

# Forms and Modes of The Free Software Society.

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## **Too much freedom, too many gifts**

In the economy of ideas and software, the enforcers of intellectual property rights face a contradiction. For them, the most intrinsic aspect of the knowledge economy has become a threat. The message of free market hegemony is that there is now too much freedom in the system. Freedom is damaging the economy. As governments and corporations count the cost of piracy and throw huge resources into fighting it, the culture of sharing, at the bedrock of this same economy, is transitioning towards new forms and modes within society. This means the emergence of new institutions and new 'ways of doing'.

In his cornerstone ethnographic essay, 'The Gift. The Form and Reason For Exchange in Archaic Societies', Mauss argued against the existence of 'free', or 'pure' gifts. Gift-exchange, he said, is always an economic activity. An ancient verse has it that, "a gift always looks for recompense" (Mauss 1990, p.1). In a study devoted to the gift, Derrida also dealt with the impossibility of the gift given freely (Derrida 1992). Based particularly on Mauss' conclusions, Ingold develops a conception of gift-exchange as a continuous, temporal, directed process (Ingold 1986, p.270) and he emphasises the non-instrumental (i.e. non-economic) value in relationships between gift-exchange partners.

## Academic gift-exchange

According to Richard Barbrook, scientists of the early ARPANET programme were used to operating in an academic gift economy, "Instead of trading information with each other ... academics collaborated by sharing knowledge." (Barbrook 2007, p.166). This was seen as, "...the most efficient method of conducting scientific research. (Barbrook 2007, p.170). Although such sharing was at odds with the ideology of post-war fordist democracy, the military sponsors of the ARPANET project tolerated this practice and aimed instead at being first to build the information network (Barbrook 2007). This picture can be criticized as idealistic, and devoid of necessary reference to instrumental policies in education and arts - any look through the pages of 'Variant' (a quarterly free, cultural newspaper in Scotland) will demonstrate their impact.

## Hacking and free software

From around the mid-1950s a new culture of programming and engineering was growing at the Cambridge M.I.T. Lab. From 1948 The Tech Model Railroad Club (TMRC) became a hub for students (and some others), who together, through building track and controls for a hobby railway, learnt about building and programming systems - compilers of the TMRC dictionary recorded the word for this behaviour: 'hacking'. Membership of the TMRC allowed hackers time at mainframe computer terminals. Because of demand for this scarce resource, access was possible mostly at night - this mode of doing (in a hobbyist institution-within-an-institution), has become an archetypal trait of hacker culture. Another characteristic, the 'hands on imperative' (Levy 1984) informed Richard Stallman's belief that (as with the ideal academic gift economy) computer code should be shared and not traded. In defence of this principle, Stallman gave up his career to establish the Free Software Foundation and invent the General Public License (GPL), a license guaranteeing freedom to share software without payment. To sharpen the message that this is an 'anti-copyright' license, the term 'copyleft' is used.

## UNIX, FSF and GNU/Linux

From the 1970s, UNIX was adopted as the principle operating system for mainframe computers in government, business and in universities. This proprietary product was distributed by the U.S. telecoms provider AT&T, whilst Berkeley University was licensed to release its own 'BSD' version to the academic and research communities. Stallman's idea was to write, from scratch, an operating system using the same UNIX standards and functionality, but with a code base that honoured the four freedoms of the GPL - briefly, freedom to use, improve, share and to modify and redistribute the software. For this project he chose 'GNU' (a playfully recursive acronym for 'GNU's Not UNIX'). Replicated, or hybrid forms of the GPL exist. The Debian Free Software Guidelines (DFSG), a social contract between the Debian Software Foundation and users of its software, remixes but retains the GPL's four freedoms. Other licenses build more loosely on the GPL. Such licenses, created for programming languages like Perl, Python and Tcl, fork away from the GPL to define their own characteristic, replicated forms. When Stallman set out to write the GNU operating system, he began by copying (and later extending) the functionality of existing tools. Today, there are equivalents to Berkeley's original BSD distribution which do not depend on its commercial code-base. Stallman was unsuccessful in his goal, of single-handedly writing a complete replacement UNIX-like system. Before the heart of the GNU system was complete, an alternative core became available and programmers put this together with the GNU tool-set. The combined hybrid form is explicitly referred to as GNU/Linux.

