Vortrag auf dem "2005 Left Forum" in New York (15. – 17. April 2005) im Rahmen des Workshops "The Digital Commons as a Public Good" (http://www.2005leftforum.org/testing/program.htm)

"Digital Goods and the Concept of the Commons"

What are digital goods, what's special about them?

Digital Goods are a combination of signals, electronically represented as 0 and 1. As such they build a system of information which can express different contents, for example music, texts, pictures, numbers or algorithms. The existence of such immaterial content is not new, but rather the form in which it can be expressed now. So, a digital good is a result of the developement of the information and communication technology. The new quality of this technology is that not only can the information be transformed into data, but it can also be sent through the world wide internet and it is a characteristic of these goods that they increase and don't decrease when they are passed on. What I want to say is that they double when reproduced which is normal in copying processes but in the case of digital goods they double without a loss in quality and they double to almost zero costs. One can say that through the new technologies the productivity in reproducing information could be raised dramatically - supply is potentially infinite.

This is an enormous potential for big gains for the so called content industry. And since the internet is open to commercialization there is a growing tendency to commodify digital data: There is a push to sell music as single tracks and text as single papers or as e-books. Newspapers demand fees for the access to their archive and even to actual single articles, just to mention a few examples.

Because of the commodification and the restrictive protection of digital data, people fear the undermining of the fair use doctrine, the limitation of the first amendment and a "copyright imperialism" initiated by big content industries. They claim "Information wants to be free" and they claim open or free access to information.

This is where the concept of the commons or puplic goods comes into place.

Protagonists of the fight for an more open information structure like Larry Lessig, Yochai Benkler, Jessica Litman or David Bollier and many more activists refer to this term in a positive way. This choice of language wants to express the normative position, which claims that certain goods should not be privately or exclusively owned but should be open to all. The so called *digital commons* or the *information commons* appear to be an idea about democratic processes, freedom of speech, free exchange of information, more creativity, more efficiency and last but not least more social equality. But the definition of the commons or of public goods - which is often used synonymously - is diffuse.

Ambiguities: The concept of the commons / public goods

The concept of public goods stems originally from economic science, therefore two criteria must be fullfilled for the definition of a public good: non-excludability and non-rivalness in consumption. This pure economic approach is contested. First of all if you look at the examples, there aren't many of these so called public goods. The sunset is such a public good, the national defense is to be considered a public good and the classic example is the light house: You can't exclude ships from using the light of a lighthouse - when one ship is using it, another ship doesn't loose anything. The material characteristic of the light - the fact that it is not excludable - is the reason why the private sector can't marketize these things. But at the same time the lighthouse-service is needed. So to overcome market-failure the state is seen as responsible for providing the public good.

Scholars and activists would like to get rid of this strict economic determination of what a public good is. They transform the concept of public good into a political term by emphasizing that certain things *should be* a public good. But still they choose the desired public goods along material criteria: mainly natural resources should not be owned exclusively.

The term "commons" stems originally from the social ecology and is likewise related to nature, like water, air, sun, forest, lakes, and so on. It is nowadays applied to information. Yo-chai Benkler developed the thesis to invent an information protection movement like the environmental protection movement. What free access to air means to breathing, is comparable

with what free access to information means to creativity and therefore to the development of human beings. That's basically the argument.

There are many attempts in literature to define commons or public goods. Ostrom and Hess for example distinguish from public goods what they call "common-pool resources". They draw a line between the two along the criteria of non-rivalness in consumption. See the table.

		SUBTRACTABILITY	
		LOW	HIGH
		public goods	common-pool resources
	DIFFICULT	sunset common knowledge	irrigation systems libraries
7		toll or club goods	private goods
EXLUSION	EASY	day-care center county clubs	doughnuts personal computers

From: Ostrom, Elinor and Hess, Charlotte: Artifacts, Facilities and Content:

Information as a Common-pool Resource, 2001

According to this table, private goods are not difficult to identify, private goods are subtractable and one can easily exclude people. The confusing thing to me is that the model on the one hand relies on technical and objective criterias, which indicates that it must be a static model: Just look at the material consistence of the good and you can put it in order. On the other hand, it is not at all a static one but a dynamic.

The lack of distinction between content and form

This model like most definitions is confusing, because it doesn't distinguish strictly between the social form of a good and its material consistence. A library for example can be transformed from a common-pool resource into a private good. The excludability in this case is not at all a technical term, a natural thing inherent in the good itself, but a result of certain social relations. One can install an entrance for the library, one can demand a monthly member fee or whatever. It is technically no more difficult than excluding people from a private swimming pool. The criteria of non-rivalness in consumption is also not a fixed one, it changes gradually dependent on the amount of users and on the social context in which it is used. Air is for example often called a public good, but imagine a crowd of people in a room, you will soon feel how subtractable air can be. Both criteria – exludability and subtractability - are neither static nor objective.

That doesn't mean that the technical criteria plays no role. There are of course technical hindrances to exclude people and there are differences in non-rivalness in consumption – but these characteristics play a different role under different social circumstances and could therefore not be considered outside a social context - as an isolated, independent and for-ever-valid natural or technical state of their being.

Let's look at it from the other side: One can also imagine that a private good is transformed into a public good. For example, when an owner of a private beach opens his gate and no longer takes an entrance fee. Or a little bit more difficult to imagine: all the people involved in producing a doughnut (a typical private good according to the table above), for example the farmer who produces the flour, the farmer who cultivates the sugar beet and the cocoa bean, the workers who process the sugar, the baker who is baking the doughnuts, and so on. Imagine all these people decide to produce the doughnuts in a collective action and put them in a common pool freely available for everyone. Imagine one could find them at every place free of charge to take away (just imagine!) like strawberrys on a wild field. This would be a so called public good too – wouldn't it? This may be an extreme example - but anyway.

