#### Journal of Peer Production

ISSN: 2213-5316

http://peerproduction.net

### Towards a New Reconfiguration Among the State, Civil Society and the Market

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Abstract:

This essay tries to outline the general aspects of a political agenda for a gradual transition to a commons-oriented, social knowledge economy. In doing so, we first articulate some transitional proposals concerning both the micro-economic and the macro-economic levels, shedding light on the concept of the "partner state". Next, a discussion follows that attempts to argue why our proposals would imply post-capitalist developments, as well as to explain the role of the capitalist sector in such a scenario. We, then, conclude by addressing some issues for future research and action.

Keywords: partner state, open cooperativism, ethical market, post-capitalism

By Michel Bauwens and Vasilis Kostakis

#### Introduction

The FLOK (Free/Libre Open Knowledge) Society project, where one of the authors served as the research director, ran in Ecuador from January to June 2014. It was a research and action project focused on a full integrative transition towards a "social knowledge economy", i.e., an economy that would function around shared pools of knowledge in almost every domain. This research effort consisted of a general strategic paper for such a transition and specialised papers on various specific topics, such as distributed manufacturing, biodiversity, energy and others.

The concept that might have led to the most confusion has been that of the "partner state", first introduced by Orsi (2005, 2009) and then further developed by Kostakis and Bauwens (2014). Given the very relative success of the implementation of the proposals in Ecuador itself, there have been discussions that this invalidates the proposals. The partner state is understood as a state form for the transition period towards a social knowledge economy, in which the resources and functions of the state are primarily used to enable and empower autonomous social production. The partner state can in no way be equated with any existing form of the market state, in which the state develops and supports an economy based on capital accumulation by private shareholders, as is currently the case in Ecuador, even if that state is managed by a government that considers itself progressive and aims to develop the economy to achieve greater social equality.

We will argue that a partner state can only be a fully participative state form, for instance, on the model of the medieval cities governed by associations of guilds or citizens (see Kropotkin, 2012). A partner state would also require policies that represent a clear break with the functioning of the political economy of capital. However, in conditions of a dominant market state, and given the complexities of the state form and the balance of power within its agencies, it is possible to consider prefigurative experimentations with a "partner state approach".

It should be emphasised that this article is a discussion of a programme for change, which is to a great extent projective. We attempt to describe the speculative aspects as extensions of the P2P/social practices that currently only exist as relatively marginal practices. So our goal is to outline the general aspects of a political agenda for a gradual transition to a commonsoriented, social knowledge economy. In doing so, our narrative, enriched during the FLOK Society project experience, aims to promote the discussion on transitional policies and open a dialogue with those who recognise the inherent unsustainability of the dominant political economy, but might have different visions.

We first articulate the transitional proposals toward a social knowledge economy concerning both the micro-economic and the macro-economic levels. Next a discussion follows that tries to answer two key questions on the transitional programme: (1) Why is this a post-capitalist scenario? And (2) what is the role of the capitalist sector in such a scenario? Finally, we conclude by addressing some issues for future research and action.

#### Reconfigurations on the micro-economic level

The social knowledge economy is not a utopia or simply a project for the future. Rather, it is rooted in an already-existing social and economic practice, that of the commons-based peer production (CBPP), which is producing commons of knowledge, code and design, and has created real economies, like the free/libre open source software (FLOSS) economy, the open hardware economy and others. In its broadest interpretation, concerning all the economic activities emerging around open and shared knowledge (which are not necessarily identical to CBPP), it has increasingly been contributing trillions of dollars to the GDP of the USA, according to the *Fair Use Economy* report (Rogers and Szamosszegi, 2011).

