

“Digital Property”
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Digital Goods: What's it all about?

My topic was announced as “Digital Property” and you will already know that it deals with the issue of property since the rise of the Internet.

At first sight the Internet seems to question the existence of private property. This causes different reactions: improving copyright (the not very surprising “bourgeois” reaction) versus the promotion of “copyleft” and “free software” (seemingly an “anti-bourgeois” reaction)

In the following I will sketch these positions and then I will criticize the common presuppositions of both positions. At the end, I will give an outlook on new trends of capitalist modes of production and the usage including the mode in which free software is produced.

The Internet is a medium, and as such it is also a huge copy and distribution machine. That doesn't sound quite as thrilling as “information superhighway” or “Cyberspace” or “virtual world” but well – it's a functional definition.

What can be copied and distributed? As the German newspaper “Frankfurter Allgemeine Zeitung” put it briefly and precisely, “products made up of matter cannot be sent as data”. But everything else can: Sound, text, picture and algorithms (software) can be expressed as digital data.

It is characteristic of these digital goods that they increase and don't decrease when they are passed on – they double when reproduced, and they do that without a loss in quality.

The best-known phenomenon of digital distribution is the music exchange system Napster. It wasn't until the headlines produced by the Napster case that the problems posed by digital property have gained wider public attention.

So, what is the problem? To put it briefly: On the one hand, people see the ability to commercially exploit digital goods called into question and propose a stronger copyrights regime. They fear the end of private property and the downfall of Western civilization in general.

On the other side is the “Copyleft-movement” that rejects a restrictive property regime on the net. “Information wants to be free” is their slogan.

Before I examine these positions in detail I want to draw a distinction between two kinds of goods: on the one side there are those that only appear as part of a whole product and don't have to be exchanged directly for money, that are (or can be) free; on the other side there are those that are meant to be traded for money and thus have to (or should) be charged for. Also to be taken into account is the vast amount of digital goods that are produced on the basis of “voluntary work” or with public money at universities and in the context of research and development in general.

An example:

1) The online-edition of a newspaper can be seen as part of a bigger product, namely of a “modern” newspaper.

Or take the free distribution of Adobe's Acrobat Reader – the firm creates a network and sets a standard that allows it to sell more Acrobat Writers. Here, the free distribution of a digital good creates opportunities for the realization of a profit that are part of a whole product that is being produced according to standard capitalist principles – even if a part of it is being given away.

In this case, digitalization doesn't pose a property problem for capitalism at all, only problems that also exist in the analog world. Advertising and marketing strategies are always investments that pay off or fail. That a host of

online-newspapers had to shut down or cut down on their workforce is not due to their material - as opposed to digital - constitution but to their lack of profitability.

2) The second case is more interesting: A song by - let's say - Madonna is produced exclusively for the commercial market. It's meant to be sold and this is probably more difficult when you can download your free copy from Napster or one of its successors.

The production of goods in capitalism – if we disregard hobby and voluntary modes of production – always serves two purposes:

- production for the market, for the realization of a profit
- production for use (in order to be exchanged, a product needs a use)

A good has thus a double character – and this also applies for digital goods:

Considering that the Madonna song is now available free and everywhere on the net, that it is thus not subject to the owner's discretionary and exclusive power of disposition, its value cannot (or only with considerable effort) be realized.

The technically feasible distribution of digital goods constitutes thus at the time being a dysfunctionality for capitalist exchange. The problem can obviously or apparently (this is the contested point) only be solved by restoring the exclusive power of disposition over digital goods, i.e. by securing property rights over digital goods.

Enclosures in Cyberspace

Actors

With digital goods circulating freely on the internet, the actors that have an interest in the exploitation of these goods are fighting over the exclusive power of disposition over them. Among them are:

- the content industry: publishers, record labels, the film industry
- lobby groups, collecting societies
- artists (e.g. Metallica, Die fantastischen Vier)
- the state.

Apart from those with a practical interest in the matter, there are other actors arguing in favor of copyright protection on a theoretical level, among them economists, jurists (law scientists) and journalists.

