

Copyright in the Digital Age: Key Economic Issues



BY DR. MICHAEL MANDEL

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The bounds of traditional copyright are being stretched and broken by technological change. The ease of digital copying, combined with new forms of creativity and production, including 3D printing, is transforming the copyright landscape at an accelerated pace.

Creators, companies, and governments need to think clearly about which goal or goals of copyright is the most important to them, and move towards a system that supports those goals. Speaking in the broadest terms, copyright establishes the right of an author or creator to control and benefit from his or her artistic endeavor. Yet what is society trying to achieve by granting such a right?

There is no better time to consider this fundamental question. The European Commission, under President Jean-Claude Juncker, has put a high priority on creating a Digital Single Market, which among other things would replace national copyright systems with a single EU system. Meanwhile, over the next several months, the European Parliament will be considering a draft report that offers up its own version of an EU-wide copyright system.

Simultaneously, American and European T-TIP negotiators are talking about how to harmonize intellectual property protection across the Atlantic, which could affect copyright as well. And national governments in Germany and Spain extended their copyright systems in recent years for the explicit—and ultimately unsuccessful—purpose of charging Google News and other sites a fee for running snippets of stories from national newspapers. In Germany, newspapers ended up giving Google the right to run snippets for free, despite the new law, because the traffic from Google News was so valuable that newspapers didn't want to lose it. The law in Spain, by contrast, didn't allow the fee to be waived, leading Google to close down the Spain version of Google News rather than pay the fee.

The debate over whether newspaper publishers can impose a fee on search engines is just a small piece of the range of copyright issues. What's on the table is a veritable smorgasbord of approaches to copyright: Size of penalties for copyright violation, breadth of fair use, length of copyright, attitude towards linking, cross-

border licensing, definition of illegal copying, exemptions for libraries and schools, and ‘moral rights’ for authors, which is the European term for the maintaining the integrity of a creative work even if the economic rights have been sold. What’s more, as we will discuss below, the rise of 3D printing—with all the specifications of an object contained in a digital file—offers an entirely different twist that could irrevocably alter copyright rules.

But since the battle over the next era of copyright is really now only getting started, it’s still too early to discuss details of particular proposals. In this essay I will ask some fundamental questions of the economic purpose of copyright. In this way, we can perhaps gain some insights into how copyright can be modified to best deal with today’s rapidly changing technological and economic environment, and adapted to deal with the needs and preferences of different countries.

Copyright can be said to serve one or a combination of three possible economic purposes. These are:

- To promote the creation of new artistic works
- To allow creators and authors to benefit from their artistic endeavors
- To stimulate jobs and economic growth

These goals do not necessarily conflict with each other. However, they do imply distinctly different approaches to building a copyright system, especially as technology changes.

Consider: In the United States, the historical purpose of copyright has been to promote the creation of new artistic works. That principle is enshrined in the Constitution, which aims 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.

By this principle, a copyright system should be judged by the flow of new books, music, movies, and so forth. This is not an easy criterion to track, since we need to measure both quantity and quality of artistic works.

One of the big issues has been whether a copyright system that allows digital copying reduces the incentive of authors and musicians to produce books and music. The answer appears to be no: Novos and Waldman (2013) note that “there is little evidence of a significant reduction in the creation of new music or books which are two of the types of original works where digital piracy has been significant.” Similarly, Handke, Girard, and Mattes (2015) observe that “there are no studies as yet that indicate a negative effect of digital copying on the quantity or quality of new works supplied” (translated from German).. And Waldfoegel (2012) notes that there is “evidence that the quality of new recorded music products has not fallen—and may well have risen—in the decade following Napster.”

However, studies show that right holders do have their income reduced by unauthorized digital copying. And that bears on the second possible purpose of copyright—to ensure that the production of creative works benefits authors and creators, or the assigned rights holders. This purpose of copyright was stressed in the seminal 2001 EU copyright directive, titled “on the harmonisation of certain aspects of copyright and related rights in the information society.” This directive, which has governed EU copyright policy for the past decade, gives heavy weight to the “marketing” and “exploitation” of creative content.

The influential 2011 European Commission report “A Single Market for Intellectual Property Rights” stresses the need to protect benefits to rights holders:

“Authors and other creators expect a fair return for the use of their work, be they books, newspaper articles, sound recordings, performances, films or photographs. This is also true of publishers and producers who provide investments to produce and disseminate creative works. The potential exists to increase authors' and creators' returns if a proper copyright environment facilitates the licensing and the dissemination of works in a digital single market.”

A copyright system that maximizes returns to authors and creators might not maximize the production of new artistic works. Handke et al note that “a strong copyright protection makes it more expensive to build on existing works or to develop new forms of distribution”(translated from German).

In a relatively new development, the copyright system has been justified in recent years on the basis of the jobs and incomes growth. The 2011 European Commission report previously mentioned had the subtitle

“Boosting creativity and innovation to provide economic growth, high quality jobs and first class products and services in Europe.”

A 2013 study, for example, identified 9 million direct and indirect jobs in the European Union created by copyright-intensive industries. (European Patent Office and Office for the Harmonization in the Internal Market, 2013).

However, there is no evidence directly relating characteristics of a copyright system to its ability to produce jobs and incomes. Consider the copyright on the script of a popular television show in France, for example. The rights holder might decide that their profits are maximized by having the show only produced in French. But if it was licensed more broadly, there might be local versions produced in other countries using local crews, creating jobs all across the EU.

In general, while these three goals—creation of new artistic works, rewarding authors and creators, maximizing jobs and incomes—are not necessarily conflict-

ing, they are also not tightly linked to each other. A copyright system that maximizes earnings potential for creators need not be the same as one that maximizes the future production of creative works. Similarly, a copyright system with a broad policy of fair use may or may not maximize jobs and income.

What's more, the current disputes over copyright may be minor compared to what is coming with 3D printing, digital scanning, and the Internet of Things. In theory, any object can be digitally scanned, reduced to a digital file, and then recreated identically by a 3D printer. Suppose you scanned a decorative vase—is the digital file covered by copyright, even if the original object was not? Suppose now that you wrote a book, consisting of only the digital instructions required to generate the vase from a 3D printer—is that file covered by copyright?

Thus copyright intersects with manufacturing and retailing, which typically employ far more people than cultural and creative industries. The question then becomes: What are the copyright rules that maximize the total value added produced by manufacturing and retailing in a country? This is very different than the traditional arguments over copyrighting artistic works (although the ability to download a file that allows you to create a perfect scale replica of Michelangelo's David has the potential to transform Europe's cultural industries as well).

Nobody can predict how copyright law is going to change next, either in Europe or the United States. But in order to navigate the coming changes, we need to have a better idea about what goals we are striving for.

References

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