The micro-economic structures of this emerging commons-oriented economic model could be summarised as follows: At the core of this new value model are contributory communities, consisting of both paid and unpaid labour, which are creating common pools of knowledge, code and design. These contributions are enabled by collaborative infrastructures of production, and a supportive legal and institutional infrastructure, which enables and empowers the collaborative practices. These infrastructures of cooperation, that are technical, organisational and legal infrastructures, are very often enabled by democratically-run foundations. These foundations are more generically called "for-benefit associations", which may create code/design/knowledge depositories; protect against infringements of open and sharing licenses; organise fundraising drives for infrastructure; and organise knowledge sharing through local, national and international conferences. Thus, they are similtaneously both an enabling and protective mechanism. Finally, successful projects create an economy around the commons pools, based on the creation of value-added products and services that are based on the commons pools, but also add to them. This is done by entrepreneurs and businesses that operate in the marketplace. Most often, these are for-profit enterprises, creating an "entrepreneurial coalition" around the commons and the community of contributors. They hire developers and designers as workers, create livelihoods for them, and also support the technical and organisational infrastructure, also including the funding of foundations.

If we look at the micro-level, we recommend the intermediation of cooperative accumulation. In today's FLOSS economy we have a

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ISSN: 2213-5316

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paradox: The more "communist" the sharing license we use (that is, no restrictions on sharing) in the peer production of FLOSS or open hardware, the more capitalist the practice (that is, multinationals can use it for free). Take, for example, the Linux commons that has become a corporate commons as well, enriching big, for-profit corporations. It is obvious that this works in a certain way and seems acceptable to most FLOSS developers. But is this way optimal? Indeed, the General Public License (GPL) and its variants allow anyone to use and modify the software code (or design), as long as the changes are integrated back in the common pool under the same conditions for further users. Our argument does not focus on the legal, contractual basis of the GPL and similar licenses, but on the social logic that they enable, which is: It allows anybody to contribute, and it allows anybody to use. In fact, this relational dynamic is technically a form of "communism": From each according to his/her abilities, to each according to his/her needs. This paradoxically allows multinational corporations to use FLOSS code for profit maximisation and capital accumulation. The result is that we do have an accumulation and circulation of information commons, based on open input, participatory processes, and commons-oriented output; however, it is subsumed to capital accumulation.

Therefore, it is not currently possible, or at least easy, to have social reproduction (that is, to create sustainable livelihoods) within the sphere of the commons. The majority of the contributors participate on a voluntary basis, and those who have an income make a living either through wage-labour or alliances with capital-driven entities. Hence, the FLOSS and free culture movements, however important they might be as new social forces and expressions of new social demands, are also, in essence, "liberal" in the tradition of the political ideology of liberalism. We could say they are liberal-communist and communist-liberal movements, which create a "communism of capital" (see the relevant debate among Bauwens and Kostakis, 2014; Rigi, 2014; Meretz, 2014).

The question is whether CBPP, that is, a new proto-mode of production, can generate the institutional capacity and alliances needed to break the political power of the old order. Ultimately, the potential of the new mode is the same as those of the previous proto-modes of production?to emancipate itself from its dependency on the old decaying mode, so as to become self-sustaining and thus replace the accumulation of capital with the circulation of the commons. This would be an independent circulation of the commons, where the common use-value would directly contribute to the further strengthening of the commons and of the commoners' own sustainability, without dependence on capital. How could this be achieved? Is there an alternative?

We believe that there is: To replace the non-reciprocal licenses, that is, those which do not demand a direct reciprocity from its users, with one based on reciprocity. We argue that the Peer Production License (PPL), designed and proposed by Kleiner (2010), tentatively demonstrates this line of argument. PPL should not to be confused with the Creative commons (CC) non commercial (NC) license, as its logic is different. The CC-NC offers protection to individuals reluctant to share, as they do not wish a commercialisation of their work that would not reward them for their labour. Thus, the CC-NC license stops further economic development based on this open and shared knowledge, and keeps it entirely in the notfor-profit sphere. The logic of the PPL is to allow for commercialisation, but on the basis of a demand for reciprocity. It is designed to enable and empower a counter-hegemonic reciprocal economy that combines a commons that is open to all that contribute, while charging a license fee for the for-profit companies who would like to use it without contributing. Not that much changes in practice for the multinationals; they can still use the code if they contribute, as IBM does with Linux. However, those who do not contribute should pay a license fee?a practice they are used to. Its practical effect would be to somehow direct a stream of income from capital to the commons.

It might be interesting, here, to refer to the work of Ostrom (1990) where it becomes evident that the commons are not traditionally totally open to all: "A distinct community of users governs the resource" (Bollier, 2014: 3).

