how competition policy informed the enactment of the Statute of Anne (8 Anne c.19, 1710 (UK)), the first British copyright act, and shaped some of its key features. The second section focuses on various copyright doctrines that aim to promote competition and competitive innovation from within: it discusses the limited term of copyright, limitations on copyrightable subject matter, and doctrines such as fair use and the first sale doctrine. The third section discusses some of the challenges for the traditional allocation of rights between owners and users in the digital age, and the fourth section discusses the merit of promoting competitive goals from within as opposed to applying them externally through competition law.

THE STATUTE OF ANNE: COMPETITION POLICY AT THE CRADLE OF COPYRIGHT

The historiography of Anglo-American copyright law often begins with the Statute of Anne, which created the first statutory exclusive right over books. But, as much as that
Act resulted from the London publishers’ demand for statutory exclusive rights, it also reflected Parliament’s disdain of the monopoly of the Stationers’ Company. This self-regulating publishers’ cartel controlled the book trade and, pursuant to several licensing acts and other regulations, played a vital role in censoring publications unfavorable to the Crown or the Church (Patterson, 1968). The last of these licensing acts expired in 1695, and, after a period of 14 years during which the book trade was left entirely unregulated, Parliament enacted the Statute of Anne. Therefore, copyright law was not born as a response to a world of free copying. Quite the contrary, as much as it was responsive to publishers’ demands for statutory exclusive rights, modern copyright law was also a countermeasure against an oppressive regime of press control in which censorship and exclusive print privileges were conflated. Thus, the Act contained key elements that are best understood as measures that aimed to prevent the Stationers’ monopoly from reemerging. It vested initial copyright in authors rather than publishers to weaken the Stationers’ stronghold on the catalogue (Nicita and Ramello, 2007). It limited the term of copyright to achieve two outcomes: maximizing access to books as they became part of the public domain and traded in a competitive market, and constraining the incumbent Stationers’ market power over in-copyright books by forcing them to compete with out-of-copyright books (Nicita and Ramello, 2007). The Act removed the Stationers’ Company enforcement and adjudication powers, and created a price-control mechanism to prevent ‘too high and unreasonable’ prices (Bracha, 2010: 1437). Lastly, while copyright depended on registration with the Stationers’ Company, an alternative mechanism for securing copyright was created should the Stationers’ Company refuse to register a work (Patterson, 1968).

The effect of these measures was not immediate. Notwithstanding the limited statutory term, the London publishers maintained that they held perpetual common law copyright, and it took several decades until the courts rejected this argument (Ochoa and Rose, 2001: 681–2), and, in the absence of modern competition law, some of the Stationers’ anti-competitive practices, such as paying competitors to stay out of the market (Blagden, 1961), could not be directly challenged, but over time the London publishers’ stronghold had weakened.

This background is useful not only for understanding how competition policy informed copyright law from its inception, but also because it provides a historical reminder of how copyright law responded to the economic, social, and political changes that the printing revolution brought about, and it also reminds us that, while limited copyright can serve as the ‘engine of free expression’, excessive control can serve as a highly effective break (Netanel, 2008: 3). These reminders allow us to reflect more broadly on demands for new regulations as we move from print to digital.

OWNERS’ RIGHTS AND USERS’ RIGHTS: COMPETITION POLICY FROM WITHIN COPYRIGHT

Although modern copyright law still retains some of the pro-competition stance that existed in its original design, over time it has omitted some measures and developed others: some minimize copyrights potential harm to static competition, while others ensure that it is not used to harm dynamic competition. Legal jargon often refers to them
as ‘limitations and exceptions’, but they should be better understood as reflecting the law’s choice to treat creative works as resources regulated as semi-commons: the state allocates usage rights over intellectual goods between different actors: some rights are allocated to creators and their assignees (copyrights), while other rights are allocated to users (users’ rights) (Frischmann, 2012).

I suggest that the following three related dimensions provide a rational basis for such allocation:

- **Incentive sufficiency**: We would tend to allocate uses that generate marginally high incentives to owners, and otherwise to users.
- **Utilizing capacity**: We would allocate usage rights according to the relative capacity to utilize the work for socially desirable purposes, including innovative purposes.
- **Transaction costs**: We would consider the likelihood of value-maximizing voluntary exchanges. Ideally, when transaction costs, broadly understood, impede socially efficient bargaining, we would like to allocate usage rights to owners if allocating them to users would undermine the incentive to create or disseminate, and we would like to allocate usage rights to those who might have comparative advantage with respect to certain types of uses.

