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The Parody of the Commons

Vasilis Kostakis[1] and Stelios Stavroulakis[2]

[1]Tallinn University of Technology, Tallinn, Estonia, P2P Lab, Greece,
kostakis.b@gmail.com, www.p2plab.gr/en
[2]P2P Lab, Greece, sstavra@gmail.com, www.p2plab.gr/en

Abstract: This essay builds on the idea that Commons-based peer production is a social advancement within capitalism but with various post-capitalistic aspects, in need of protection, enforcement, stimulation and connection with progressive social movements. We use theory and examples to claim that peer-to-peer economic relations can be undermined in the long run, distorted by the extra-economic means of a political context designed to maintain profit-driven relations of production into power. This subversion can arguably become a state policy, and the subsequent outcome is the full absorption of the Commons as well as of the underpinning peer-to-peer relations into the dominant mode of production. To tackle this threat, we argue in favour of a certain working agenda for Commons-based communities. Such an agenda should aim the enforcement of the circulation of the Commons. Therefore, any useful social transformation will be meaningful if the people themselves decide and apply policies for their own benefit, optimally with the support of a sovereign partner state. If peer production is to become dominant, it has to control capital accumulation with the aim to marginalise and eventually transcend capitalism.

It has been claimed that an increasing number of people are now able to manage their political, social, and productive lives through a variety of interdependent networks enabled by the Information and Communication Technologies (ICT) (Castells 2000, 2003; Benkler 2006; Bauwens 2005; Perez 2002). However, authors, such as Webster (2002a, 2002b), have argued against the idea of an "information society". They emphasise the continuities of the current age with former capitalist-oriented social and economic arrangements (Schiller 1981, 1984, 1996; Webster 2002a, 2002b). Kumar (1995, 154) maintains that the information explosion "has not produced a radical shift in the way industrial societies are organized" to conclude that "the imperatives of profit, power and control seem as predominant now as they have ever been in the history of capitalist industrialism". In addition, Berry (2008, 369) postulates that scholars such as Benkler (2006) fail to recognise the extent to which network forms of production "will be co-opted into mainstream 'industrial' ways of production".

Through several cases of successful networked-based, collaborative projects such as free software or Wikipedia, we see the emergence of new ''technological-economic feasibility spaces'' for social practice (Benkler 2006, 31). These feasibility spaces include different social and economic arrangements, in contrast to what Kumar and Webster claim, where profit, power, and control do not seem as predominant as they have been in the history of modern capitalism. Benkler (2006) has argued that from this new communicational environment a new social productive model, i.e., Commons-based peer production, is emerging different from the industrial one. Peer production, exemplified by various free software (GNU, the Linux kernel, KDE) and free content (Wikipedia) projects, makes information sharing more important than the value of proprietary strategies and allows for large-scale information pro-

duction efforts (Benkler 2006). In this context, peer production could be considered an early seed form stage of a new mode of production enabled through Internet-based coordination where decisions arise from the free engagement and cooperation of the people. They coalesce to create common value without recourse to monetary compensation as key motivating factor (Bauwens 2005; Orsi 2009; Kostakis 2013).

Our take is that peer production is a social advancement within capitalism but with various post-capitalistic aspects, in need of protection, enforcement, stimulation and connection with progressive social movements around Commons-oriented policy platforms. As "Commons" we understand the cultural and natural resources, which are held in common (not owned privately) and remain accessible to all members of a society (see Ostrom 1990; Hardt and Negri 2011; Bollier 2009). In this essay, our point of departure is the digital Commons (knowledge, software, design) since peer production was first noticed in the information sphere of production. We consider the "Commons" a third sector alongside the market and the state, which conceptualises the deep affinities amongst several forms of collaboration and helps validate their distinctive social dynamics as significant forces in economic and cultural production (Bollier in Laisne et al. 2010).

The term "peer production" or "peer-to-peer production" originates from the innovative nature of peer-to-peer (P2P) networking architecture that enabled the advent of the Internet. The introduction of P2P architecture in the social relations of production and exchange of goods and services is based on the idea that every networked community, just like every networked node, becomes a "server" to satisfy the needs of other communities, as well as a "client" to satisfy its own. Peer production operates on a non-competitive, synergetic basis leading to an optimal distribution of resources (Benkler 2006; Bauwens 2005, 2009). The traditional market approach with its pricing mechanism has mostly been unable to achieve such optimal allocations due to productive information asymmetry whereas peer production maximises the access to information. Contrary to the traditional economic thought, in peer production we become witnesses of consumer/producer dichotomy's collapse towards a new understanding in the form of the "multitude" (Hardt and Negri 2001), "prosumers" (Toffler and Toffler 2006), "produsers" (Bruns 2008), or "user-innovation communities" (von Hippel 2005). Further, it has been shown (Benkler 2002, 2006; Bauwens 2005) how peer production, given certain resources, optimally exploits the skills and abilities of the producers involving participatory ownership structures, participatory learning and decision-making (Fuchs 2013). Whereas the firm binds by contract only a fraction of capabilities, which considers appropriate for realising a certain goal. In a peer production project the motive emerges when a full set of capabilities is accessing a given amount of resources. Peer production achieves the optimal allocation of resources being a more productive system for information than the market-based or the bureaucratic-state ones (Bauwens 2005; Kostakis 2012).