In the same vein, Hardin's thesis about the "tragedy of the commons" has also been called "The Tragedy of Unmanaged, Laissez-Faire, Common-Pool Resources with Easy-Access for Non-Communicating, Self-Interested Individuals" (Hyde, 2010: 44). Therefore, with a license like PPL, which can be considered as merely a first instance of a reciprocity license, the creation of the commons would not be interrupted by the "renting mechanism", which would sell a license fee for usage rights. What the capitalist enterprises would produce might be subject to strict intellectual property legislation, while the commons would continue to exist and grow without them. In other words, there is no privatisation of the commons; the privatisation occurs outside the commons sphere. In short, the antagonistic relation between the PPL and the GPL is that the latter funds (not monetarily, but with resources) the private exploitation of the commons by capital, while the former restricts that.

Of course, there is arguably a price to be paid for that: The commons would grow slower because they would be more strictly governed, but the advantage would be that in this way the basis of a new co-operative commonwealth, which the GPL generally fails to establish, would be formed. The entrepreneurial coalitions that are linked around a PPL-based commons would be explicitly oriented towards their contributions to the commons, and the alternative value system that it represents. From the point of view of the peer producers and commoners, a commons-based reciprocal license would allow the contributory communities to create their own co-operative entities. In this new ecology, profit would be subsumed to the social goal of sustaining the commons and the commoners. Even the participating for-profit companies would consciously contribute under a new logic. This proposal would link the commons to an entrepreneurial coalition of ethical market entities (co-ops and other models, as we later mention) and keep the value created by the commoners within the sphere of the commons, instead of letting it be captured exclusively by corporations.

In other words, through this convergence (or rather combination) of a commons model for abundant immaterial resources, and a reciprocitybased model for the "scarce" material resources, the issue of livelihoods and social reproduction could be solved. The value would be kept inside the commons sphere itself. It is the co-operatives that would, through their co-operative accumulation, fund the production of immaterial commons, because they would pay and reward the peer producers associated with them. In this way, CBPP could move from a proto-mode of production, unable to perpetuate itself on its own outside capitalism, to an autonomous and real mode of production. It would create a counter-economy that could be the basis for reconstituting a "counter-hegemony" with a for-benefit circulation of value. This process, allied to "pro-commons" social movements, could be the basis for the political and social transformation of the political economy. Hence, we might move from a situation in which the communism of capital is dominant, to a situation in which we have "capital for the commons", increasingly ensuring the self-reproduction of the peer production mode.

The new open co-operativism would be substantially different from the previous form. In the old one, internal economic democracy is accompanied by participation in market dynamics on behalf of the members, using capitalist competition. There is an unwillingness to share resources with outsiders, therefore, no creation of the commons. We argue that an independent commons-oriented economy would need a different model in which the co-operatives produce commons and are statutorily oriented towards the creation of the common good. To realise their goals they should adopt multi-stakeholder forms of governance that would include workers, users-consumers, investors and the concerned communities. Today, we have a situation where open communities of peer producers are largely oriented towards the "start-up" model and are subsumed to profit maximisation, while the co-operatives remain closed, use exclusive intellectual property licenses, and, thus, do not create a commons (at least a knowledge commons). In the new model of open cooperativism, a merger should occur between the open peer production of the commons and the co-operative production of value.

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ISSN: 2213-5316

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The new open co-operativism would: (1) integrate externalities, (2) practice economic democracy, (3) produce commons, and (4) socialise its knowledge. The circulation of the commons would be combined with the process of co-operative accumulation, on behalf of the commons and its contributors. In the beginning, the knowledge commons field, following the logic of free contributions and universal use for everyone who needs it, would co-exist with a co-operative model for physical production, based on reciprocity. But as the co-operative model would become more and more hyper-productive through its ability to create sustainable abundance in material goods, the two logics could merge.