With these considerations in mind, let us turn to discussing some of the limitations to copyright and see how they promote competition policy goals along those three dimensions.

**Limited Term**

The limited term of copyright serves competitive goals, static and dynamic in different ways: It promotes static competition by allowing intra-brand competition between competing suppliers of the same work when the copyright expires. It may also increase inter-brand competition and lower prices for copyrighted books because it forces copyrighted works to compete with those in the public domain. Limited term also serves dynamic competition. If a limited term exerts competitive pressure on the prices of work, it also reduces the cost of future creation that builds on existing works. Moreover, in order to successfully compete with out-of-copyright works and command higher prices, new works have to offer something better, or at least different, than older ones (Katz, 2009c).

Let us consider limited terms along the three dimensions mentioned earlier. Discounting and depreciation imply that beyond a certain term ‘the incremental incentive to create new works as a function of a longer term is likely to be very small’ (Landes and Posner, 2003a: 473). Therefore, a limited term achieves efficiency gains without negatively affecting the incentive to create.

Regarding the capacity to utilize, we can fairly assume that *ceteris paribus*, and relative to any other randomly chosen firm, creators have some advantage in utilizing a work for the purpose for which it was created and around the time it was created. This advantage weakens over time, while the cost of getting permission, if required, increases as the identity of the current owner and his or her whereabouts become more difficult
to discern (Katz, 2012). Moreover, at least for projects that reuse several existing works, the greater is the number of such component inputs that require permission, the higher will be the cost of getting it, as well as the likelihood of a tragedy of the anti-commons (Heller and Eisenberg, 1998). Therefore, if beyond a certain period there is no a priori reason to allocate exclusive usage rights while the cost of correcting inefficient allocation increases, it makes sense to limit the term of copyright and allow all to use the work as they see fit.

Unfortunately, the utility of time limits has diminished as the term of copyright increased through a series of copyright reforms. The public benefit arising from current copyright terms that can easily exceed a century is highly doubtful.

Offering two counter-arguments, Landes and Posner (2003a) proposed giving copyright owners an option of periodically renewing their copyrights. They maintain that, in the case of some works, continued exclusivity will reduce congestion externalities, and create better incentives to commercially exploit older works. It is not obvious, however, that congestion externalities in the consumption of creative works exist or are a matter of concern (Boldrin and Levine, 2004; Karjala, 2006). Moreover, even if the phenomenon might not be theoretically impossible, the assumption that the value of information generally increases with consumption (Gans, 2012) seems to provide a more solid basis for general policy prescriptions. Empirical work (Heald, 2007; Buccafusco and Heald, 2012) also casts doubts on the importance of the hypothesis that longer copyright terms might provide incentives for exploiting older works.

**Subject Matter Limitations: Facts, Ideas, and the Merger Doctrine**

Copyright may subsist only in original expressions, but not in facts (Feist v. Rural, 1991: 344), and ‘in no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work’ (Copyright Act (US) 1976, sec.102). Even when copyright subsists in a work, copyright applies only to copying the expression or substantial part thereof, but it is not an infringement to copy any facts contained therein or any idea, process, system, and so on that the work describes. As a result, a copyright offers only a limited protection from competition. Thus, the law would allow the copyright owner to limit intra-brand/work competition, but it will not prevent others from selling competing substitutes (Breyer, 1970), even those based on ideas or information copied from the first. Consequently, copyright does not automatically result in market power, and, notwithstanding the copyright, every work is at least partially contestable. The degree of market power is a function of how many non-infringing substitutes may be available, and how close those substitutes are in the eyes of consumers.

This point has led several commentators to dismiss the concern that copyright may be a source of significant market power (for example, Landes and Posner, 2003b). But this view oversimplifies the issue, and is inconsistent not only with the easily observable fact that the price of many copyrighted works often exceeds their marginal cost substantially (Katz, 2007), but also with the fact that the purpose of granting copyright is to enable recoupment of the cost of creation by setting prices above the competitive level. If the
effect of those limitations were indeed to eliminate any significant market power they would defeat copyright’s very purpose to create such market power. Why then would the law adopt a set of such contradictory rules?

