University Seminar in New Media Teaching and Learning
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Open Collaboration and the Networked Environment
Applications to Education
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Yochai Benkler, Professor at Yale Law School discussed topics from his newly published book, The Wealth of Networks: How Social Production Transforms Markets and Freedom. His book considers commons based peer production and its potential impacts on social change.

Professor Benkler began by discussing the radical decentralization of the physical capital necessary to make and distribute information. He noted that one billion people have the physical capital to create knowledge. Everyone in the world that has access to a computer and Internet connection is now a potential contributor. Access to networks and knowledge make it easy for individuals to contribute to the general knowledge in the world, and these interactions are creating a significant social impact.

Benkler then introduced commons based peer production, which is the idea that a large number of people can make small contributions to complete a large project. He asserted that peer production occurs outside the boundaries of traditional economic frameworks, as it happens without exclusion. Anyone with the tools to participate can contribute and become an actor in social change.

He continued, stating that new economy is moving swiftly towards peer production and then compared it to the traditional market economy. Professor Benkler stated that collaboration amongst human beings is growing and people are now able to create information goods without price signals and managerial commands. This demonstrates the difference between the traditional market economy and the economics of commons based production because it is more focused on share-ability of goods and material resources.

Professor Benkler argued that by permeating the boundaries of the firm, the issue of knowledge production is solved. In the traditional economy, there is a question of how to prioritize data and allocate resources. This is not a problem with peer production because contributors work on what is relevant to them, as per the decentralized nature of peer production. Moreover, individuals do not require permission to act, as there is no concept of property or permission, which means that information can move freely and with expediency. Professor Benkler maintains that the new labor force made up of decentralized volunteers poses major threat to traditional companies who fall into the

existing economic and social structure. A prime example of this is Linux, an open source platform that is created and maintained by volunteers. This product directly competes with market-based products like Microsoft and IBM, and is now being more commonly adopted.

He then went on to describe the elements required to successfully execute commons based peer production, which are modularity, granularity and an integration platform. He explained that in order to solve a problem using peer production, it needs to be broken up into logical modules and the modules need to be chunked down to the smallest workable components. Finally, the integration platform needs to be flexible and open source, so that everyone can contribute.

He concluded this section by discussing new trends that were emerging as a result of the flexibility of social production. One notable example is that the BBC network now asks individuals to contribute pictures, video or commentary on stories where they do not have a news crew. Professor Benkler notes that this would not have been possible before, however, social sharing and exchange are beginning to take root in our culture and does allow for this type of interaction.

He moved onto talk about the political implications of commons based peer production. Benkler recounted how a woman named Bev Harris discovered source code for voting machines in Georgia, on-line. She did not have any resources but was able to utilize the Internet to leverage her peers to help investigate the issue. Eventually it was determined that election voting machines used in the 2002 Georgia elections were not correctly certified and they were decommissioned. Even though this was only determined a year later and did not change the outcome of the election, Benkler felt it was still a triumph of peer production. This instance demonstrated the power of information sharing, as it was not possible for authorities to shut people down or suppress information once it was out.

Professor Benkler closed with a charge to the audience to think about ways in which peer production could be applied to education. He remarked that new social exchange allows for debate, collaboration and innovation, which are also components of the educational process. He talked about the remix culture and the re-emergence of a new kind of folk culture that is growing as a result of the new social exchange. Finally, he asked the audience to work with students to get them to engage in peer production by asking them to coerce students to learn by doing.

At the end of his speech, Professor Benkler took questions from the audience. A number of audience members asked questions about how to reconcile the distinct differences between the traditional educational model that focuses heavily on individual knowledge creation and accomplishment, and peer production that promotes knowledge sharing and collaboration. The Professor agreed that it is not easy to break from typical conventions, especially in a university setting. However, he mentioned that there have been some successes like at the Human Genome Project, which benefited from modularity. The scientists modularized their project and were able to use each individual's incremental finding to map more of the human genome, which resulted in a lot more productivity and

collaboration. He also mentioned that there are now people trying to develop software that would help to document smaller contributions, so a balance between the with academic institutions can be established, where individual accomplishments are noted, but projects can also continue to progress.

Another example Professor Benkler mentioned was the Public Library of Science, which is an online journal that publishes a breadth of science articles, but is completely free and provides users with the ability to download and distribute any of their articles, so long as they are cited. This provides students with the ability to contribute to a reputable publication, while participating in knowledge sharing. He says that this is becoming more commonplace in the science world. He did not assert whether this is true across all academic disciplines.

The Professor was also asked about what other elements were require for commons based peer production to be successful, with respect to academia. He mentioned that it was important to have the ability to have both synchronous and asynchronous communications. He cautioned each of them is appropriate but not identifying this up front could negatively impact a project. He talked about the project Second Life that benefits largely from synchronous communications.

The final question of the evening centered on whether this social movement was unique, and what if any legacy does this movement have. Professor Benkler ended stating the following, "What makes this movement unique – I am borrowing Jamie Boyle's stuff; this movement is setting the competition for media, Hollywood, etc. it is limiting the amount of moves. You see surprising alliances, however that is not unique to this social movement. Is the global aspect of it new? Not necessarily new, but it is now, it is our movement now."