It should be emphasised that scholars have criticised the concept of open co-operativism or our view that the P2P/commons movement is in need of new commons-based reciprocal licenses (Rigi, 2014; Meretz, 2014). Rigi (2014: 403), for example, suggests the creation of "revolutionary peer producing cooperatives" based on an "exodus from cities to the countryside and the appropriation of land and its transformation into commons on which cooperatives will be built." We find the concept of revolutionary peer producing cooperatives of interest, as another experimental form in a wealth of commons-oriented organisational formats

It is important to highlight that the commons-based reciprocal licenses, like PPL, are not merely about redistribution of value, but about changing the mode of production. Our approach is to transform already-existing peer production, which today is not a full mode of production, being incapable of assuring its own self-reproduction. This is exactly why the convergence of CBPP in the sphere of abundance must be linked to the sphere of cooperative production, to ensure its self-reproduction. As noticed in past phase transitions, the existence of a proto-counter-economy and the resources that this allocates to the counter-hegemonic forces are absolutely essential for political and social change. This was arguably the weakness of classic socialism, in that it had no alternative mode of production and could only institute state control after a takeover of power. In other words, it is difficult, if not impossible, to wait and see the organic and emergent development of CBPP into a fully alternative system on its own. If we follow such an approach, CBPP would just remain a parasitic modality dependent on self-reproduction through capital.

We argue that the expectation that one can change society merely by producing open code and design, while remaining subservient to capital, is a dangerous pipe dream. Through the ethical economy (for an in-depth discussion of the concept, see Arvidsson and Peitersen, 2013) surrounding the commons, by contrast, it becomes possible to create non-commodified production and exchange. We, thus, envision a resource-based economy (Hackett, 2006) that would utilise modularity (Kostakis and Papachristou, 2013) and stigmergic mutual coordination (Elliott, 2006).

We believe that there will be no qualitative phase transition merely through emergence, but that it will require the reconstitution of powerful political and social movements that aim to become a "democratic polis". This democratic polis could indeed, through democratic decisions, accelerate the transition. We argue that in order to transcend capitalism, we have to create a sustainable ecosystem consisting of ethical markets, commoners and cooperatives. We can find no other way, on the microeconomic level, to create such an ecology besides utilising the potential of commons-based reciprocal licenses. On the macro-economic level, we are going to suggest a new approach for the state, the market and the civil society, trying to take into consideration the perils that such an ambitious endeavour includes.

#### Reconfigurations on the macro-economic level

On the basis of these generic micro-economic experiences, it is possible to deduce adapted macro-economic structures as well, which would include a civil society that consists mainly of communities of contributors creating shareable commons; of a new state form, which would enable and empower social production generally, and create and protect the necessary

civic infrastructures; and an entrepreneurial coalition that would conduct commerce and create livelihoods (see Figure 1).

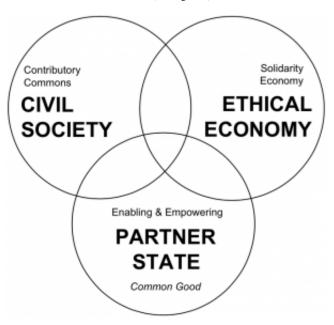


Figure 1. The commons-oriented model of a social knowledge economy.

However, such changes at the level of the micro-economy might not survive a hostile capitalist market and state without necessary changes at the macro-economic level (Kostakis and Stavroulakis, 2013). We should not ignore the fact that the state has its own interests in perpetuating its bureaucracy and legitimacy. Gajewska (2014) emphasises this argument through the case of the campus food services (free lunches) at Concordia University as an example of peer production in the physical world. She describes the tension between the university administration and the P2P food services collectives that were producing food commons. The project started with "direct action" occupying university space for cooking, eventually recognised by Concordia University. What we realise is that a transition narrative should take into account the possibility for creating spaces of democratic accountability from below. For example, in the aforementioned case, the university was the framework through which students could pool resources in the form of fee levies and organise forbenefit projects (Gajewska, 2014). Hence, there is a need for transition proposals carried by a resurgent social movement that embraces new value creation through the commons and becomes the popular and political expression of the emerging social class of peer producers and commoners. This movement should arguably be allied with the forces representing both waged and cooperative labour, independent commons-friendly entrepreneurs, and agricultural and service workers.