The three-dimensional framework described earlier provides some answers. From the incentive perspective, copyright protection over facts and ideas may not be necessary for generating sufficient incentives for three reasons. The first is that firms may resort to other means, legal, technological, and organizational, to gain some protection over facts and ideas, and the law may recognize such means, albeit reluctantly, especially when copying them might prove detrimental to the incentive to collect or create them (Katz, 2009c). Second, whether the facts or ideas that a work conveys will be repurposed, for what purposes, and how lucrative those uses might be, is entirely unpredictable. Therefore, beyond some core of predictable uses, an exclusive right to repurpose facts or ideas will provide a rapidly decreasing marginal incentive to create the work. In addition, copyrighted works are often used in ways that generate direct and indirect network effects (Katz, 2009c; Gans, 2012). As network effects intensify, competing works, even if they are similar or functionally equivalent, do not provide the same network value. The incumbent work becomes less contestable, allowing the copyright owner to recoup its investment even without the power to exclude others from copying facts and ideas. At the same time, treating facts and ideas as commons ensures that they can be used freely for many other purposes. This implies that the importance of circumscribing the scope of copyright is not so much in how it constrains the copyright owner’s market power by increasing static competition, but in how it ensures that this market power – even when exists – may not be used to prevent or hinder Schumpeterian competition and innovation more broadly (Katz, 2009c).

Lastly, had protection extended over facts and ideas, reusing them would require permission. But obtaining permission is not costless, and may be plagued with accumulating transaction costs, including those arising from imperfect and asymmetric information, strategic behavior, or coordination.

In sum, since extending protection over facts and ideas is not necessary to generate sufficient incentives to create works in the first place, treating facts and ideas as commons seems preferable to exclusivity. This ensures that facts and ideas can be used at the socially efficient level (at marginal cost), which, in turn, promotes both static and dynamic competition. Statically, free facts and ideas can be used to produce competing works, constraining incumbents’ market power at the margin, and dynamically promotes Schumpeterian competition, by removing barriers to the creation of other intellectual, cultural, and social goods.

The merger doctrine is another doctrine in American copyright law that limits the anti-competitive potential of copyright (Cotter, 2006). This doctrine is closely related to the idea–expression dichotomy, discussed above, but takes it one step further. Under the merger doctrine, an expression otherwise protectable will not be protected where there is only one or very few ways of expressing an idea, or when, as a result of factors such as network effects or technical compatibility, other expressions prove to be insufficient substitutes, no matter how similar they are. The doctrine’s purpose is to prevent de facto exclusivity over the idea, which may translate into exclusivity over markets (Katz and Veel, 2013).
Fair Use

Fair use is another (and perhaps the ultimate) doctrine of American copyright law serving pro-competitive interests. Fair use extends the right of users beyond copying facts, ideas, or insubstantial parts of a work, and permits them to use substantial parts of the protected expression—even the entire work—in circumstances that otherwise would constitute infringement. Fair use mitigates some of the static losses resulting from exclusive rights in two principal ways: it constrains the copyright owner’s market power by forcing it to compete, at the margin, with unauthorized but lawful copies, and it may reduce monopoly pricing deadweight loss by permitting users whose willingness to pay is higher than marginal cost but still lower than the price set by the copyright owner to use the work (effectively increasing output to the level that would occur with perfect price discrimination (Gordon, 1998). Fair use also mitigates dynamic losses by ensuring that the exercise of the copyright would not hinder downstream creativity and innovation by other authors and users (Landes and Posner, 2003b).

A standard objection to justifying fair use on these grounds is that such intervention only undermines the ability of copyright owners to set price discrimination schemes that would maximize both access and incentive (Fisher, 1987). Therefore, the early economic analysis of fair use viewed it as justified only when it responds to market failures in a narrow sense (where the cost of locating the owner, negotiating a license, and enforcing it are higher than the surplus it generates), with the implication that improvements in the technology or organization of licensing would render it unnecessary (Gordon, 1982). Under this approach, fair use would be preferable to fair use (Bell, 1998). More recent thinking accounts for a richer concept of market failure, including failures that may arise from strategic behavior, imperfect information, the negotiating parties’ indifference to the negative or positive externalities of their activities, or the fact that some of these externalities are simply non-monetizable. This implies that even when licensing is feasible, fair use does not necessarily become futile (Frischmann and Lemley, 2007; Gordon, 2010).