The Argument

What is their argument? In a nutshell, the proponents of copyright protection regard private property protection as the basis for innovation (this also signifies, of course, that without copyright protection there wouldn't be content on the net), i.e.:

intellectual property rights lead to efficient economic activity, and this serves the common good. It's the classic argument: An efficient economy is somehow equated with economic growth which is supposed to lead to more employment and to a better supply of goods and this in turn is equated with the common good.

[this is typical of bourgeois discourse: individual interests are presented as being in the interest of the common good.]

Measures to enforce property rights

The above mentioned actors try to safeguard intellectual property rights on different levels:

- Create awareness

Campaigns are being organized that aim at creating and increasing awareness among the simple-minded consumers that with every download of a copyrighted piece of music 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 of 'Those who reproduce content illegally, steal, and those who distribute content unlawfully, are thieves.'"¹

- 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.

[But also copy protection techniques like adding useless bits of information to music CDs in order to make it more difficult to read them into a computer, are among the highly controversial technical measures (controversial because older CD players can also have a problem with these CDs).]

- Legislation

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 has yet to be put into national law. Central to both is that circumvention of copy protection techniques is made punishable. More precisely, the creation and distribution of software that can avoid and undermine legal copyright claims, is made illegal.²

[Obstacles

It would be a topic in its own right to discuss whether copy protection technology can be effective in the first place. Some people say that copy protection basically isn't possible because the data has to be available unencrypted at some point in order to be consumed. And this in their view makes it possible to reproduce and upload them on the net. Other difficulties arise in the context of legal enforcement and user control.

At present, everybody who wants to, can – with a little know-how – get pirated software on the net or from friends etc., or you download a key that cracks shareware-products and extends their life-span beyond the trial period.

To sum up, it is difficult to secure property rights effectively on the net against uncontrolled distribution and use. Until now, Lawrence Lessig shows convincingly that this can change.³

The origins of Copyleft

On the other side of the spectrum, the 'freedom fighters' of cyberspace proclaim that "information wants to be free." The slogan originates in the hacker movement and is older than the public debate on digital property.

Programmers were the first to realize what it means when electronic data is subsumed under the exclusion principle as a means of the realization of a profit.

In the beginnings of the computer industry business was restricted to the sale of hardware and technical support. Software was a by-product, then it was no problem to exchange software to jointly work on it. This got more difficult following the introduction of restrictive licenses on software. Proprietary software emerged where the source code – a program's man-readable language – was held back, in a way like a company secret.

The consequence was that programmers couldn't improve on and develop proprietary software.

Richard Stallman, programmer at MIT and today's guru of the free software movement, was understandably annoyed and lamented the end of the glorious days of freedom⁴ and open cooperation in software development.

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

2 DMCA, 17 USC §1201, also the European new copyright directive, see article 6 (http://europa.eu.int/eur-lex/de/tif/dat/2001/de_301L0029.html)

3 Lessig, Lawrence (1999): Code and other laws of cyberspace, New York, NY

4 See also Meretz, Stefan: LINUX & CO. Freie Software – Ideen für eine andere Gesellschaft, at: <http://www.kritische-informatik.de/fsrevol.htm>.

He founded the Free Software Foundation,⁵ launched the General Public License (GPL) and coined the term "copyleft" as opposed to "copyright".

But the rejection of private property over source code is for Stallman not only a more efficient mode of production but also a step towards a freer society.⁶

Software under GPL has to be "free", although free in this context doesn't necessarily mean "free of charge" but that the source code remains openly visible and accessible to all – collaborative development and improvement is thus possible. A great amount of software was developed in this spirit, and one of the best-known products is the operating system Linux.

In the late nineties, a sort of countermovement was formed, the Open Source Movement, that also advocated open source codes but rejected Stallman's political ideological attitude. Open Source's motivation lies rather in the greater efficiency of open, compared to proprietary source code. Commercialization is explicitly welcomed.

In the meantime, a couple of organizations have emerged that use the label "free" to shield the internet from private commercial interests, but also from governmental regulation. The term "free" is now not only applied to free software but also to text, music and pictures, although these are different forms of digital goods. "Free" is more a label than a strict juristic or technic term.