Initially, we introduce the concept of the partner state approach (PSA), in which the state becomes a "partner state" and enables autonomous social production. The PSA could be considered a cluster of policies and ideas whose fundamental mission is to empower direct social-value creation, and to focus on the protection of the commons sphere, as well as on the promotion of sustainable models of entrepreneurship and participatory politics. It is important to emphasise that we consider the partner state as the ideal condition for a government to pursue (as is the case with the FLOK society project) and the P2P movement to fight for. While people continue to enrich and expand the commons, building an alternative political economy within the capitalist one, by adopting a PSA, the state becomes an arbiter, retreating from the binary state/privatisation dilemma to the triarchical choice of an optimal mix amongst government regulation, private-market freedom and autonomous civil-society projects. Thus, the role of the state evolves from the post-World War II welfare-state model, which could arguably be considered a historical compromise between

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ISSN: 2213-5316 http://peerproduction.net

social movements for human emancipation and capitalist interests, to the partner state one, which embraces win-win sustainable models for both civil society and the market. In such an approach, the state would strive to maximise openness and transparency, while systematising participation, deliberation and real-time consultation with the citizens.

It should be highlighted that a PSA would not be opposed to the welfare state model, but rather should transcend and include it. A partner state should retain the solidarity functions of the welfare state, but debureaucratise the delivery of its services to the citizen. The social logic would move from ownership-centric to citizen-centric. The state should be de-bureaucratised through the commonification of public services and public-commons partnerships. Public-private partnerships not only add to the cost of public services and create widespread distrust and the need for control to counterbalance the profit-interests of the partners, but are essentially anti-democratic as they leave out the participation of the citizenry. Public service jobs could be considered a commons pool resource, and participation could be extended to the whole population. Furthermore, representative democracy would be extended through participatory mechanisms (participatory legislation, participatory budgeting, and so on).

It would also be extended through online and offline deliberation mechanisms, as well as through liquid voting (real-time democratic consultations and procedures, coupled with proxy voting mechanisms). In addition to this, taxation of productive labour, entrepreneurship and ethical investing, as well as taxation of the production of social and environmental goods should be minimised. On the other hand, taxation of speculative unproductive investments, taxation on unproductive rental income and taxation of negative social and environmental externalities should be augmented. In these ways, the partner state would sustain civic commons-oriented infrastructures and ethical commons-oriented market players, reforming the traditional corporate sector in order to minimise social and environmental externalities. Last but not least, of great importance would be the engagement of the partner state in debt-free public monetary creation, while supporting a structure of specialised complementary currencies.

The second component of a social knowledge economy would be an ethical market economy, that is, the creation of a commons-oriented social/ethical/civic/solidarity economy. Ethical market players would coalesce around the commons of productive knowledge, eventually using peer production and commons-oriented licenses to support the social economy sector. They should integrate common good concerns and a broad spectrum of stakeholders in their governance models. Ethical market players would move from extractive to generative forms of ownership, while open, commons-oriented ethical company formats would be privileged. They should create a territorial and sectoral network of "chamber of commons" associations to define their common needs and goals and interface with civil society, commoners and the partner state. With the help from the partner state, ethical market players would create support structures for open commercialisation, which would maintain and sustain the commons. Ethical market players should interconnect with global productive commons communities (that is, open design communities) and global productive associations that project ethical market power on a global scale.

The mainstream commercial sector should be reformed to minimise negative social and environmental externalities, while incentives that aim for a convergence between the corporate and solidarity economy must be provided. Hybrid economic forms, like Fair Trade and social entrepreneurship, could be encouraged to obtain such convergence. Distributed micro-factories for (g)localised manufacturing on demand should be created and supported in order to satisfy local needs for basic goods and machinery. Institutes for the support of productive knowledge should also be created on a territorial and sectoral basis. Education should be aligned with the co-creation of productive knowledge in support of the social economy and the open commons of productive knowledge. Therefore, all publicly funded research and innovation should be released

under a commons-based license [for an extensive discussion of this proposal, see Boldrin and Levine (2013) and Pearce (2012)].