The framework of incentives, relative capacity to utilize, and transaction costs is useful in explaining fair use. Because fair use may permit copying beyond the copying of facts, ideas, or insubstantial parts, its incentive-reducing potential is greater. Therefore, unlike the categorical allocation of facts and ideas to users, fair use analysis is more nuanced and detailed.

The US Copyright Act requires courts to consider several factors: (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work (Copyright Act (US) 1976, sec.107). In their analysis, courts have to determine whether the use is merely substitutive to the work or whether it is transformative. The more transformative the use is, the more likely it will be considered fair (Sag, 2012). It is easy to see why: if the use is for another purpose, it is less likely to function as incentive-reducing substitute, and more likely to increase social utility. At the same time, the more transformative the use is, the less likely it is that the owner would have an a priori advantage in exploiting the work for that purpose, or that the prospect of using the
work for that purpose would have been an important factor in the decision to create the work ex ante. Therefore, allocating that right to owners would merely increase transaction costs, impeding socially beneficial uses, without any meaningful countervailing benefits, while allocating those rights to users avoids that.

Lastly, transaction costs may be important for deciding how to allocate different uses between owners and users, and fair use analysis may factor them, albeit not always consciously. Thus, uses for research, education, criticism, and so on often generate substantial positive externalities that cannot be fully internalized by the users or may not be monetizable at all. For example, in a recent lawsuit brought by the Authors Guild against the HathiTrust, a collaborative organization of several major research libraries, the court found the defendants’ activities to be fair use (Authors Guild v. HathiTrust, 2012). The scanned books were used for three purposes: (1) creating a full-text searchable inventory of the works available in the libraries to enable new opportunities for research based on metadata analysis and data-mining; (2) preservation of fragile books; and (3) access for people with certified print disabilities. All of these activities generate substantial positive externalities that cannot be fully internalized by the users or monetized at all and, as the court found, do not deprive the copyright owners of any important revenue source, because high transaction costs would prohibit the formation of a viable market for such uses.

Whether the use is for commercial or non-commercial purposes may also indicate how wide the mismatch between private and social value is. As a rough approximation, in the case of commercial uses the gap may be narrower than in non-commercial ones. But this is only a rough approximation. For example, transaction costs may impede uses that depend on reusing numerous works even if the purpose is commercial. Likewise, even if users expect to profit from the use, innovative uses might be extremely difficult to contract about because of information asymmetries, strategic behavior, problems of bilateral monopoly, and other frictions.

In sum, fair use promotes competition policy goals from within copyright because it permits some uses that mitigate the static inefficiency that copyright might create, but, at least as importantly, because it promotes dynamic efficiency by carefully allocating usage rights on the basis of how such allocation affects the various parties’ incentives and capacity to innovate.

The First Sale Doctrine

One of the contentious issues in designing copyright and competition policies is the degree to which copyright owners can rely on their copyrights to impose and enforce downstream post-sale restraints. The issue arises in different contexts, for example whether copyright can be used to impose territorial restrictions and prevent parallel trade, whether copyright owners can prevent resale of used works by licensing them instead of selling them, or whether they should be permitted to maintain the retail price of their works. These debates often revolve around the doctrine of ‘exhaustion’, or ‘first sale’, which limits the exclusive rights that survive the initial authorized sale of an item protected by copyright.

Similar to fair use, the first sale doctrine can constrain the copyright owner’s market power by forcing it to compete, at the margin, with secondhand copies, borrowed copies,
or cheaper parallel imports, and it may reduce monopoly pricing deadweight loss by permitting those uses (Gordon, 1998). The first sale doctrine also promotes long-term dynamic efficiency because, while it may permit short-term restrictions agreed on between collaborating firms, it ensures that over the longer run intellectual goods can be freely sold and reused without being encumbered with restraints imposed by copyright owners (Katz, 2012).