This article begins with a brief outline of how the initial architecture of the Internet is being distorted into a client-server format as observed in proprietary social networks managed by the cognitive capitalists of the web. We, then, address and question the main arguments in relation to "the tragedy of the Commons" and the phenomenon of Commons-based peer production. What is the role of the peer produced Commons in the capitalist accumulation while the emancipatory potential of peer communities is neutralised without affecting their productive function? To answer this question, we discuss how the emancipatory promise of the (digital) Commons and of peer production can evolve into a parody bringing to the fore the case of free software. To tackle the threat of the Commons' full absorption as well as of the underpinning peer-to-peer relations into the dominant mode of production, we conclude by arguing in favour of a certain working agenda for Commons-based communities.

1. From the Tragedy to the Parody of the Commons

Benkler (2006) postulates his assumptions about the conditions for the development of peer production, taking for granted a general stable economy. He does not deal with the threats Commons-based peer production will face once exposed to a hostile economic environment. An emerging question is why the dominant socio-economic framework would resist to the

building of a Commons sphere. After all, one may argue, it is within this sphere that the Internet and many other digital technologies have been developing. Our position is that the aforementioned statement is partially true: The emergence of web technologies, and of the Internet itself, has taken place in a contradictory framework. The previously failed attempts for the adoption of ACTA/SOPA/PIPA proposals that seek to restrict the freedom of the individuals through a global enforcement of strict "intellectual property" standards; the efforts for a regulatory regime with an architecture of transactions in the first place (rather than policing the transactions afterwards) (Boyle 1997); the attempts for surveillance and censorship by both authoritarian and liberal countries; and "the growing tendency to link the Internet's security problems to the very properties that made it innovative and revolutionary in the first place" (Mueller 2010, 160), are only some reasons that have made scholars, like Zittrain (2008), worry that digital systems may be pushed back to the model of locked-down devices centrally controlled information appliances.

The initial P2P architecture of the Internet, based on the end-to-end principle, has been distorted into a client-server format where the server has the absolute authority over the client, who stands unprotected with limited intervention possibility (Kempf and Austein 2004). The "addiction" of the client to assign tasks, which concern him/her on the first place, to the supposed convenience that the server offers is a phenomenon observed in proprietary, centralised social networks and SaaS models (i.e., "Software as a Service" acronym; for example, think of Facebook). This exemplifies the tendency of the user population to neutralise and detach from issues important for their online and offline future.

Further, in this contradictory framework we observe nuanced changes not only in the institutional design concerning the Internet but also in the used terminology. For instance, see the shift from "free" to just "open source" software. The term "open source" has become related to ideas and arguments based only on practical values, such as having powerful software (Stallman 2012). As Stallman (2012) writes: "the two terms describe almost the same category of software, but they stand for views based on fundamentally different values. Open source is a development methodology; free software is a social movement." The open source implies that non-free software is an inferior solution to the practical problem at hand, whereas for the free software advocates non-free software "is a social problem" (Stallman 2012). "If it's the same software (or nearly so), does it matter which name you use?", Stallman asks to answer, "yes, because different words convey different ideas. While a free program by any other name would give you the same freedom today, establishing freedom in a lasting way depends above all on teaching people to value freedom."

We attempt to move from a strict techno-economic analysis towards a discussion of the Commons within a turbulent, contradictory socio-economic framework. In other words, what is the role of the Commons in the capitalist accumulation while the emancipatory potential of peer communities is neutralised without affecting their productive function? The capitalist system arguably seeks to incorporate Commons-based, peer communities because of their cost-effective advantage (low-cost labour with high quality products). We argue that the development of P2P relations in itself, if placed in the current socio-economic conditions, can take place only temporarily because in the long run it will be undermined by means designed to maintain profit-driven relations of production into power. We call this transformation process "parody of the Commons" in relation to what Benkler (2006) defines as "tragedy of the Commons".

In 1968, Garret Hardin first introduced the concept of the tragedy of the Commons referring to the degradation of a finite resource used by a group of individuals who act independently and rationally on the basis of their self-interest. If individuals agreed to assign private management responsibility, which would implement a protection fence around the resource against the "rational" behaviour of all, the resource would be safe (Hardin 1968). Elinor Ostrom (1990) understates Hardin's approach claiming that if those, who share a certain resource, belonged to a local community, then they would adopt the optimal solutions to serve their interests. In certain cases the aforementioned statement cannot apply, because of a lack of confidence amongst community members due to the high communication costs and/or because of the small benefit from the problem solving. However, the criteria that

Ostrom (1990) articulates are also immanent in Hardin's definition as a matter of the rational behaviour of individuals. Ostrom (1990) correctly denotes that the resource sustainability can be achieved by adopting best practices without the need of privatisation. What eludes both Hardin and Ostrom is that the best practices or the technical means are defined by those in power. There is arguably almost no possibility of implementing measures that would not enforce the established structure. The shared resource may not become private, but the extra-economic support of other privatised means in the infrastructure of the common resource (e.g. friendly policies toward activities regardless of business plan) could gradually eradicate the resource. Once again, the ruling agenda defines whether the technical means can be considered best practice.

Hardin's (1968) position about salvation through privatisation has been claimed for forests. If forests get privatised, the manager's best interest would be to protect the wood from fire and the uncontrolled work of woodcutters. What we have here is a category error. What the managers protect is their fenced area rather than the forest itself. In front of the "sacred" ownership rights there is no legal document to guarantee that the area will remain a forest. Nowadays, the destruction of natural environment does not occur because the environment is a common resource. It is arguably happening because the applied policies are designed to support means of production of private appropriation, which exploit the common resource unconditionally. To that point, Hardin's and Ostrom's approaches are equally unhelpful, since their difference is related solely to the composition of the mixture. For Hardin, more privatisation is required, whereas according to Ostrom it should be constrained.