Additionally, commons infrastructures for both non-material and material goods have to be created: In such a political economy, society is seen as a series of interlocking commons supported by an ethical market economy and a partner state that protects the common good and creates supportive civic infrastructures. Local and sectoral commons would create civil alliances of the commons to interface with the chambers of commons and the partner state. Interlocking for-benefit associations (knowledge commons foundations) would enable and protect the various commons. In addition to this, solidarity cooperatives should form public-commons partnerships in alliance with the partner state, while the ethical economy sector could be represented by the chamber of commons. Also, the natural commons should be managed by a public-commons partnership based on civic membership in commons trusts.

In a nutshell, the ethical economy would "realise" the value that is created by the commoners in the common pools, by creating added value for the ethical market sector. The realised surplus would go directly to the workers who are also the contributors to the commons, thereby realising their self-reproduction, independently of the classic capital accumulation economy. As explained before, a new "cooperative accumulation" process should thereby be created that would mediate between the commons and the classical capital sector, and directly serve the commons and the commoners.

In the vein of Arvidsson and Peitersen (2013), ethical companies could take very different form with their common goal being to contribute to the common good in general, and to the commons specifically. They may be allied amongst themselves as entrepreneurial coalitions around certain specific common pools (but likely will use more than one commons). The different legal regimes may be benefit corporations, Fair Trade companies, social businesses, workers' or other forms of cooperatives, such as solidarity cooperatives (their emergence has been described elsewhere by Restakis, 2010; see also his article in this special issue), and integrate the common good into their statutes, while being multi-stakeholder governed.

#### **Discussion**

So, why do we claim that these reconfigurations could lead to a post-capitalist scenario? Capitalist-driven societies produce for exchange value, which may or may not be useful; and continuously strive to create new social desires and demands. By way of contrast, the social knowledge economy consists in a productive civil society of contributors, citizen contributors who continuously contribute to the commons of their choice based on use value motivations; it is around these use-value commons that an ethical market and economy finds its place, and creates added value for the market. The commons is continuously co-produced by both citizen contributors and paid ethical labour from the cooperative/social sector. In this scenario, the primary driver is the sphere of abundance of knowledge available for all, which is not a market driven by supply and demand dynamics. A market of cooperatives and social solidarity players, which add and sell scarce resources on the marketplace, is deployed around the non-material abundance of non-rival or even anti-rival goods.

In this same scenario, the state is no longer a neoliberal market-state at the service of property owners, but is at the service of civil society, their commons, and the sphere of the ethical economy. It is not at the service of private capital accumulation, but serves value accumulation and equitable value distribution taking place in the commons-cooperative sector. It is at the service of the "buen vivir" (for a discussion of the concept, see Gudynas, 2011) of its citizens, and the good knowledge they need for this. Instead of a focus on public-private partnerships, which excludes participation from civil society; a PSA would focus on the development of public-social or public-commons partnerships. As said, where appropriate, the PSA would look at the possible commonification of public services. For example, perhaps following the model of Quebec and Northern Italy in

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ISSN: 2213-5316

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creating solidarity cooperatives for social care, in which the state enables, regulates the direct provision of care by multi-stakeholder governed civilsociety-based organisations (for a detailed account of the issue, see Girard and Langlois, 2009).

It is likely that once the state undertakes the support of a commons-based civic and ethical economy in the sphere of knowledge, that it will also look at the development of institutional commons in the physical sphere. For instance, developing commons-based housing development policies that keep social housing outside of the speculative sphere. A society and state that desire to develop a commons in the non-material sphere of knowledge, would arguably also look at expanding the commons sphere in other spheres of human activity. An example may show why this may be sometimes necessary. In the sphere of FLOSS production, nearly all FLOSS knowledge communities have their own for-benefit association that enables the cooperation, protects the licenses, etc. This is, mostly likely, because engagement requires knowledge and access to networks, which have been largely socialised in our societies. But open hardware developers have not developed such associations, and are more dependent on the companies selling hardware. This is because open hardware requires substantial material resources that need to be purchased privately. favouring the owners of capital and weakening the productive community that contributes to the commons. In such a scenario, the idea that open hardware developers could mutualise their means of production, would reestablish more balance between developers and company owners. Our illustration also mentions the commons-oriented ownership and governance forms that could assist citizens in having more control over crucial infrastructures, such as land and housing.

