



COMMONS

TRANSITION

● Policy Proposals for an Open Knowledge Commons Society

Commons Transition: Policy Proposals for an Open Knowledge Commons Society

P2P Foundation



The FLOK team in Quilotoa, Ecuador
Photograph by Kevin Flanagan

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Preface to the First Edition

Ecuador's FLOK Society (Free-Libre, Open Knowledge) project was originally commissioned in 2013 through a tripartite agreement involving the [Ecuadorian Coordinating Ministry of Knowledge and Human Talent](#), [Senescyt](#) (The Secretary of Innovation and Technology) and the [IAEN](#) (The National Institute of Advanced Studies). The project had been initiated by Carlos Prieto, then rector of the IAEN and Daniel Vázquez and Xavier Barandiaran.

The project marked the first time a nation state commissioned a practical plan to transition to a mature Social Knowledge Economy based on Peer to Peer principles. It was initiated to “fundamentally re-imagine Ecuador”, based on the principles of open networks, peer production, and a commons of knowledge.

The core group of researchers were Michel Bauwens, Belgium/Thailand, (P2P/Commons Transition Policies); Daniel Araya, with assistance of Paul Bouchard (Open Education, Open Science, Human Capabilities), Jenny Torres, Ecuador (Open Technical Infrastructures); John Restakis, Canada/Italy (Social Infrastructure, Institutional Innovation); George Dafermos, Crete/Greece (Open and Distributed Energy, Manufacturing and Agriculture); Janice Figueiredo, Brazil (Commons for Collective Life, i.e. open food networks, open currencies, open urbanism).

This core FLOK Society team was supported by a much larger network of researchers, activists, and hackers associated with organisations such as the P2P Foundation, Shareable, the Commons Strategies Group, ShareLex, Free Knowledge Institute and others. They also had legal assistance from a team of lawyers experienced in the ‘open’, ‘sharing’ economy, and technical support from a network of hackers/open IT experts associated with civic movements such as 15M in Spain.

The policy proposals in this book are intended to help visualise and enable real world practices towards a society based on equity, economic democracy, and shared material and knowledge commons. Although originally written for the Ecuadorian project, they have

been adapted and improved upon to apply to regions and countries far beyond the borders of Ecuador. We share them to give an overview of the many precedents and possibilities pointing to a more fair and just social order, and to inspire the development of a co-operative commonwealth as the foundation of an empowered civil society at local, regional, national, and global levels and to create the institutional means that enable civil society to adapt to the needs and concrete realities of particular peoples and places.

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Introduction to the Commons Transition Plan

Michel Bauwens and John Restakis

When the administration of Rafael Correa was swept into power in 2006, it appeared as though a new political page had been turned in Ecuador. A Citizen's Revolution that had mobilized broad swathes of the Ecuadorian public, in particular the country's indigenous peoples, had galvanized the country around a radical set of political, social, economic, and environmental values that set the stage for an overhaul of the nation's inherited political past.

In short order, the Ecuadorian government re-wrote the national constitution, rejected the odious national debt contracted by previous corrupt regimes, joined the Bolivarian Alliance for the Americas, and developed a comprehensive vision of national economic and social life based on the concept of *Buen Vivir* (Good Living) that linked economic and social life to the values of personal well being and protection of the environment.

This vision formed the basis of the country's National Plan and the move to fundamentally alter the nation's productive matrix from one of dependency on foreign capital and oil extraction to the construction of an economic model based on the values of commons, co-operation, and free and open access to knowledge.

At the end of 2013, the FLOK Project (Free/Libre Open Knowledge) was launched to articulate what such an economy would look like and what policy recommendations would be required to realize it. Under the joint sponsorship of The Ministry for National Planning (SENPLADES), The Ministry for Innovation and Human Resources (SENESYCT), and the National Institute for Advanced Studies (IAEN) the government asked an international team of researchers to draw up a participatory process to craft a transition strategy for a society based on the idea of a "social knowledge economy" – an economy based on free and open access to knowledge conceived as a commons. And while the project was rooted in the particular context and

concerns of Ecuador, the issues, sectors, and policy proposals that were addressed also transcended this local situation.

The local context was that Ecuador is still essentially in a dependent situation vis-a-vis the western-dominated global economy, which means that it needs to export raw material at low added value, and import consumer goods at high added value. It's a scenario for permanent dependency that the progressive government wanted to change. The FLOK Project was a key strategy to aid in this effort. Following the lead of Minister Rene Ramirez of SENESCYT, FLOK aimed to envisage an economy that would no longer be dependent on limited material resources, but on infinite immaterial resources – such as knowledge.

The proposals of the research team consisted of a generic Commons Transition Plan, and 18+ legislative proposals including a dozen pilot projects, which were further developed and validated in the *Buen Conocer Summit* at the end of May 2014. The synthetic proposals were then presented by the research team at the end of June 2014, while still being finessed for scientific publication. The proposals are now being processed in the Ecuadorian administration, and being submitted to political review and assessment.