Benkler (2006, 378) explains that traditionally the tragedy of the Commons is described by (i) the absence of incentives, i.e., nobody invests resources in a project since no privatisation follows; (ii) the absence of leadership, i.e., nobody has the appropriate authority to guide and accomplish such a project. What Benkler says is this: Let's assume that Hardin's proposition is true: Privatisation secures the sustainability of a resource. But how do we get there? To begin with, what is our incentive to assume ownership or management of a common resource, if we do not charge for its use? And suppose that the incentive has been found: Are we capable of achieving the sustainability goal when this capability is part of collective intelligence? The difficulty to meet both conditions means inadequacy of assuming responsibility, hence, the common resource has no future, according to Hardin. Benkler (2006) states that this does not apply in peer production: Commons-based communities manage to find their own ways.

However, counter-examples can be found against the cases Benkler brings to the fore to support his argument. For instance, see the software development in traditional corporate environments on projects released under permissive free software licenses (examples include the MIT license and the BSD licenses), which allow privatising code modifications and, thus, do not take action against patent "treachery" (see Peren 1999; GNU 2013; Fitzgerald 2006). In that way software misses its free component and its quality becomes questionable, since the distribution of code's changes depends on the personal stance of the entrepreneur who can package them up under restrictive terms. That is to say, the programmer or the entrepreneur can shift from a permissive license to an "end-user license agreement". In addition, production shifts to the terms with which the non-free, proprietary software is produced. Thereby the software community experiences higher pressure and the rights of the end users are eventually reduced. In other words, permissive free software licenses can lead to a "tragedy" or rather a "parody of the Commons" because of free software's allegedly emancipatory promise. In such a scenario maximising individual freedom away from society needs would have worse total consequences than would have resulted by applying regulation to maximise societal freedom instead. One might claim that code is in abundance, as an informational good with almost zero marginal costs; however it needs improvement and maintenance, i.e., labour hours. Hence, investing free labour hours in dead-end projects, permissive free software licenses may trigger a parody of the Commons, by slowing down the overall adoption pace of free software. By contrast the copyleft licenses (for example the GPL, General Public License) guarantee end users the freedoms to use, study, share (copy), and modify the software. Copyleft is a method of social production as well as a process of knowledge sharing,

which makes a program or other work free, and requires all modified and extended versions of the program to be free as well (GNU 2012). Hence, copyleft licenses define the relations amongst the members of software communities and in that sense they create ecologies outside or rather in the interstices of the capitalist market. To ensure there is no misunderstanding, we need to clarify the meaning of free software. The "free" in free software, unlike "free" in free labour, does not mean gratis. Free software is defined by the four freedoms the user of that software has in order to use, study, share copies, and share modified versions of the software.

2. Defining the Parody of the Commons

We name "parody of the Commons" the introduction of privatisation in the management of the common resources realised either by the assignment of ownership to individuals or by the interference of state regulation, when capital is the prevailing force as well as the appropriation of the financial results. Both routes rely on the assumption of owning better information pools, which is challenged by the current developments of liberal-democratic societies. If Commons-based peer production does not become the dominant mode of production, the conditions for a tragedy will be arguably met and then the emancipatory promise of the Commons will be torn apart. It can be claimed that the state policies have to be considered as a parameter. We argue that the state intervention – when it legislates enforcing or facilitating measures – actually applies Hardin's schema following other routes. The state perceives as "public" all goods and resources of some value and then intervenes introducing regulations for the "common good".

However, this intervention is an attack to the public sphere and subverts communities. If a community starts to grow, inspectors from above turn up to define specifications, procedures, financial constraints, setting the direction for the future of the common resource. Also they set aside the immediate interests of those who now must obey rules set by bodies irrelevant to the local needs. The basic idea originating to the bounded rationality principle is that regulation cannot stop the abuse and eventually the depletion of the Commons occurs. This approach does not adopt the position that the state is incapable by nature or due to its size. The state policies are, most of the times, what they are because of commitments and facilitations by the political system to the financial sector.

We define two main features of the parody of the Commons. The first feature is the institutional integration, which is the absorption of the proportional dividend of every individual by a mandatory private appropriation enforced through legislation. The applied policies cannot affect free software communities in large scale, but they directly harm other forms of Commons as much as any other type of industrial unit involved with the production of any material. Individuals enter the Commons to enjoy the participatory nature of a productive and/or creative endeavour carrying the belief that the involvement of other members alongside with theirs builds a sum that belongs to all and from which all benefit from. In that sum, every contributor to a Commons-based community expects a contributory return plus a reward for non-voluntary work. The capital markets seriously challenge this belief by pursuing their own agenda, based on onerous and illegal, concerning the international law, debts that stifle the real economy. The central or local administrations in an attempt to fulfil financial obligations to creditors, apply policies that oblige a whole society to transfer a large part of the national income toward payments to creditors. Instead of re-investments for the local needs, the society is deprived from valuable resources and assets. The state treats Commons-based communities as any other business unit and applies heavy non-contributory taxation. Any ambitious activity is finally ceased and one of the first victims is the voluntary work done by the members of peer communities. This is not an imaginary situation; it is the reality in the Eurozone today, where the banking sector is allowed to have an unprecedented concentration of power. The link, which makes this situation unbearable for all, is arguably the iron fist of the common currency. Even Germany, the most powerful economy in the Eurozone, is turning slowly into recession (Indexmundi 2013; The Economist 2011) while most of the cities and towns there now belong to the banks rather than the federal state (Czuczka 2012). For the

European south, there are many examples of structural reforms taking place that damaged equally the industrial and agricultural sector in the last 40 years. This is arguably a path to a dead-end.