## Immaterial forms and the GPL-society

Sharing, and the exchange of ideas, then, exist as both the mode and form of the knowledge economy. Freely distributed immaterial forms (services such as software), embody and perpetuate activity in this domain. The economy of intangible forms derives value from 'immaterial labour'. These are the main subjects of inquiry for Oekonux, a German and English mailing list-based project. Oekonux participants theorize about 'germinating forms of the GPL-society'. The marxist-informed discussion aims to learn the lessons of 20th century revolutionary movements. Stefen Merten, a defining voice in this community, explains this work in a paper, 'Milestones on the way

to the GPL-society'. He says, that because of the contradiction between mechanization and profit, capitalism has entered a crisis phase from which it cannot recover. A way is now open for a society modelled on the 'special features' of GNU/Linux (including therefore, the GPL). Oekonux in 2003, sees that society is moving through the series of initialization procedures before it will reach the run-mode of the GPL-society. In this future society, "...people will be free to arrange their relations to each other and to things consciously and by free decision" (Merten 2003, p.12).

## Production as process

Because of its marxist-oriented perspective, Oekonux tries to understand the evolving social and economic modes of production, with the expectation that the GPL-society will ultimately succeed exchange value; Mauss' gift-economy is inappropriate to theorizing free software value systems, in which people may take things without the compunction to reciprocate (Merten 2003). Besides such auto-marxist perspectives on social and economic modes of production, Bourdieu, through the identification of 'cultural' and 'symbolic' (or status) production, criticized reductionist economic ideology. Bourdieu's focus of interest, was the creation, distribution and accumulation of value within complex social systems.

From 2001, organizing through the Net-Time mailing list, cultural activists - connected through the 'Next 5 Minutes' conferences of the 1990s published a series of papers. Like Merten's presentation of 2003, these used a computer metaphor to re-imagine the present conditions, in this case with the imperative title 'make:world', "...a unix command used to completely update an operating system ... [which] rebuilds and renews the whole system while it's running" (MakeWorldFestival 2001). 'make world paper3' was published on September 11th 2003 to critically reflect the World Summit on the Information Society' (WSIS). In an essay, recalling Oekonux's 'new forms' germinating within the present society, and titled 'Reverse Engineering Reality' Lovink and Schneider wrote,

"The current multiplicity of struggles, models and forms of organizations makes it possible and even necessary to repose a question, that has been taboo for a little while: What is to be done? There is one main difference to the old-style Leninist attitude. It will most likely generate no answer, only more questions." (Lovink and Schneider 2003).

## Production as outcome

'make:world3' and the 'Trans\_european Picnic', respectively, were actions timed to coincide with the WSIS gatherings in Geneva and Tunisia (2003) and with the extension of European borders (2004). Through mobile and temporal actions they highlighted the connections between information and human traffic, between ideas and materiality,

"The revolution ... has been announced for a long time. It is anticipated in the advantage of the open source idea over archaic terms of property. It is based on the steady decline of the traditional client-server architecture and the phenomenal rise of peer-to-peer-technologies. It is practised already on a daily basis: the overwhelming success of open standards, free software and file-sharing tools shows a glimpse of the triumph of a code that will transform knowledge-production into a world-writable mode." (Lovink and Schneider 2003).

