

BOOK REVIEW

THE FUTURE OF IDEAS

by Lawrence Lessig

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The explosion of creativity centering around the Internet has been phenomenal. New business methods and processes have been developed; new means of transferring information, such as Napster, have arisen. The Internet has allowed software like GNU/Linux developed under a "free software" philosophy which scoffs at traditional ideas of intellectual property protection to flourish.

Lessig, a Professor of Law at Stanford Law School, argues that the environment which spawned this creativity arises because the Internet is "commons", which, like common land or the highway system, is potentially available to all on an equal basis.

This has arisen partially because the architecture of the Internet is such that it is an "end to end" system, meaning that its sole role is to deliver intact a packet of digital information from one address to another. Aside from the fact that more money buys you a bigger pipe onto the system, any user's packet has a right to make it to its intended address as anyone else's. There is no discrimination shown in terms of the identity of the sender, the nature of the information, or its importance. In a sense, the Internet is a very dumb system in that this is all it does. All of the intelligence is contained in the computers at the edges of the network. This makes the system phenomenally versatile, in contrast to the telephone system, where the intelligence is centralised in the telephone exchanges. The telephone system is good at transporting voice information from one place to another, relatively poor at transporting data from one place to another, and totally useless at doing anything else. The potential applications, however, of the Internet are limitless.

The other reason for the explosion in creativity is that this freedom (to quote Richard Stallman, in the sense of "free speech, not free beer") is part of the philosophy of the Internet. A great many people have sympathy with this view, without really having an understanding of the fundamental economic and philosophical arguments behind it, and Lessig's book convincingly addresses these points head-on, and argues that this freedom is rapidly being eroded.

In Lessig's view, this explosion of creativity is already being severely dented by the activities of big business, in combination (although not necessarily collusion) with the regulatory activities of governments throughout the world. Creativity is stifled further by developments in terms of the way that the Internet operates on the technical level: for example, the next generation Internet protocol (IPv6) will enable packets to be prioritised in terms of, for example, the sort of information which they carry, and Lessig argues that this prioritisation of access will be a hindrance, and possibly even a barrier, to innovation.

In pure economic theory, the fundamental point of intellectual property law is to provide a limited monopoly to inventors, just sufficient to give them the incentive to invent, without restricting others from using others' ideas to build upon. No idea has ever been

created in a vacuum: Isaac Newton's assertion that his work was built upon the shoulders of giants (a sentiment echoed by the rock band Oasis) is universally true.

The economic and social purpose of intellectual property law is to strike a balance between enabling this information to be free in order to maximise innovation, while at the same time providing sufficient incentive by way of locking competition out (to enable non financial returns) to spur enable inventors to invent. The existence of a gamut of intellectual property laws suggests that this balance should be struck very differently in different circumstances. There is also the fundamental question as to whether the granting of a virtual monopoly is necessary to enable creativity to exist in the first place. Lessig quotes the first ever Commissioner of the US Patent Office, Thomas Jefferson, an outspoken opponent of the future basis of patent protection. There is of course an argument that patents are more appropriate in some market sectors than others. For example, it is much easier to argue for their existence in the pharmaceutical industry than it is in software industry (where, for example, Douglas Brotz from Adobe Corporation is quoted as saying that software should not be allowed patent protection at all).

Of course, there is an extent to which the creative process is severely hampered by intellectual property law, and that is in terms of barrier to entry. For example, until recently, computer programmers always believed that as long as they were not copying the source code of software from elsewhere, that the software they produced would not be infringing anyone else's rights. The slow but inexorable introduction of software patents, first in the US and now in Europe, has put paid to that. To ensure that they are not infringing third party rights, coders now have to undertake the arduous and expensive task of obtaining patent clearance in any jurisdiction which accepts software patents before publishing their software there. It is very difficult to establish a case that the establishment of software patents has any net benefit to either the economy or society. Surely, copyright protection is sufficient? The introduction of software patents provides marginal, if any incentive to companies to develop software, but provides a huge potential barrier to entry for programmers, especially those working on their own, which includes the majority of those working in the Free Software/Open Source movements.

Microsoft, of course, can benefit from this bias towards big business, and takes the view that it should embrace whatever standards are out there (ie take advantage of work that has already been done by others), and extend it (ie make it proprietary so that it can lock users in). It can then use intellectual property law to keep competition out. Of course, this is a very effective way of generating an enormous amount of wealth for Microsoft. Lessig gives pains to point out that this does not mean that Microsoft is morally flawed. On the contrary, it is fulfilling the obligation it has to its shareholders to maximise shareholder value, something it would be very difficult to deny it has been phenomenally good at. However, whether this is good for the economy, and humanity as a whole, is an entirely different question, which lies at the heart of Lessig's book. Interestingly, recent outbursts by Microsoft Chief Executives made after this book was published against the "virus" that is the GNU public general license ("GPL"), (which requires that software written using Free Software itself becomes Free Software) demonstrates Microsoft's understandable opposition to the free software movement, in that the existence of the GPL neatly throws a spanner into Microsoft's "embrace and extend" philosophy.

Lessig is at pains to ensure that his thesis is not placed at any point on the left - right continuum of the political spectrum. It is very easy to make the assumption that by advocating a serious reduction in the extent of intellectual property rights, he is attacking property in general, and is therefore somewhere on the left. However, the goal of his thesis is to maximise creativity and wealth creation overall, and he acknowledges intellectual property law and regulation does have a very significant and important role to play in this.

Lessig goes on to examine other commons, such as the use of the radio spectrum, where he advocates similar liberalisation, hastened by the development of technological measures, such as spread spectrum radio transmission and smart "software radios" (the former incidentally being co-invented by Hedy Lamarr the film actress), which enable devices to share spectrum much more effectively.

The book somewhat unsurprisingly has an American bias, being written by an American author based at an American university, but despite this Lessig shows a refreshing awareness of developments outside the US.

Unlike criminal lawyers or family lawyers, whose activities impinge directly on the most fundamental aspects of their clients' lives with every case they take on, intellectual property lawyers probably spend comparatively little time considering about the wider context of the work which they do. This book, in my view, should be compulsory reading for all intellectual property lawyers, and anyone interested in the inter-relationship between the law creativity, society and economics. It is masterfully written, densely argued and continually thought provoking. Like Richard Dawkins, Lessig pulls off the impressive stunt of making the reader feel a lot cleverer than he knows he really is. He also equips the reader with useful tools for thinking. Any IP lawyer will be a better IP lawyer after reading "The Future of Ideas".

Andrew Katz