The second feature is the external outsourcing, according to which, regardless of the partners' intentions and plans, the project is converted into a mode of crowdsourcing/aggregation economy. In the aforementioned scenario the peer produced use value serves certain for-profit interests no matter if peer producers are aware of it. The owners/administrators of the web platforms/network, i.e., the "netarchists" such as Facebook or Google (for an overview of the concept see Bauwens 2007, 2013; Kostakis 2012) can be considered as the web capitalists, who renounce their dependence on information accumulation through intellectual property and become enablers of social participation (Bauwens 2007, 2013; Kostakis 2012). They combine open and closed elements in the architecture of their platforms to ensure a measure of profit and control by expanding the reach of neoliberal economy through cognitive capitalism (see Aytes 2013; Andrejevic 2013; Bauwens 2007, 2013; Kostakis 2012). Fuchs (2013, 219-220) notes that in proprietary-based platforms the productive labour is outsourced to users "who work completely for free and help to maximize the rate of exploitation [...] so that profits can be raised and new media capital may be accumulated. This situation is one of infinitive exploitation of the users". In a similar vein, Terranova (2013, 53) addresses the relevance of the concept of the Commons: "as the wealth generated by free labour is social, so should be the mode of its return". Hence, she concludes, "social networking platforms should be deprivatized – that is, that ownership of users' data should be returned to their rightful owners as the freedom to access and modify the protocols and diagrams that structure their participation".

So, free labour is voluntary. In peer production projects, the knowledge worker owns the final artefact (which is always open to further development) of the productive process and gains experience, knowledge, relations and/or even money (however, monetary profit is not the key motivating factor) through it. In states of privatisation (according to the aforementioned categorisation that would be in the crowdsourcing/aggregation economies) free labour implies exploitation. In addition to the social media monopolies, the development of Apple's MacOS X is another example of external outsourcing. In short, MacOS X is based on UNIX, software that begun as a free-shared product to later become proprietary under different brand names and then free again (for example, FreeBSD and NetBSD). Parts of the latter free software components along with the mach kernel developed at Carnegie Mellon University were included into NeXTSTEP operating system, which was finally renamed into OS X.

Hence, we argue that the Commons firstly emerge as a tragedy due to long-term inertia and then evolve to a farce or a parody. As soon as the gradual destruction is perceived (tragedy) everybody agrees to privatise the management and in case they do not agree, the state may force agreement in order to implement the assignment. The common resource remains common by its name only (parody). We argue that, unfortunately, this is a likely scenario. To put it in software terminology, this constitutes a security hole in the ecology of peer production, and, for the moment, no patch (i.e., solution) has been proposed. The question, therefore, is whether the peer producers will actually benefit from the development of P2P relations and the production of commonly produced use value, or whether the Commons-based peer production phenomenon will just constitute a part of a neoliberal Plan B, put in Caffentzis' terms (2010). Supposing peer production will be progressively emerging as a dominant productive model upon which will rely the prosperity of the people (see Hardt and Negri 2011; Rigi 2012; Bauwens and Kostakis in press; Kostakis 2013), then the transcendence of the parody is not just a theoretical issue to be dealt with. It is rather a practical, political issue that will determine the success of the Commons-based communities in general. Hence, it is necessary to approach the Commons concept within the ongoing socio-economic context that is blooming and discuss how it affects the function of the real economy.

While the triggering event of its burst was the failure of subprime mortgages, many opinions have been voiced concerning the causes of the 2008 financial bubble. Some of techno-economic nature (for example Perez 2009a, 2009b) and others (for instance Sowell 2010; Krugman 2009, 2012; Stiglitz 2010), which focus more on the symptoms rather than on the

inherent contradictory characteristics of the capitalist system. According to Karl Marx (1992/1885, 1993/1983), the general pattern of the capitalist system, which makes economic crises inevitable, is created by the combined action of two laws of capitalist integration. The first law concerns the tendency of profit's quota to decrease whereas the second law describes the need for an increasing capital concentration and accumulation. These two laws contradict each other leading the system to collapses and crises: Capital cannot be invested when the declining rate of profit's quota is faster than the increasing rate of capital accumulation. In Marx's analysis, capitalism is inherently built on a Sisyphean logic reaching always a dead-end in which the escapable policy often concerns the partial destruction of the total capital. For a certain period of time, capitalism –a process of "creative destruction", to remember Schumpeter (1975/1942, 1982/1939) who shares many views with Marx in the analysis of the capitalist dynamics– may seem sustainable, introducing innovative products and services. Williamson (1995, 1998), also, from a different perspective reaches a similar conclusion: Every firm will stop developing once its organisational costs surpass the organisational costs of a smaller firm.

The partial transformation of the stagnant capital into loan capital is used as a pressure valve for overcoming the dead-end (Marx 1992/1885; Harvey 2007, 2010; Lapavitsas 2012). The overflow of loan capital with compound interest into international markets along with the shift of policy decision-making from democratically elected state governments to the banking sector firms and institutions preserves a global debt crisis. Once the loanable capital secures its dominant position in the market, the debt crisis becomes permanent and is reinforced regardless of the progress in the annual economic indices. Even a prosperous economy will start declining in the course of time if the annual surplus is being used to serve external debts. Serving the external debt does not necessarily mean that the debt is reduced, it may as well increase if the interest is accumulated into capital, thus neutralising not only the benefit of the local producers, but also any advantage on innovation achieved by their talent and effort. This situation occurs when the creditor and the debtor sign an unbalanced agreement, the interest rates and spreads are unfairly high and there is no flexibility in monetary policy. In that case, and especially in bankrupting economies, the individuals who participate in Commons-oriented communities may fall into the trap of a parody of the Commons.