Several aspects of the Ecuadorian process were highly progressive, such as the intense participatory process and the openness to both local and foreign input, which is both innovative and unusual. So too was the willingness to link technological and economic questions with the social and cultural conditions in which they must be realized.

The FLOK Project, the Commons Transition Plan, and the Policy Papers, significantly transcend the local context and have a global significance.

The first characteristic of the FLOK process is of course its very existence. This is the first time that a transition plan to a commons-based society and economy has been crafted. There are 'new economy', green, social economy, and other transition plans, but none of them have focused on re-organizing society and the economy around the central concept of the Commons as the core

value creation and distribution system.

The Commons Transition Plan is based on an analysis and observation of the already existing commons processes and economies, and the value crisis that they provoke within the current political economy. The rise of the digital commons is a case in point.

There is a growing contradiction between new relations of production emerging around the digital commons and the economies they are creating, and how this emerging prototype of a new mode of production is embedded within capitalism. In short, while more and more use value is created in and through the commons, only a fraction of this is being monetized. When this commons-produced use value (such as free and open software (FOSS)) is monetized into exchange value, it is done so through proprietary platforms that very seldom share any of this exchange value with the creators.

Hence we see an evolution from a type of capitalism that was based on the extraction of rent through the privatization of knowledge and the control of intellectual property and supply networks (cognitive capitalism), to a new form of 'netarchical capitalism' in which proprietary platforms both enable human co-operation but also exploit it for the benefit of private capital. In other words, netarchical capitalism directly extracts value from human co-operation itself. Moreover, in our current information age, the whole of society is being transformed into a "social factory" producing commons-generated goods and services. The cases of uncompensated user-generated value for Facebook and Google are obvious examples.

The failure of netarchical capitalism to return fair value to its creators has transposed the traditional exploitation of labour in the production of material goods to that of immaterial goods such as knowledge, branding, and ideas that are now the driving force of capital accumulation. This has greatly increased the precariousness of both workers and commoners the world over. Hence, any transition must also solve and restore the feedback loop between value creation and distribution, and create an ethical and civic economy around the commons, moving from extractive forms of

exploitative capital, to generative forms of co-operative capital. In other words, capital that returns value to those that contribute to the commons.

This process requires the re-conception and re-alignment both of traditional commons and co-operative thinking, and practice, into new institutional forms that prefigure a new political economy of co-operative commonwealth. This in turn, is based on a simultaneous transition of civil society, the market, and the organization and role of the state and forms a foundation principle of the Commons Transition Plan.

For most of the history of industrial and post-industrial capitalism, the primary political conflict has been one between state and market – whether to use the state power for redistribution of wealth and regulation of the excesses of the market, or to allow market players to privatize the value of public and social goods and services for the benefit of capital. This is the classic conflict between social versus private benefit and has been called by some the lib (for liberal) vs. lab (for labour and its derivative social movements) pendulum. In our current political economy, except for a few researchers who operated outside of the mainstream, such as Elinor Ostrom and her research on the commons, the focus on social value and the common good has been discarded as a historical legacy without future. Indeed, the remaining physical commons that exist globally, mostly in the South, are everywhere under threat while under austerity, what remains of public goods in Europe and North America are also being privatized at breakneck speeds.

But the emergence of digital knowledge, software and design, as new forms of commons not only recreate commons-oriented modes of production and market activities, they also show that value is now increasingly created through contributions, not traditional labor, to create commons, not commodities. Through its contributions and the ubiquity of digital technology, it can be said that civil society has now become productive in its own right, and we can make a leap from contributor communities of software developers to a vision of civil society that consists of civil commons contributed to by citizens.

The entrepreneurial activities that are created around the commons induce the vision of an ethical economy, a non-capitalist marketplace that re-introduces reciprocity and co-operation in the market's functioning, while co-creating commons and creating livelihoods for the commoners. This type of economy and market in which co-operation, mutuality, and the common good define the characteristics of a new kind of political economy, point the way to a new state form, which we have called the Partner State.

Thus, the commons not only introduces a third term next to the state and the market, i.e. the generative, commons-producing civil society, but also a new market and a new state. A foundation principle of a Commons Transition Plan is that the changes must happen concurrently in all three aspects of our social and economic life.

Through the Partner State concept, the report proposes the radical democratization of the state, the mobilization and expansion of the social/solidarity economy, the creation and use of public-commons partnerships, the co-operitization of public services, and other innovative concepts and practices that could fundamentally renew our political economy. These ideas are developed in the second document.

A third contribution by George Dafermos, shows a policy report on Open Design Commons and Distributed Manufacturing developing on the work around the FLOK transition in Ecuador, to give the reader a taste of what these changes could mean in a concrete sector.

In addition, we added an interview with one of the co-researchers Janice Figueredo, about the more practical aspects of the projects, and her interaction as a researcher with local civic groups.

But what now? What comes after the FLOK experience in Ecuador?