As well as such experimental and temporary 'proto-forms', permanent and evolved forms of the GPL-society have been in existence for some time. The Mozilla Foundation is one example of a global non-profit organisation embodying free software values. The foundation's website explains: "As a non-profit organisation, we define success in terms of building communities and enriching peoples lives instead of benefiting shareholders. We believe in the power and potential of the Internet and want to see it thrive for everyone, everywhere" (Mozilla 2011). 'Mozilla' is the codename for the Netscape browser source code. The project to build the next generation of Netscape Navigator took its name from this, after Netscape released the program source in 1998. In 2003, this project became The Mozilla Foundation, "...dedicated to shaping the future of the Web for the public good" (Mozilla 2011). This is one example of a form commonly adopted by projects in the open source domain - in the Linux realm alone, there are numerous instances of projects providing free source and commercial services. Services can be anything from systems management to bespoke software implementations (where it is normal that the resulting code is given back into the public domain). Two significant further examples of the influence of free software values in emerging institutions of the GPL-society, are Wikileaks and the PirateBay; organizationally very different, but similar, I suggest, in their aims to facilitate the free flow of information. These are relatively new, but already well-established forms.

Co-operation between free software projects and commercial entities (po-

tentially 'co-opting' forms), remains a contentious aspect of the Oekonux programme. Regardless, it seems clear, that in the progress of the web, there has been an energetic and substantial movement towards the realization of the GPL-society. Some now consider that in immaterial terms, of software and the associated labour, the GPL-society is already here. After the milestones, there will be new tasks to realize immaterial forms in material ways (Merten 2003). At the time of Merten's paper, 3D printers were a nascent technology, in the first stages of development. Today such printers are a reality and available to buy, or in the case of the 'Rep-Rap' 3D printer, copy. This 3D printer, able to replicate all of its component parts, is the literal kitchen table, DIY, world-writing machine.

## The peer-to-peer economy

With new and established institutions of the GPL-society present, and with the means to reproduce both immaterial and material forms also now present, efforts have begun to theorize, and realize, the peer-to-peer (P2P) economy. Parecon, the project for participatory economics

"...came mainly from the cumulative struggles of diverse populations trying to win liberation from capitalism. Parecon owes, in particular, to the anarchist and the libertarian socialist heritage, to the most recent experiences of the New Left of the Sixties, but also to every historical uprising and project aimed at eliminating class rule from the beginning to the present. It has learned from successes and from failures." (Parecon 2011)

As the name suggests, Parecon seeks to undo hierarchical modes of organization and replace them with "self-managing councils of workers and consumers...", which introduce participatory planning and "...balanced job complexes, remuneration for duration, intensity, and onerousness of socially valued labor" (Parecon 2011). Similar to PareCon is the P2P Foundation, which develops theoretical P2P models and catalogues the modes and forms which indicate a shift away from the notion of 'consumer' and towards one of 'producer'.

Oekonux often uses difficult marxist language and terminology. This can make its discourse appear impenetrable and overly-theoretical. Peer-to-peer projects are notable for their focus on practical implementation: 'Global Villages' (developing ideas and infrastructure for future communities) and 'Bitcoin' (the P2P currency) are two examples.

Micro-financing platforms bring another facet to the notion of a P2P economy. 'Flattr' is one such platform, enabling users to contribute small amounts of money to the projects they value.

## Materializing immaterial forms

Already, peer-to-peer economic theories are being translated into concrete forms - experimental, proto-forms with social value. Institutions are appearing as the outcome of self-organizing practices based on collaboration and sharing.

'Rastasoft' and the collective 'GOTO10' are two organisations to have developed the multimedia platform 'pure:dyne'. An adaption of GNU/Linux geared towards media-activism, pure:dyne has gained popularity amongst artists, so that it is used for example in live coding, where performers "...expose and rewire the innards of software while it generates improvised music and/or visuals" (toplap.org 2011).

As a humorous, and gently provocative take on the aforementioned 'make:world' gatherings, GOTO10 adapted this for their own festival title 'make:art'. The first, held in Poitiers in 2009, took as its theme 'forking', with the aim to throw a positive light on diverging and hybrid forms of free software projects and culture. The implication - in hacker speak - is that divisions are a feature (and not a bug).