The peer producer participates to satisfy his/her inner positive motives, interests and needs (for instance, the need to create, learn, communicate and share) on a voluntary basis (Benkler 2006; Hertel, Niedner and Herrmann 2003; Lakhani and Wolf 2005). As Hertel, Niedner and Herrmann (2003, 1174) point out, the Linux kernel community participants are driven "by similar motives as voluntary action within social movements such as the civil rights movement, the labour movement, or the peace movement". On the other hand, the peer producer has no idea that his/her voluntary inputs contribute to the retention of the average profit quota's decrease, offering the chance to capital to develop, appropriate, expand and grow. Therefore, we argue that those who have a competitive advantage over the P2P relations of production will benefit from the appropriation of the commonly peer produced use value. The aforementioned is a typical case of the transformation of the tragedy into parody, once the lack of authority, observed in several Commons-based peer projects, gives the chance to extra-economic means to take advantage of creative communities' inertia.

3. The Parody of Free Software?

For the economic system the accumulation of means of production is both a functional necessity and cause for deadlock. In the area of information sciences, computers and other digital devices, the technical capacity of using all those devices as means of production is at the hands of the majority. The private property in the means of production at this economic sector for the first time is universal and the amount of means that people own decisively influences their potential. Today, free software, due to its technical excellence, is being widely used by organisations that compete against the philosophy and practice of peer communities. One of the causes is the division of the developers' community to those who use the term "free software", thus, contributing to an increasing power of software communities and

to those who prefer constructs like "open source" or "shared source" arguing in favour of the ease of free software penetration into the world of business. The latter removed from all users, individuals or legal entities, the ability to understand that their political freedom that depends on the use of digital media is far more important than the technical superiority of the free software that enables those media.

The majority of the people cannot be aware of all these, when free software is not a corner stone of the public education system. This shortcoming severely damages society or part of it in the face of urgent social issues. Even the application of wide consent policies is doomed to fail if the technical infrastructure does not deal with immediate social problems. One may observe two heavy consequences of the community division. The approaches closer to "open source" are anti-pedagogical due to their axiological neutrality, thereby cannot get promoted as educational material, while friction with free software does not offer teachers a clear direction. Then society, due to absence of guidance, is moving conceptually to what people intuitively understand. That software technology is more technology and less software, hence, a business for specialised engineers.

When the new technology of typography was invented, its high cost kept the majority at a distance from these new means of production. In our days, when the excuse of keeping a distance from digital media is not an option, the misinformation, even by official sources, regarding the dynamics of software has become epidemic. In that way, it prevents people from finding out how to use computers for their own benefit, instead forcing them to assign even the simplest task to computer experts.

The network, i.e., a sum of networked nodes, is actually the "real computer" since coherence and economies of scale are both possible in the network. The traditional state policies that give way to monopoly power cannot easily apply here. The advocates of P2P architecture are struggling against a coordinated international effort to control the power of peer nodes before the majority realises the width of opportunities it offers. The chosen policy to subvert Commons-based communities is on one hand the pressure for signing international agreements against the freedom of Internet, which is a typical operation of institutional integration, and on the other the binding of users to monopoly corporations. Those corporations charge for pre-installed proprietary technologies that come with any newly purchased device and deprive all from basic freedoms in exchange of a presumed ease of use.

Although the "golden cage" is a syndrome that cannot last forever, companies that develop non-free software may estimate that one way or another it will be a source of income driven by the power of inertia. Proprietary technologies in operating systems and software applications have two major consequences. They keep the users divided and helpless (Stallman 2008), deconstruct local cultures (Greve 2006a, 2006b) and increase digital illiteracy. This is a good example of external outsourcing, which holds a more or less important role, however the institutional integration appears to be the most appropriate way of undermining the Commons.

4. Overcoming the Tensions

In times when the global economy is relatively stable, the parody of the Commons can be easily avoided. There is insignificant migration of labour power from the corporate model towards the Commons, hence no serious pressure to apply institutional integration and the mobility of community members practically cancels the consequence of crowdsourcing. But in an era of economic collapse and while mobility becomes a risk, gradually more people direct their attention to communities, with many of them doing so for survival purposes.

The state seems to face Commons-based peer communities as ordinary economic units subject to heavy taxation while supports "intellectual property"-based activities. Those activities are injected into communities blocking their growth. The hope that the multiplicity of communities will help them rise into dominant relations of production is refuted since the political system will allow communities to grow only if their operations and functions become integrated to the established mode of production. History shows that the capitalist mode of production allowed no other form of production. The future of pre-capitalist or novel produc-

tion modes was predetermined: destruction or integration. While P2P relations are not dominant, their dependence on a friendly economic environment becomes imperative.

A recent example where a Commons might be commodified is the case of ERT's digital archive. ERT was the Greek state television and radio network. It was a constituent of the public sector and had been funded through a mandatory tax implemented into the bill of the public electricity enterprise (DEI) for decades. In December 2007, the launch of the effort to digitise the old ERT archives was announced, which first delivered results a few months later. Although initially this endeavour was considered an important step for the public availability of a unique cultural wealth, the decision to be distributed in that specific way was met with the opposition of several Commons-oriented communities and civilians. According to the protesters, behind this initiative lies an "innocent fraud": The digital archive remained in the exclusive ownership of ERT. Patented file types and video, text and picture formats were selected to implement the digitisation while download and further use of the material was forbidden. Further, in the current event of ERT's dissolution as a consequence of the Greek crisis, (at the time of this writing, August 2013, the fate of ERT's archive is still unknown) this national cultural aggregation, created and funded by the Greek citizens, may revert to private ownership. Already during the summer absence of a public Greek network, private stations broadcasted parts of the archive. The ERT case highlights the traditional concept for state ownership of public goods: The state manages a resource on behalf of the civilians over which they have no authority. And in turbulent times the exploitation of the Commons, as part of "shock doctrine" policies (see Klein 2008), more easily takes place contributing to and catalysing the process of capital accumulation.