The Argument

The copyleft-people also put forward the common good-argument. The preamble of the Free Software Foundation's charter states that "digital space ('Cyberspace'), with software as its medium and its language has an enormous potential for the promotion of all mental and cultural aspects of mankind."⁷ A central task of the Free Software Foundation is therefore the promotion of democracy.

In almost any debate on Copyleft, "promoting democracy" is mentioned, and this always in the sense that access to knowledge and information has to be guaranteed.

A widespread fear is also that the commercialization of the net could lead to and strengthen the surveillance state, a fear that I find quite reasonable – but that is a different story.

DRMS would restrict the possible uses of digital goods enormously, compared to the analog world. The fair-use principle for example, that gives the buyer of a music CD the right to make private copies and pass them on to friends, would be impaired when a track could only be copied three times or if the use of an e-book was restricted to the buyer. In the latter case, the accustomed practice of lending books to friends would come to an end. But all this is being argued about fiercely at the moment.

Regarding the content industry's arguments, the Copyleft-people dismiss the point that without property rights there would be no creativity. They point to the example of musicians who in their majority don't actually earn a living with the music they make.

They also point out the fact that digital goods aren't scarce but duplicate when passed on. Consequently, they see private property protection as theft – and what is being stolen is public space (Maguhn, German Member of ICANN). Rather, in their opinion it is plain to see that the rules and laws that govern cyberspace are different from those that apply in the analog world, and therefore they regard the traditional property rights system as unfit and outdated for the digital age.

Alternatives to Copyright

Content on the net is thus to remain free. Contrary to the copyright principle, other strategies are put forward that are seen to be more adequate for the digital age, e.g.:

5 <http://fsfeurope.org/documents/preamble.de.html>.

6 In connection with free software, Stallman said in an interview, you couldn't call it "stealing" when you download software to use it in your own products, because: "this word implies a sort of property, that would be really, really bad. (...) This code belongs to the general public, and I don't want anybody to mistreat the general public." (Stallman 1996).

7 <http://fsfeurope.org/documents/preamble.html>.

Donation models, that allow voluntary payments to artists at a mouse click (a portal like this already exists under www.fairtune.com);

Redistribution- or fund models: It is being considered to set up a fund paid for by a fee levied on video, audio and PC-equipment. The payouts would be allocated according to the artists' popularity, that could be determined using a special software (number of downloads per song etc. see Ku 2001⁸)

Furthermore, offering services is presented as a possible way out of the dilemma: the product itself can remain free of charge and the services offered around it can generate revenue (concerts instead of music goods, suggestion of Barlow, Grateful Dead songwriter, and others, ...a kind of merchandising model).

Critique of Both Positions

Copyright: only private property can generate efficiency?

The copyright-position rests upon the Property Rights Theory (which is based upon John Locke, and at a later date upon Douglass North, among others), which to explain and challenge I have not enough time here. Therefore only two central points of critic:

- To claim that only private property can generate efficiency is inherently correct in the context of capitalism, when efficiency is seen in terms of producing surplus value and not in terms of increased production of goods. But even then, secure property rights are only a necessary, not a sufficient condition, because for an increase in producing surplus value other aspects play a role (like e.g. competition, demand, etc.).
- That man or woman can only be innovative or creative when his or her property rights are secure, is an untenable premise that infers anthropological causes from social relations existing in capitalist societies. Capitalist forms of human relations are supposed to express anthropological features

Copyleft: Cyberspace – really a completely different world?

The internet freedom fighters explicitly separate cyberspace from the real world (other rules etc.). This is false, both analytically and in reality. The internet doesn't hover above or outside the capitalist world. The capitalist dysfunctions of the internet that can still be observed are leftovers from the early days of the net when it wasn't geared towards private exploitation but obeyed power political imperatives and was in this sense a state project.

The critics of private property relations on the net refer only to the level of commodity circulation. They don't take into account the sphere of capitalist production. Only by the sphere of production property relations affect the circulation sphere. I will explain briefly what this means.

In bourgeois perception, exclusive control over the goods originates in one's own labor, i.e. he who plucks the apple shall keep it (John Locke).

According to Marx, this is not the case. For Marx, the power of disposition derives from the social relations of production.