Taking this as the starting point and as the usual practice, one could say: Wow, it's difficult to exclude people from the doughnuts. We would have to build at every production location level-crossing barriers, fences, sealing offs, locks at the doors, bars at the windows. Not to mention organize workers control so that nobody distributed the doughnuts free of charge. And on top of that, we would have to engage a security service to survey the selling. And we would have to make laws and to build jailhouses for people who still would try to get the doughtnuts for free. Basically we would have to install what I call the "architecture of private property" keeping the demand from the supply to create scarcity.

We already know this architecture for centuries, we're used to it and furthermore it is not necessary to install this architecture from scratch as it is for the free data flow of digitalized information.

Remember the argument that private goods are private ones, because they are excludable and subtractable. I would turn this explanation around and say, that goods are private goods, because it is their social form which they can get in a certain society - namely in a capitalist society. And I would add that in capitalism – sure - the easier it is to exclude people from the usage of things, the more likely it is that they are to be transformed into a private good. It needs special social techniques to bring goods in the social form of private good - above all force.

It's part of Karl Marx's theory that one has to distinguish the social form of a thing from its material consistence. The social form of a good in the capitalist society is the commodity-form, it is the carrier of the exchange value. In addition a commodity has a use value – which refers to the material consistence. As Marx pointed out: "As use values, commodities are, above all, of different qualities, but as exchange values they are merely different quantities, and consequently do not contain an atom of use value." According to Marx, the commodity form is ignorant toward its content. That means that given the appropriate technological and legal means, every content could be commodified.

content and form of digital goods

Let's apply these findings to the so called digital goods. According to the table above, common knowledge is a public good. What happens, since the internet is open to commercialization, is a growing commodification of digitalized knowledge. In this process different levels are involved:

Create awareness (ideology, consciousness)

Campaigns are being organized that aim at creating and increasing awareness among innocent consumers where with every download of a copyrighted piece of music for example, they contribute to the end of civilization as we know it. Michael Lehmann, a german professor

working on copyright issues, maintains that: "indeed a specific awareness of doing something unlawful needs to be culturally developed in the sense that 'Those who reproduce content illegally, steal, and those who distribute content unlawfully, are thieves." In the last two years the campaigns have been getting harsher, e.g. one campaign organized by the film industry brands copiers as criminals.

Technology

On the technological level, the number one strategy is to develop copyright protection technologies like the so-called Digital Rights Management (DRM) systems. These are software implementations that can control the distribution chain of digital goods from the producer to the user according to the specific needs of a particular business practice. One can sell and protect a piece of text or a music track and technologically prevent people from copying it, perhaps more than one time or not at all so that distribution to friends or relatives - permitted by the fair use doctrine - is not possible anymore.

Government measures

These technical and ideological measures are supported by state legislation. Examples are the DMCA Digital Millennium Copyright Act (US) and the European Directive on Copyright that is in progress to be put into national law. Central to both is that circumvention of copy protection techniques is made punishable. The creation and distribution of software that can avoid and undermine legal copyright claims, is made illegal.

This is just a very short selection, but one can see that a whole lot of measurements are needed in order to establish the "architecture of private property" for a - according to the table above - originally public good.

The general common conditions of production

Why goods are public goods has, according to Karl Marx, and even to Adam Smith not a highly normative but a functional reason. According to Adam Smith, some goods "which though they may be in the highest degree advantageous to a great society are, however, of

Lehmann, Michael: Digitalisierung und Urheberrecht, in: Lehmann, Michael (ed.): Internet- und Multimediarecht (Cyberlaw), Stuttgart 1997, pp. 27.

such a nature that the profits could never repay the expenses to any individual or small number of individuals, and which it therefore cannot be expected that any individual or small number of individuals should erect" (Smith 1776/ 1976, Buch V: 244). Therefore public goods are necessary to relieve commerce.

Similar but without an affirmative relation to market and commerce, Marx states that the commons are general conditions of production and that they are only funded by the government as long as it is not profitable for the capital to supply these goods (Marx 1857/58, 1953: 432). If the single capitalist doesn't invest in general conditions of production like railroads or telecommunications and so on, than the government has to pay for it and by doing so he acts like the "ideal collective capitalist" as said by Frederick Engels.

But when the investments are already made, then it is possible for the government to privatize public goods with the goal that the private companies now provide these goods in order to make profit. Recent examples for this strategy are the privatizations of telecommunication or utilities companies in Europe. As Marx noted, there is a tendency inherent in capitalism to transform all of the labour in labour of which capitalists can reap surplus - meaning to privatize companies and make them accessible for capital accumulation. The recent development of privatization of the common or public goods worldwide indicates therefore that capitalism is in a new state of it's historical development.

Conclusion

A lot of scholars and activists don't question the social form of the private good - in contrast they praise the market and the form of the private good as efficient and well installed – for certain goods. Accordingly, most of the advocates of the commons concept defend it only for certain goods and they justify that with a diffuse mixture of material consistence and normative claims. They ignore that under capitalist circumstances public goods are functional for the capital itself and that they are a pure social construction, so that they will be transformed in a private good as soon as its profitable for capital and as long it is not in the interest of the nation state to keep control over these goods - as it is the case in the national defense.

If one wishes to withdraw goods from commodification then its better not to justify that with any material consistence but rather with a clear political statement against the social form of private goods. That requires rethinking and questioning this form, which is obviously the prevailing and seldom challenged form in which everything tends to transform, dependent on technological, legal and ideological means and dependent on the state of the art of capitalism.

Or to come back to the doughnuts example with a german quote from the early seventies:

"We don't want just a few doughnuts, we want the whole bakery"