An effective treatment is arguably the use of means that guarantee the smooth growth of communities. Structurally, a measure is the adoption by society of the five maturity conditions to enter the Commons: open standards, free software, P2P architecture, advanced learning system and communities. As far as the political context is concerned, the parliamentary democracy, for instance in Greece, is trying hard to secure the current status quo by demolishing various citizens' rights and occasionally violating constitution. One should not rest his/her hopes on the political party system and the associated policies mainly due to three characteristics inherent to political party policies: i) restrictions on democracy is a policy to overcome economic crisis; ii) supranational centralism in deciding and applying fiscal and monetary policies serves the vision of a United Europe; iii) in a long period of depression, increased capital borrowing is the best method to return to growth.

This set of characteristics makes this intentional absurdity evident in the behaviour of political parties, for which the probability to adopt P2P practices is practically zero, since this perspective requires immediate implementation of P2P infrastructures, something which is in contrast with the notion of "property" as it is embedded in the philosophy of the political system. How is it possible for a political system that defends the constitutional interpretation of "property", to take the lead in confiscating private properties? One possible answer is that while the political system simply declares itself as an adherent of property, it only defends a particular monopolising trend, a form of impersonal appropriation against the real individuals. When Jean Monnet (1976) declared "nous ne coalisons pas des Etats, nous unissons des hommes" ("we are not building a coalition of states; we are creating a union of peoples"), his wish came along with the deconstruction of the national state, conceptually prepared in various publications. The philosophical background of that approach was clearly Manichaeistic since the bipolar schema national-supranational is interpreted on the basis of a theocracy that proclaims a dualism of absolute extremes. Only a few scholars, Victor Hugo one of them, attempted to transcend the anti-dialectic heritage of the discourse around the "ideal of a unified Europe" (Swedberg 1994).

The answer to the problem should be a type of democracy capable to emerge from the activity of Commons-based communities and the interactions among them. A political project at both national and international level is required to release the healthy forces that demand the construction of communities for the benefit of their members. Given the estimated lengthy time period of the economic crisis as well as its structural peculiarity, which is a combination of monetary inflexibility and debt accumulation regardless the possible reduction of deficit,

the parody of the Commons can be eliminated only if communities adhere to their mission: To ensure a high maturity level and make their requests for a Commons infrastructure a government policy towards a "partner state", i.e., democratically-run, civic institutions that protect the common good (see Bauwens 2012; Kostakis 2012).

This high maturity level could be achieved through the establishment of a democratic legal jurisdiction, which would impose restrictions on the exploitation of the Commons (Kleiner 2010; Fuchs 2013; Bauwens and Kostakis in press). Peer production might be collectively sustainable but it is not individually: Most of the peer contributors cannot make a living and they are dependent on wages from the capitalist market. We side with Bauwens and Kostakis (in press) who suggest "the creation of Commons-friendly, ethical enterprises, consisting of the commoners themselves, who also control their own governance and have ownership. Such enterprises would be legally structured so that theirs is an obligation to support the circulation of the Commons". The development of the Peer Production Licenses, introduced by Kleiner (2010) as a copyfarleft type license, could be part of the debate. These licenses could be oriented towards a plural form of ownership, which would include "maker ownership (i.e. a revisiting of worker ownership for the P2P age), combined with user ownership, i.e., a recognition that users of networks co-create value; and eventually a return for the ethical funders that support the enterprise" (Bauwens and Kostakis in press). In that way profit making is allowed, but profit-maximisation would not be the driving force of economic development.

Against the capital accumulation, which leads to the parody of the Commons-based communities' political struggle should include the creation of an infrastructure that protects, enables and catalyses the circulation of the Commons. In that way peer production i) could become sustainable on the personal level as well; ii) expand more easily to the manufacturing of tangible products building on its conjunction with the emerging desktop manufacturing technological capabilities (see Kostakis 2013); iii) and, thus, protect itself against capital accumulation with the aim to marginalise, control and eventually transcend capitalism.

5. Conclusion

We defined two main features of the parody of the Commons: the institutional integration and the external outsourcing, according to which the Commons-based peer production is converted into a mode of crowdsourcing. In these conditions, we described how the Commons emerge as a promise, then a tragedy and evolve into a parody. As soon as the gradual destruction is perceived (tragedy) the management of the commons resource is privatised: The common resource remains common by its name only (parody). We argue that this is a likely scenario, particularly damaging communities devoted to the production of tangible goods, in the absence of free hardware and open specifications. Since information sources as well as ICT are uniformly distributed, we claimed that the best management is one applied by groups of conscious individuals without orders from above. This should take place away from the traditional perception of the market, which, despite its imperfections, secured its place in a distant past, when the technology level could not possibly support analogous claims. Subdivision of communities into groups organised by a particular information-based competitive advantage or preferential access and control delegation to the most powerful parts cannot be possible if Commons-based communities follow their principles. The opening of a path to such a perspective depends on whether the majority decides to take creative control of their future.

References

Andrejevic, Mark. 2013. Estranged Free Labor. In *Digital Labor. The Internet as Playground and Factory*, edited by Trebor Scholz, 149-164. New York: Routledge.

Aytes, Ayhan. 2013. Return of the Crowds: Mechanical Turk and Neoliberal States of Exception. In *Digital Labor. The Internet as Playground and Factory*, edited by Trebor Scholz, 79-97. New York: Routledge.