For this, the existence of the double free worker is central, who has to be

- without property (free of means of production)
- formally free in order to be able to sell his or her labor

As we know, the consequence is what Marx labels the transition of the laws of appropriation. Capitalist property is not based on the appropriation of one's own work but rather on the appropriation of other people's work.

The rest is a familiar story:

⁸ Ku Ray Shih, Raymond (2001): The Creative Destruction of Copyright: Napster and the New Economics of Digital Technology, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=266964. To explain the different models in more detail would go beyond the scope of this lecture. It can only be speculated on the possibilities of their being put into practice and especially on the consequences for the affected artists and also for the intermediaries, whose importance will probably diminish.

The worker is forced to sell his labor in order to survive,

the capitalist buys the labor and lets it work longer than what would be necessary for its reproduction,

and this extra work goes as surplus value into the products that are meant to realize their value in exchange for money.

These are the exchange relations that determine the workings of the production sphere and from them the capitalist draws the disposition power over "his" product (which is legally established in civil law and in property rights jurisprudence),

The capitalist then tries to exchange this product for money in the sphere of commodity circulation. It is only there where the problems arise. So you can see: The ownership problem posed by digital goods only concerns the circulation sphere, this is where the exchange of goods is disrupted. If you take this perspective, naturally the question does not arise why a principle like the exclusive power of disposition exists in the first place and where it comes from. Rather, the only question that comes up is how to change and adapt this principle considering the special quality of digital goods.

This is especially apparent in the terminology of the "free" (free software, free music etc.). "Free" in this context doesn't have to do anything with "free of charge" but rather denotes the openness of the knowledge embodied in the digital good. But how can a digital good be controlled, priced and accounted for, i.e. be fit for exchange, when it can be "freely" copied (as often as I want to) and distributed (to whomever I want)?

The Internet-freedom movement has to resolve the contradiction between the pressure to realize profits and the free availability of digital goods by devising alternative models – and this is what they do, as I have said before.

Conclusion

The whole debate is indicative of the fact that capitalism is in the process of coming to terms with the new technologies.

Pessimistically speaking, there will be a transition period that will functionalize goods exchange on the net - by trial and error.

What will happen exactly, whether the copyright lobby prevails or whether the copyleft-movement will succeed in promoting their alternative models in an uneasy alliance with managerial economists, remains still to be seen - the emergence of mixed forms is not unlikely.

But the alternative models point in a different direction that goes, to put it briefly, "from product to process". Not the copyrighted products are to be sold but the services "around them". In this context I want to mention Jeremy Rifkin who argues that the increasing immateriality of products is an integral part of a development in society as a whole that leads to the disappearance of property. Following technological innovation, the service sector expanded because "more and more goods – then bulwark of the private property system – are transformed into pure services" (Rifkin 2000: 115). What used to be sold was now more and more "accessible".⁹ The trend towards more "access" doesn't, however, threaten private property, it is rather a revenue and pricing model more appropriate for the internet.¹⁰

At the present it seems that the way in which the immaterial world adjusts to and fits into the given capitalist property structures gives rise to a new, postindustrial production paradigm. Here, this can only be touched upon briefly.

Free software can be called the archetype of this trend: Its mode of production is based on open knowledge, cooperation, flat hierarchies, flexibility, worldwide networking, and in most cases on unpaid labor without a binding contract. The open source and free software model has for a long time assumed the role of a leading example for industry and managers. Norbert Bense, head of human resources at DaimlerChrysler Services corp.,

⁹ The Frankfurter Allgemeine Zeitung (the leading bourgeois newspaper in Germany) agrees: "Today knowledge becomes public, ubiquitous and free, services on the contrary remain private, local and cost money", in: Horn, Karen (2000): Auf der Allmende des Wissens, in: FAZ vom 14.04.2000, p 13.

¹⁰ It is not comprehensible why according to Rifkin the categories of provider and user should be so fundamentally different from those of seller and buyer. Rifkin neglects the analytical difference between the material condition of a product and its economic form, its quality as a good. The material condition of a product – its immateriality in the case of digital products – doesn't affect the economic category in which it is placed. Therefore, neither is the existence of private property affected, nor does it disappear.

presented at a conference new work models that come close to aspects of the free software model not only in terms of language. He described the new work model with the following catchwords: "have fun" (as a motivating force instead of earning money), "motivate volunteers", "reputation for cool code", "turn customers into colleagues", "employee's need for self-fulfillment" etc.