The distribution of digital content has further complicated the application of the doctrine. One feature of digital content is that it can seldom be used without being reproduced. Consider the difference between a printed book and an e-book. The printing and initial distribution of a book would typically require the copyright owner’s permission. But reading it does not, because copyright does not include an exclusive right to read. Likewise, reselling the book, lending it, or giving it away requires no license because of the first sale doctrine. However, the digital equivalents of such activities involve numerous reproductions, permanent or temporary. For example, buying an e-book requires downloading a copy of it, and reading it requires making temporary copies on the computer’s random access memory and its screen. Being able to read the book on multiple devices and keeping it synchronized may require making additional copies on the device and on a cloud server. Copyright owners often claim that any of those acts is a reproduction for copyright purposes and therefore requires their permission. As a result, the distribution of digital content is often accompanied by contracts and licenses whose terms may permit some of those activities but not others. For example, the license may permit the user to download an e-book and install it on one or more devices for the purpose of reading it, but it may also prohibit transferring a copy to another person, or otherwise impose restrictions on how the content may be used. Digital content may be susceptible to another level of control implemented completely unilaterally through technological protection measures (TPMs), which may make it technologically impossible for users to use digital content contrary to the wishes of its sellers.

These phenomena raise several broader policy questions: Should the law treat analog uses and their digital equivalents differently, or should it be technologically neutral and focus on the economics of transactions and how they effectuate different users’ experiences, irrespective of their precise technological details? Should the allocation of usage rights between owners and users change when digital technologies are involved? What is the optimal mix of public and private ordering in this field, that is, to what extent can copyright owners modify that initial allocation through contracts, license terms, and TPMs?

ALLOCATION OF RIGHTS IN THE DIGITAL AGE

Answering these questions is not an easy task, because technological developments affect each of the three dimensions discussed earlier. Obviously, digitized content can be easily reproduced and distributed, raising the specter of copyright owners losing all control and any ability to recoup their investments. Intuitively, this would suggest that to preserve incentive sufficiency copyright owners should be granted greater powers. Yet technological change has also led to ‘a dramatic, and permanent fall, in the costs of production of almost all types of copyrightable subject matter’ (Pollock, 2008: 52), and has facilitated
the emergence of new user and open collaborative production (Benkler, 2007; Baldwin and von Hippel, 2009), suggesting that incentive sufficiency may be maintained even when rights allocated to owners are weaker.

Considering utilizing capacity also points in ambiguous directions. The digital revolution unquestionably opens new ways of utilizing works. Copyright owners may have comparative advantage in exploiting some of them (for example, commercial online distribution of newly released movies), whereas users may have comparative advantage in others (for example, commentary, fan fiction, mashups, or mass digitization projects for facilitating research and preservation). Transaction costs are also affected by technological change. A networked digital economy may facilitate transactions that may not have been possible before, but it cannot eliminate all of them. All of this suggests that what may be regarded as an optimal second best allocation of rights between owners and users in the analog world may not work the same way in the digital world.

The issue becomes more complicated because, as discussed in the previous section, whatever the initial allocation – as a matter of public ordering – is, digital technology provides copyright owners a greater opportunity to rearrange that allocation by different means of private ordering: contracts, licenses, and TPMs, potentially undermining copyright law’s public policy objectives (Radin, 2003). The three-dimensional framework discussed in this chapter can be useful for drawing the limits of private ordering in this area. It helps distinguishing between circumstances where socially efficient bargaining is likely, and the initial allocation of usage rights should serve only as a default to be later rearranged through the market, and those in which the law should be less permissive of such rearrangement, because externalities and other market imperfections would impede socially efficient bargaining.

FROM WITHIN OR FROM WITHOUT?

Assuming that allocation of usage rights between copyright owners and users is desirable, let us turn to consider whether such allocation should preferably be done from within copyright law or rather by imposing external limitation through competition law. Theoretically, optimal allocation can be achieved by granting broad exclusive rights to owners initially, while relying on competition law to prevent them from being used anti-competitively. Alternatively, copyright law itself may choose to allocate narrower rights to owners and broader rights to users.

At first glance, a competition law approach might seem preferable, because generally competition law requires fact intensive rule of reason analysis of a particular challenged practice and its effects in specifically defined markets. Copyright law, even when it engages in market analysis (such as in fair use analysis), does not require the same rigor (Lemley and McKenna, 2012). This could suggest that using competition law as the preferable policy lever would achieve more precise outcomes, compared to copyright law’s cruder analysis.