Bauwens, Michel. 2005. The Political Economy of Peer Production. *Ctheory Journal*. Accessed July 23, 2013. http://www.ctheory.net/articles.aspx?id=499

Bauwens, Michel. 2007. The Social Web and its Social Contracts: Some Notes on Social Antagonism in Netarchical Capitalism. *Re-public*. Accessed July 23, 2013. http://www.re-public.gr/en/?p=261

Bauwens, Michel. 2009. Class and Capital in Peer Production. *Capital and Class* 33 (1): 121-141.

Bauwens, Michel. 2012. The 'Welfare State' is Dead – Long Live the 'Partner State'?. *Aljazeera*. Accessed July 23, 2013.http://www.aljazeera.com/indepth/opinion/2012/03/20123111423139193.html

Bauwens, Michel. 2013. Thesis on Digital Labor in an Emerging P2P Economy. In *Digital Labor. The Internet as Playground and Factory*, edited by Trebor Scholz, 207-210. New York: Routledge.

Bauwens, Michel and Vasilis Kostakis. In press. The Reconfiguration of Time and Place after the Emergence of Peer-to-Peer infrastructures. In *Technopolis: Smart Cities as Democratic Ecologies*, edited by Daniel Araya. New York: Palgrave Macmillan.

Benkler, Yochai. 2002. Coase's Penguin, or Linux and the Nature of the Firm. *The Yale Law Journal* 112 (3): 369-446.

Benkler, Yochai. 2006. *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. New Haven/London: Yale University Press.

Berry, David. 2008. The Poverty of Networks. *Theory, Culture & Society* 25 (7-8): 364-372.

Bollier, David. 2009. *Viral Spiral: How the Commoners Built a Digital Re-Public of their Own*. New York: New Press.

Boyle, James. 1997. Foucault in Cyberspace. Accessed July 5, 2013. http://www.law.duke.edu/boylesite/foucault.htm

Bruns, Axel. 2008. *Blogs, Wikipedia, Second Life, and Beyond: From Production to Produsage*. New York, NY: Peter Lang.

Caffentzis, George. 2010. The Future of 'The Commons': Neoliberalism's 'Plan B' or the Original Disaccumulation of Capital?. *New Formations* 69 (19): 23-41.

Castells, Manuel. 2000. *The Rise of the Network Society*. 2nd ed. Oxford: Blackwell.

Castells, Manuel. 2003. *The Power of Identity*. 2nd ed. Oxford: Blackwell.

Czuczka, Tony. 2012. Deutsche Bank Suggests Joint Municipal Bonds, Handelsblatt Says. Bloomberg Businessweek. Accessed July 25, 2013. http://www.businessweek.com/news/2012-08-20/deutsche-bank-suggests-joint-municipal-bonds-handelsblatt-says

Economist, The. 2011. Germany's Local Finances: Hundreds of Mini-Greeces. Accessed July 25, 2013. http://www.economist.com/node/18587496

Fitzgerald, Brian. 2006. The Transformation of Open Source Software. *MIS Quarterly* 30 (3): 587-598.

Fuchs, Christian. 2013. Class and Exploitation on the Internet. In *Digital Labor. The Internet as Playground and Factory*, edited by Trebor Scholz, 211-224. New York: Routledge.

GNU. 2012. What is Copyleft?. Accessed July 25, 2013. http://www.gnu.org/copyleft/copyleft.en.html

GNU. 2013. Original BSD license. Accessed July 25, 2013. http://www.gnu.org/licenses/license-list.html#OriginalBSD

Greve, Georg. 2006a. Sovereign Software: Open Standards, Free Software, and the Internet. Accessed July 25, 2013. http://fsfe.org/activities/policy/igf/sovsoft.en.html

Greve, Georg. 2006b. On "Intellectual Property" and Indigenous Peoples. Accessed July 25, 2013. http://fsfe.org/activities/wipo/iprip.en.html

Hardin, Garrett. 1968. The Tragedy of the Commons. *Science* 162 (3859): 1243-1248.

Hardt, Michael and Toni Negri. 2001. *Empire*. Cambridge: Harvard University Press.

Hardt, Michael and Toni Negri. 2011. *Commonwealth*. Cambridge: Belknap Press of Harvard University Press.

Harvey, David. 2007. *The Limits to Capital*. London: Verso.

Harvey, David. 2010. *The Enigma of Capital: And the Crises of Capitalism*. Oxford/New York: Oxford University Press.

Hertel, Guido, Sven Niedner, and Stefanie Herrmann. 2003. Motivation of Software Developers in Open Source Projects: an Internet-Based Survey of Contributors to the Linux Kernel, *Research Policy* 32 (7): 1159-1177.

Indexmundi. 2013. Germany Economy Profile 2013. Accessed July 25, 2013. http://www.indexmundi.com/germany/economy_profile.html

Kostakis, Vasilis. 2012. The Political Economy of Information Production in the Social Web: Chances for Reflection on our Institutional Design. *Contemporary Social Science* 7 (3): 305-319.

Kostakis, Vasilis. 2013. At the Turning Point of the Current Techno-Economic Paradigm: Commons-Based Peer Production, Desktop Manufacturing and the Role of Civil Society in the Perezian Framework. *tripleC-Communication, Capitalism & Critique* 11(1): 173-190.

Kempf, James and Rob Austein, eds. 2004. The Rise of the Middle and the Future of End-to-End: Reflections on the Evolution of the Internet Architecture. Accessed July 25, 2013. http://tools.ietf.org/html/rfc3724

Klein, Naomi. 2008. *The Shock Doctrine: The Rise of Disaster Capitalism*. New York: Picador.