New work forms with flexible contract and time arrangements like part-time-, borrowed, fee-based and other temporary work contracts are increasingly taking the place of the traditional full-time work relationship, that already today make up only a mere two-thirds of all work relationships.¹¹ According to estimates, these work arrangements will make up at least half of all work relationships within the next couple of years.¹² The teams and employees in the so-called network co-operations are coordinated with the means of "indirect steering", i.e. unlike in company hierarchies there are no concrete work assignments for whose achievement every superior employee is responsible to his superior. Only the goals that have to be met are specified to the competing project teams, and they have to struggle to meet them. These goals include profit margins or productivity values and they are oriented to the shareholder value principle, i.e. the aim to increase the company's value in the interest of the main shareholders. From this perspective, for the employees in the new work organizations labor signifies "to be the manager of the resource '1'". Thus, they are directly exposed to the unbounded exploitation context and they engage in the "constant and endless self-economization of this relationship" (see Glißmann 2001: 129¹³).

It fits into the picture that musicians increasingly reject contracts with record companies. They prefer direct contacts to their customers and market themselves on the net. The proposed criteria how money can be raised for text or music without copyrights also point to tougher competition and to precarious non-binding work relationships.

"Even in a world without copyrights, the journalist who is the only one to possess a relevant information will still be well-paid. This is because he doesn't mind that the report loses its copyright protection after being passed on, when he has already earned his money. (...) So the future belongs rather to the agile 'information brokers', who could be self-employed free lancers or small, highly specialized teams, than to the traditional big publishing houses..." (Geser 2001¹⁴).

Whatever the future holds, the dissolution of traditional production relations is nothing new in the history of capitalism:

"Modern industry never views or treats the existing form of a production process as the definitive one. Its technical basis is therefore revolutionary, whereas all earlier modes of production were essentially conservative. By means of machinery, chemical processes and other methods, it is continually transforming not only the technical basis of production but also the functions of the worker and the social combinations of the labor process." (Marx Capital, Volume 1867, 1976: 617).

11 Standard work arrangements comprise workers and employees in unlimited full-time positions, excluding temporary work (see Oschmiansky, Heidi; Schmid, Günter (2000): *Wandel der Erwerbsformen. Berlin und die Bundesrepublik im Vergleich*, Wissenschaftszentrum Berlin für Sozialforschung, Diskussionspapier FS 1 00-204).

12 See Klotz, Ulrich (1997): Informationsarbeit und das Ende des Taylorismus, in: Krämer/Richter/Wendel/ Zinßmeister (ed.): *Schöne neue Arbeit. Die Zukunft der Arbeit vor dem Hintergrund neuer Informationstechnologien*, Mössingen-Talheim, Picot, Arnold (2000): Die Transformation der Wirtschaft in der Informationsgesellschaft, in: *FAZ* vom 24.02.2000, Nr.46. With regard to the increase of these "nonstandard work arrangements" in the USA (around 40 million US-Americans, i.e. 30% of the workforce, work as "independent contractors", contract, part-time or temporary workers, and day-laborers) Altwater and Mahnkopf (2000: 772) point out that the "New Economy" in the States can be to a large extent understood as an "informal economy like it is known from third world countries", in: Altwater, Elmar/ Mahnkopf, Birgit (2000): "New Economy" – nichts Neues unter dem Mond?, in: *WSI-Mitteilungen*, Nr.12/2000

13 Glißmann, Wilfried (2001): Ökonomik der Maßlosigkeit, in: Glißmann, Wilfried/ Peters, Klaus: *Mehr Druck durch mehr Freiheit. Die neue Autonomie in der Arbeit und ihre paradoxen Folgen*, Hamburg

14 Geser, Hans (2001): Copyright oder Copy left? Prekäre immaterielle Eigentumsverhältnisse im Cyberspace, socio.ch/intcom/t_hgeser08.htm