Further, another question that may arise is that of the role of the capitalist sector in such a political agenda. The first key issue here is the creation of a level playing field between the social solidarity sector and the private sector. While the social solidarity economy voluntarily integrates the common good in its statutes and operations, and is as it were "naturally commons-friendly", the private capital sector is regulated so that its denial of social and environmental externalities is mitigated. The PSA encourages transitions from extractive to generative ownership models, while the association of private companies with the commons would assist them in adapting to the new emerging models of co-creation and co-design of value with the commoners. Hyper-exploitation of distributed labour would be mitigated through new solidarity mechanisms. As the mutual adaptation between the commons sector, the cooperative sector and the capitalist sector proceeds, the remaining capitalist sector should be increasingly socialised in the new practices, as well as ownership and governance

The second key issue concerns the self-reproduction capabilities of the commons contributors. As already discussed, under the dominance of neoliberal, cognitive and netarchical capitalist forms, commoners are not able to create livelihoods in the production of open knowledge commons, and under most open licenses, private companies are free to use and exploit the common knowledge without secure return. This obliges most commoners to work for private capital. What needs to be achieved is a new contract between the commons and the private companies, that ensures the fair distribution of value, i.e., a flow of value must occur from the private companies to the commons and the commoners from whom the value is extracted. Models must be developed that allow privately owned companies to become fair partners of the commons. In the end, no privately-owned company, using its own research staff and proprietary intellectual property, will be able to compete against open ecosystems that can draw on global knowledge production and sharing. This process of fair adaptation must be encouraged and accompanied by both measures from the commons and their associated ethical enterprises, and by a PSA, in a context in which all players can benefit from the commons. Private capital must recognise, and must be made to recognise, that the value it is capturing comes overwhelmingly from the benefits of social cooperation in knowledge creation: Just as it had to recognise the necessity for better and fair pay for labour, it must recognise fair pay for commons production.

#### Conclusion

We would like to stress that this list of transitional strategies and preliminary proposals for policy making is general and non-inclusive. By no means does this article intend to formulate a specific economic and political plan or a clearly-defined transitional policy to a social knowledge economy and a commons-oriented society. It is important to remember Bouckaert and Mikeladze's (2008: 7) advice that "a more sophisticated diagnosis, as a function of culture, context, and systems features allows for selective transfers, for inspiration by other good practices, for adjustments of solutions, for facilitated learning by doing, for trajectories which are fit for purpose." Hence, a fundamental belief on which this paper is premised is the fact that there are no universal how-to manuals, because not only does every nation have its own special characteristics, but also rapid social change based on grandiose systemic substitutions usually has disastrous results. As history has illustrated many times these results are contradictory to what ambitious but benevolent revolutionaries may struggle for.

To recap, we attempted to introduce suggestions and ideas for a postcapitalist society and draw attention to the promising, arguably creative rhetoric of a PSA for commons-oriented development. In particular, we might assume that four factors in a certain state could catalyse the transition towards a commons-based society: (1) the extended microownership of fixed capital such as land, machinery and so on, (2) the need for recomposing productive infrastructures, (3) an already existent robust network of solidarity and cooperative initiatives, and (4) a decentralised energy network. Further, interdisciplinary research and experimentation around these newly developed concepts and ideas on a global basis is imperative, along with initiating a debate between scholars and activists in order to fine-tune the transition scenarios towards commons-oriented economies and societies.

#### Acknowledgements

Sections of this essay were based on Kostakis & Bauwens (2014) as well as on Michel Bauwens' work during the FLOK society project (2014). Moreover, Vasilis Kostakis would like to acknowledge support received by IUT (19-13) of the Estonian Ministry of Education and Research.

#### References

Arvidsson, A. & Pietersen, N. (2013) The ethical economy: Rebuilding value after the crisis, New York, Columbia University Press.

Bauwens, M. & Kostakis, V. (2014) From the communism of capital to capital for the commons: Towards an open co-operativism. TripleC: Communication, Capitalism & Critique, 12, 356-361. Retrieved from http://www.triple-c.at/index.php/tripleC/article/view/561

Boldrin, M. & David K. L. (2013) The case against patents. Journal of Economic Perspectives, 27, 3-22.

