Decentralized, Non-proprietary Knowledge Production

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In Yochai Benkler's The Wealth of Networks[1] he models his ideas of knowledge production on a "decentralized, non proprietary" ideal based on the way he understands the history of scientific work.

Benkler's model of knowledge production is what he calls "commons-based peer production" (Chapter 3). Commons is an idea that property is public (with various restrictions) rather than private. Benkler identifies four types of commons which are based on two parameters: common property open to all and unregulated; common property open to all but regulated; common property only open to a defined group and unregulated; and common property only open to a defined group but regulated. These different commons define the openness of the production community in both who the contributers are and how they can use and contribute to its property.

With this commons model in mind, Benkler makes the comparison of the peer-production of science to the production of other cultural goods. Scientific discovery is built on previous scientific discovery, and is done (for the most part) for the sake of science (ars artis gratia[2]) in collaboration, support of, or conjunction of other peers. In order to produce knowledge in this type of community, an awareness and understanding of all the other knowledge is necessary, which makes commons important. Having this resource allows production members to be more creative, which results in creative thinking, innovation, and knowledge production.

Creative thinking is perhaps a necessary precursor to knowledge creation. There are three basic principles which underlie creativity[3]. First, new ideas are composed of old elements. This is an important first step in order to gather background knowledge on a subject, and to also figure out if what is being pursued has been done before. Secondly, not all ideas are on par. Data is only knowledge if it is useful and meaningful. It is the same idea which supports copyrights; a good is only worth something if it is useful to someone. Finally, creativity is enhanced by the ability to detect connections between ideas. In the context of creating creative goods, Ben Shneiderman has also stated[4] that in order to be creative, you have to be aware of everything else out there. Being creative, or creating goods (all those things associated with creativity) is like traditional academics where the first step is to see what has been done and everyone else is doing (e.g., a literature review).

Many times the production of a new good or idea is not entirely original, but a reworking of an existing idea with a new twist or series of improvements. One of the best examples for this is from the business world. Amazon is perhaps the most successful online marketplace to date. However, it wasn't "first to market", as many may think to remember. Instead, it took what it saw its competitors do, improved on it and added their own twist. This has been a successful business model for many companies, and it is no different for the production of cultural goods. However, in our political-copyright world, it is easy to imagine the litigation Amazon would have gone through if it were a production good rather than a market.

The idea of creativity is well recognized in the scientific and artistic communities, however,

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1 Benkler, Y. (2006). The Wealth of Networks. Yale University Press.
2 Latin proverb. “Art for art's sake”, or, “Art for the sake of art”.
3 Creative thinking: Three basic principles. University of Hong Kong Department of Philosophy.
4 Shneiderman, B. (2006). Creative Support Tools: A Grand Challenge. Potomac Chapter HFES Meeting, October 18, 2006.

implementing the concept in more socially-centered productions such as music, video games, and entertainment art is much more difficult. For example, from what we've learned from Benkler's scientific peer-production examples and the principles of creativity, new goods are made from the knowledge of previous goods and often incorporate old ideas and methods in new ways. Therefore, in order to be a successful contribution, the creator must have access to previous work in order to be influenced in some way by previous work. In many cases, previous work is reinvented into new and more useful goods. The most relevant example of this is YouTube. Here is an environment which provides and promotes the release of culture. Popularity of some works could be in many ways judged by how well it inspires similar works[5]. Without this openness to build off of other's creations, innovation of new ideas is stifled. Needless to say that YouTube is a copyright holder's biggest nightmare, yet it has become one of the largest repositories and sources of inspiration for popular culture on the Internet.

It is strange how 18th century English Parliament and the authors of the U.S. Constitution understood how important it was to provide cultural goods to the public domain, however innovation continues to be stifled by unreasonable patents and copyright laws. The public seems to prevail, even illegally, in order to continue creating new goods for the good of all. Benkler illustrates this well in his thorough example of the Free/Libre/Open Source Software communities, NASA's clickworkers experiment, the success of Wikipedia, and virtual communities such as Second Life. These projects have been able to overcome politics of control and property and provide open, creative, and useful products.

5 Sjoberg, L. (2006). Cats do their turn on the catwalk. Wired Magazine, October 18, 2006. http://blog.wired.com/tableofmalcontents/2006/10/cats_on_treadmi.html