## Democratizing forms

Such collaborative, democratic forms are a critical aspect of the envisaged peer-to-peer future. RebootFM is an established cultural radio station operating in Berlin, Germany. Since June 2010, 85 participating artists have released over 500 self-produced radio programmes. The station claims nearly 3000 followers on Facebook and Twitter and its programmes are also sourced as content for a number of commercial radio stations. RebootFM's website states,

"The non-commercial frequency 88.4 MHz, gives different radio groups in Berlin the possibility to produce independent, non-commercial radio, longer and more continuously than was previously the case...new formats and methods will be developed around connecting the variety of the city's creative

production to a wider and more international listener group” (RebootFM 2011).

In Catalonia, LaTele is a third-sector organisation of 'L'Assemblea per la Comunicaci Social' (ACS). ACS was established in 2003 with "...the aim of creating television of social movements and to criticize and transform the dominant model of communication". LaTele, self-described as "the free television and television community of social movements of Barcelona" (LaTele 2011), broadcasts online and - since April 2011 - on TDT channel 37, to Barcelona and nearby. The emergence of this citizen television and campaign to 'occupy the waves' is "...creating channels of horizontal communication, collectively owned and managed by the organisations, groups and individuals involved in social criticism and transformation" (LaTele 2011), from which 'programming initiatives' emerge. From its position in the third-sector, ACS seeks changes in legislation relating to non-profit media:

"The current system of broadcasting only leaves space for public media controlled by political parties, media and private business controlled by a few business groups. We want to debate this model and participate in defining a new framework that leaves space for collective forms of communication and community, where citizenship is not just passive audience or consumer..." (LaTele 2011)

To the degree that RebootFM and LaTele are institutions emerging from within the existing society, they can be identified as germ forms. Significantly, neither of these organizations eschew state financial support, though in the event only Reboot receives money (whilst ACS and LaTele are wholly self-supporting). In the current climate both are precarious positions to maintain. In the case of rebootFM, threats are in the form of proposed cuts to the job placements which enable many of the stations programmers to participate - a radio programme was devised to discuss this very issue. In the case of LaTele, a 30 second video titled 'we are not afraid of your pistol' (LaTele 2011), unflinching shows the programme makers' own situation. This video, of 27th May 2011, is taken on Barcelona's Placa Catalunya: The camera pans sideways to frame a policeman of the notoriously brutal 'Mossos'; He faces the camera and wears full riot gear; The camera zooms to the man's waistbelt, where a gun sits ready in his unclipped holster.

## The resolution of forms

In the immaterial economy, the success of free software is seen in the mainstream adoption of this economic mode and form (IBM is one example). Proto-forms of hacking and gift exchange have evolved to the point of being universally recognized institutions. In terms of the internet, the GPL-society is already here.

What does this mean for the culture of sharing? In the UK, government is asking searching questions about the rules which affect copying and sharing data. The recent Hargreaves Review, examined propositions for U.S. type 'fair dealing' legislation. Interviewed for BBC Radio 4's 'In Business', the report's principal author, Graham Hargreaves, points out, "...copyright was never intended to pay the pension of a drummer who played on a track recorded in 1963" (Radio4 2011). But Richard Mollet, Chief Executive of the Publisher's Association, remains convinced that in the internet era, the UK copyright regime is still "fit for purpose" (Radio4 2011). In 2010, countries of the World Intellectual Property Organisation (WIPO), concluded negotiations for the similarly anachronistic Anti-Counterfeiting Trade Agreement (ACTA).

Whilst signatory nations implement the resolutions, Michel Bauwens of the P2P Foundation, speaks of other, diverse, "inter-meshing patterns", as a positive and vital indicator that production of a peer-to-peer economy is possible. Even for polemicists of more utopian perspectives, it is becoming apparent that a revision of the contract between consumers and producers is not only possible but at this moment, already under way. Material replication of virtual public goods is apparent in P2P forms emerging through micro-financing institutions. Combined with democratic decision making platforms, these services could transform the reach of citizen media organizations; emerging proto-forms of today, may become institutions of a future peer-to-peer society.

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