Bollier, D. (2014) The commons as a template for transformation. Great Transition Initiative. Retrieved http://www.greattransition.org/document/the-commons-as-a-template-fortransformation

Bouckaert, G. & Mikeladze, M. (2008) Introduction. The NISPAee Journal of Public Administration and Policy, 1, 7-8.

Elliott, M. (2006) Stigmergic collaboration: The evolution of group work. M/C Journal: A Journal of Media and Culture, 9.

Gajewska, K. (2014) Peer production and prosumerism as a model for the future organization of general interest services provision in developed countries: Examples of food services collectives. World Future Review.

#### Journal of Peer Production

ISSN: 2213-5316 http://peerproduction.net

Girard, J. P. & Langlois, G. (2009) Solidarity co-operatives (Quebec, Canada). *Local Economic and Employment Development (LEED)*, 229–272.

Gudynas, E. (2011) Buen vivir: Today's tomorrow. *Development*, 54, 441–447.

Hackett, S. C. (2006) Environmental and natural resources economics: Theory, policy, and the sustainable society. *ME Sharpe*.

Hardin, G. (1968) The tragedy of the commons. Science, 162, 1243-1248.

Hyde, L. (2010) Common as air: Revolution, art, and ownership, New York, Farrar, Straus and Giroux.

Kleiner, D. (2010) *The telekommunist manifesto*, Amsterdam, Institute of Network Cultures.

Kostakis, V. & Bauwens, M. (2014) Network society and future scenarios for a collaborative economy, Palgrave Macmillan.

Kostakis, V. & Stavroulakis, S. (2013) The parody of the commons. *TripleC: Communication, Capitalism & Critique*, 11, 412-424. Retrieved from <a href="http://triplec.at/index.php/tripleC/article/view/484">http://triplec.at/index.php/tripleC/article/view/484</a>

Kostakis, V. & Papachristou, M. (2013) Commons-based peer production and digital fabrication: The case of a RepRap-based, Lego-built 3D printing-milling machine. *Telematics & Informatics*, 31, 434-443.

Kropotkin, P. (2012) *Mutual aid: A factor of evolution*, Courier Dover Publications.

Marsh, L. & Onof, C. (2007) Stigmergic epistemology, stigmergic cognition. *Cognitive Systems Research*, 9, 136-149.

Meretz, S. (2014) Socialist licenses? A rejoinder to Michel Bauwens and Vasilis Kostakis. *TripleC: Communication, Capitalism & Critique*, 12, 362–365. Retrieved from <a href="http://www.triplec.at/index.php/tripleC/article/view/564">http://www.triplec.at/index.php/tripleC/article/view/564</a>

Orsi, C. (2009) Knowledge-based society, peer production and the common good. *Capital & Class*, 33, 31-51.

Orsi, C. (2005) The political economy of solidarity: Production. *Federico Caffe Centre Research Report* 5, Roskilde University.

Ostrom, E. (1990) Governing the commons: The evolution of institutions for collective action, Cambridge, Cambridge University Press.

Pearce, J. M. (2012) Physics: Make nanotechnology research open-source. *Nature*, 491, 519-521.

Restakis, J. (2010) *Humanizing the economy: Co-operatives in the age of capital*, New Society Publishers.

Rigi, J. (2014) The coming revolution of peer production and revolutionary cooperatives. A response to Michel Bauwens, Vasilis Kostakis and Stefan Meretz. *TripleC: Communication, Capitalism & Critique*, 12, 390–404. Retrieved from <a href="http://www.triplec.at/index.php/tripleC/article/view/486">http://www.triplec.at/index.php/tripleC/article/view/486</a>

Rogers, T. & Szamosszegi, A. (2011) Fair use in the U.S. economy: Economic contribution of industries relying on fair use. *OER Knowledge Cloud*, 1-36. Retrieved from <a href="https://oerknowledgecloud.org/?q=content/fair-use-us-economy-economic-contribution-industries-relying-fair-use-0">https://oerknowledgecloud.org/?q=content/fair-use-us-economy-economic-contribution-industries-relying-fair-use-0</a>