Kleiner, Dmytri. 2010.*The Telekommunist Manifesto*. Amsterdam: Institute of Network Cultures.

Krugman, Paul. 2009. *The Return of Depression Economics and the Crisis of 2008*. New York, NY: W. W. Norton & Company.

Krugman, Paul. 2012. *End This Depression Now!*. New York, NY: W. W. Norton & Company.

Kumar, Krishan. 1995. *From Post-industrial to Post-modern Society*. Oxford: Blackwell.

Laisne, Jean-Pierre, Aigrain, Philippe, Bollier David and Tiemann, Michael. 2010. 2020 FLOSS Roadmap 3rd edn. Accessed July 25, 2013. http://www.2020flossroadmap.org/.

Lakhani, Karim, and Robert Wolf. 2005. Why Hackers Do What they Do: Understanding Motivation and Effort in Free/Open Source Software Projects, in: J. Feller, B. Fitzgerald, S. Hissam and K. Lakhani, eds. *Perspectives on Free and Open Source Software*. Cambridge, MA: MIT Press.

Lapavitsas, Costas, ed. 2012. *Financialisation in Crisis*. Leiden: Brill.

Marx, Karl. 1992/1885. *Capital: A Critique of Political Economy: Volume Two*. London: Penguin.

Marx, Karl. 1993/1983. *Grundrisse: Foundations of the Critique of Political Economy*. London: Penguin.

Monnet, Jean. 1976. *Mémoires. Nous ne Coalisons pas des Etats, Nous Unissons des Hommes*. Paris: Fayard.

Mueller, Milton. 2010. *Networks and States: The Global Politics of Internet Governance*. Cambridge, MA: MIT Press.

Orsi, Cosma. 2009. Knowledge-Based Society, Peer Production and the Common Good. *Capital and Class* 33 (1): 31-51.

Ostrom, Elinor. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press.

Peren, Bruce. 1999. *Open Sources: Voices from the Open Source Revolution*. Sebastopol, CA: O'Reilly Media.

Perez, Carlota. 2002. *Technological Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages*. Cheltenham: Edward Elgar Pub.

Perez, Carlota. 2009a. Technological Revolutions and Techno-Economic Paradigms. *Cambridge Journal of Economics* 34 (1): 185-202.

Perez, Carlota. 2009b. The Double Bubble at the Turn of the Century: Technological Roots and Structural Implications. *Cambridge Journal of Economics* 33 (4): 779-805.

Rigi, Jakob. 2012. Peer to Peer Production as the Alternative to Capitalism: A New Communist Horizon. *Journal of Peer Production.* Accessed July 25, 2013. http://peerproduction.net/issues/issue-1/invited-comments/a-new-communist-horizon/

Schiller, Herbert I. 1981. *Who Knows: Information in the Age of the Fortune 500*. Norwood, NJ: Ablex.

Schiller, Herbert I. 1984. *Information and the Crisis Economy*. Norwood, NJ: Ablex.

Schiller, Herbert I. 1996. *Information Inequality*. New York: Routledge.

Schumpeter, Joseph. 1975/1942. *Capitalism, Socialism and Democracy*. London: Harper and Row.

Schumpeter, Joseph. 1982/1939. *Business Cycles*. Philadelphia, PA: Porcupine Press.

Sowell, Thomas. 2010. *The Housing Boom and Bust: Revised Edition.* New York, NY: Basic Books.

Stallman, Richard. 2008. Free Software in Ethics and Practice. Accessed July 25, 2013. http://archive.org/details/Richard.Stallman.Manchester.2008

Stallman, Richard. 2012. Why Open Source Misses the Point of Free Software. Accessed July 25, 2013. http://www.gnu.org/philosophy/open-source-misses-the-point.en.html

Stiglitz, Joseph. 2010. *Freefall: America, Free Markets, and the Sinking of the World Economy*. New York, NY: W.W. Norton and Co.

Swedberg, Richard. 1994. The Idea of 'Europe' and the Origin of the European Union-A Sociological Approach. *Zeitschrift für Soziologie* 23 (5): 378-387. Accessed July 25, 2013. http://zfs-online.ub.uni-bielefeld.de/index.php/zfs/article/viewFile/2871/2408

Terranova, Tiziana. 2013. Free Labor. In *Digital Labor. The Internet as Playground and Factory*, edited by Trebor Scholz, 33-57. New York: Routledge.

Toffler, Alvin, and Heidi Toffler. 2006. *Revolutionary Wealth*. New York, NY: Knopf.

von Hippel, Eric. 2005. *Democratizing Innovation*. Cambridge, MA: MIT Press.

Webster, Frank. 2002a. *Theories of the Information Society*. 2nd ed. London: Routledge.

Webster, Frank. 2002b. The Information Society Revisited. In *Handbook of New Media: Social Shaping and Social Consequences of ICTs*, edited by Leah Lievrouw and Sonia Livingstone, 22-33. London: Sage.

Williamson, Oliver. 1985. *The Economic Institutions of Capitalism*. New York, NY: Free Press.

Williamson, Oliver. 1995. *Organization Theory: From Chester Barnard to the Present and Beyond*. New York, NY: Oxford University Press.

Zittrain, Jonathan. 2008. The *Future of the Internet: And How to Stop it*. New Haven, Conn.: Yale University Press.

About the Authors

Vasilis Kostakis

is a political economist and founder of the P2P Lab. Currently he is serving as a research fellow at Tallinn University of Technology as well as at P2P Foundation.

Stelios Stavroulakis

is a computer scientist and software engineer interested in distributed information systems with a particular focus on free software and open standards and a general awareness of social and environmental issues. He is a collaborator of P2P Lab.