Nevertheless, competition law should not be seen as the preferable lever, because its methodology and procedures are ill suited for dealing with harm to dynamic competition and innovation that may result from copyright overreach. Methodologically,
competition law’s fundamental theory of harm is harm to static competition, not harm to innovation (at least not apart from harm to competition). Harm to innovation is inherently speculative and counterfactual: it is the harm resulting from the new ideas, products, and services that were not conceived or developed, and current competition law is ill equipped to analyze this harm in a manner sufficient to satisfy its standards of proof. Procedurally, competition law is complaint-driven. Even if its methodologies could develop to deal with harm to innovation, competition law cannot operate without a complainant. However, harm to dynamic competition and innovation can be diffuse and elusive; it may be suffered by many but no one in particular. This may lead to serious collective action problems and information gaps and asymmetries that limit competition law’s capacity to effectively restrain copyright overreach.

In contrast, the main advantage of relying on internal copyright solutions is that this method regulates some uses of existing works as commons. Although this might seem to create a pro-competition bias, as discussed above, rarely will the limitation on copyright cover acts that directly undermine the incentive to create by permitting substitutive competition. The advantage of this approach is that it allows future innovators to compete freely without seeking permission or lobbying for government or judicial intervention.

CONCLUSION

This chapter discussed the tensions between copyright law and competition and some of the ways through which copyright law itself works to advance competition policy goals. It showed how competition policy goals and anti-monopoly measures have shaped the design of copyright since the Statute of Anne, and how the first British copyright act sought to encourage learning by granting limited exclusive rights operating within a competitive market system.

As copyright has expanded to cover new subject matter and new uses, so has doctrine evolved to ensure that the copyright may not result in excessive static losses resulting from unconstrained market power, and will not create dynamic losses by hindering future innovation. The chapter demonstrated how the limited term of copyright, limitations on subject matter, fair use, and the first sale doctrine attempt to achieve those goals. It also showed how a three-dimensional framework, consisting of considering incentive sufficiency, relative capacity to innovate, and transaction costs, can explain some key elements of the law, and provide guidance in its further development.

The digital revolution that we are currently experiencing alters again the ways in which knowledge is created, disseminated, and controlled, and like the print revolution may also bring about significant economic, social, and political changes. Copyright, as one of the legal institutions that regulate knowledge, may advance some changes and hinder others. So far, most recent amendments to copyright statutes aimed at adapting it to the digital age have focused on strengthening the rights of owners, without sufficient attention to how users’ rights might be equally essential for achieving copyright law’s ultimate purposes. Reflecting on the history of copyright and its internal mechanisms may help us to better understand the role that it should have in shaping our digital future.
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**Statutes and Law Cases**


Copyright Act, 1976 (US).


Statute of Anne, An act for the encouragement of learning, by vesting the copies of printed books in the authors or purchasers of such copies, during the times therein mentioned. 8 Anne c.19, 1710 (UK).

**FURTHER READING**

I have discussed copyright and competition policy in several of my previous writings. For example, in Katz (2009c), I show how time changes the relative importance of static competition and dynamic competition over
the lifetime of works, and how it may justify adjustments in the scope of copyright protection even within the term of protection. In Katz (2005a), I show how piracy may not always be detrimental to copyright owners, and how tolerating it has been a method for obtaining market dominance in the presence of network effects. This counterintuitive aspect of piracy has also been identified by Takeyama (1994), and Conner and Rumelt (1991), and is part of a larger literature on indirect appropriability (Liebowitz, 1985) that has identified that unauthorized reproduction may at times be beneficial to copyright owners, and to innovation (Raustiala and Sprigman, 2012). For a more skeptical view by one of the founding fathers of this literature see Liebowitz (2005). An area of perennial tension between copyright and competition policy that I have not discussed in this chapter is collective administration of copyright. Readers who are interested in a skeptical view about the practice are encouraged to read Katz (2005b, 2006, 2009a, 2009b, 2012). In Katz (2012), I discuss the first sale doctrine in greater detail, in Katz (2013) I discuss fair use and fair dealing, and in Katz and Veel (2013) my co-author and I discuss how the US tends to incorporate competition policy goals within copyright law while the EU has opted for greater reliance on competition law as a means for addressing copyright overreach.