The eBook you read here is part of an ongoing effort to create an open public forum for further commons-driven and commons-oriented policy-making, that is distinct from its first iteration in Ecuador (flokociety.org), and is open to all contributions from commoners globally.

The project will be carried by a consortium of commons and co-operative movements, that are discussing their relative support at this time, and the P2P Foundation will of course be one of the partners. With the Commons Transition Plan as a comparative document, we intend to organize workshops and dialogues to see how other commons locales, countries, language-communities but also cities and regions, can translate their experiences, needs and demands into policy proposals. The Plan is not an imposition nor is it a prescription, but something that is intended as a stimulus for discussion and independent crafting of more specific commons-oriented policy proposals that respond to the realities and exigencies of different contexts and locales.

As part of this process, we have already concluded a workshop with the *Reseau Francophone des Communs* in Paris in September, and workshops with *Syriza* officials in Greece. The idea is not to support or choose any political or social movement, but to enable all progressive and emancipatory forces to look for commonalities around their approaches, and to renew their political visions with the commons in mind.

This project therefore, is itself a commons, open to all contributions, and intended for the benefit of all who need it.

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A Commons Transition Plan

By Michel Bauwens

“The emancipatory forces of the world urgently need to move away from the simple market/state duopoly and the false binary choices between ‘more market’ or ‘more state’. As an alternative, we propose that we move to a commons-centric society in which a post-capitalist market and state are at the service of the citizens as commoners. While there are already substantial, if not thriving, social movements in favor of the commons, the sharing society and peer-to-peer dynamics, this is the first coherent effort to craft a transition program in which this transformation is described in political and policy terms.”

Background to the Commons Transition Project

The Commons Transition Plan you are about to read is rooted in the particular experience of the [FLOK project](#) in Ecuador, which took place mainly in the first half of 2014. This was a research project commissioned by three governmental institutions in the state of Ecuador. Its intention was to help Ecuador transition to a ‘social knowledge’ economy and society, i.e. , a society and economy that functions as common pools of shared knowledge in every domain of social activity. However, the experience (especially the ‘generic’ transition plan that was proposed) largely transcends the specific situation in Ecuador. Here, we propose a version of the plan that has been changed by removing most, if not all, specific references to Ecuador. Nevertheless, it is useful to know some of the background of the original project. Here is an excerpt of the introduction to [the Ecuadorian version](#):

The National Plan for Good Living of Ecuador recognizes and stresses that the global transformation towards knowledge-based societies and economies requires a new form for the creation and distribution of value in society. The National Plan’s central concept is the achievement of ‘*Buen Vivir*’ (‘*Sumak Kawsay*’, in Kichwa language) or ‘good living’; but good living is impossible without the availability of ‘good knowledge’, i.e. ‘*Buen Conocer*’ (‘*Sumak Yachay*’, in Kichwa language). The third national plan for 2013–2017 explicitly calls for an open-commons based knowledge society^[1]. President Correa himself exhorted young people to achieve and fight for this open knowledge society^[2]. The FLOK Society is a joint research effort by the Coordinating Ministry of Knowledge and Human Talent (with Minister Guillaume Long), the SENESCYT, i.e. the ‘Secretaría Nacional de Educación Superior, Ciencia, Tecnología e Innovación’ (with Minister Rene Ramirez) and IAEN, i.e. the ‘Instituto de Altos Estudios del Estado’ (with rector Carlos Prieto) to develop transition and policy proposals to achieve such an open commons-based knowledge society. The acronym

FLOK refers to:

- **Free**, meaning freedom to use, distribute and modify knowledge in universally available common pools;
- **Libre** stresses that it concerns free as in freedom, not as in 'gratis';
- **Open** refers to the ability of all citizens to access, contribute to and use this common resource.

The explanation of the FLOK acronym highlights one of the limitations of the original project. Indeed, the FLOK Research team was tasked with the transition to a 'social knowledge' economy, i.e. a commons of knowledge only, and not the commons of land, labor and money, which Karl Polanyi considered to be the three false commodities that were necessary for capitalism.

A full commons transition would consider the four commons, i.e. the Polanyian triarchy, plus the knowledge commons. The research team circumvented this limitation by using a specific methodology which systematically looked at 1) the feeding mechanisms for those commons, many of which require both 2) material and 3) immaterial (intangible) conditions for their successful development. Hence, in this roundabout way, it was possible to introduce many of the requirements in terms of other 'physical' commons. Nevertheless, the limitation stands, and any newer version of the Commons Transition Plan would necessarily integrate the transition policies for the remaining three commons. The current revised version has already been substantially de-FLOK'ed, that is, it is published here with most if not all of the references to the Ecuadorian context removed. This 'generic' version is meant to be 'universal', not in the old euro-centric manner that claims to be universally applicable as a single similar process, but as a reference document that can be discussed in diverse local contexts, adapted or rejected in part or whole depending on the local deliberations of the commoners.

But despite the diversity of local conditions, there are structural similarities for all who are part of the current dominant world-system of globalized capitalism. All people of the world are subjected to the pseudo-abundance of a growth-based system that

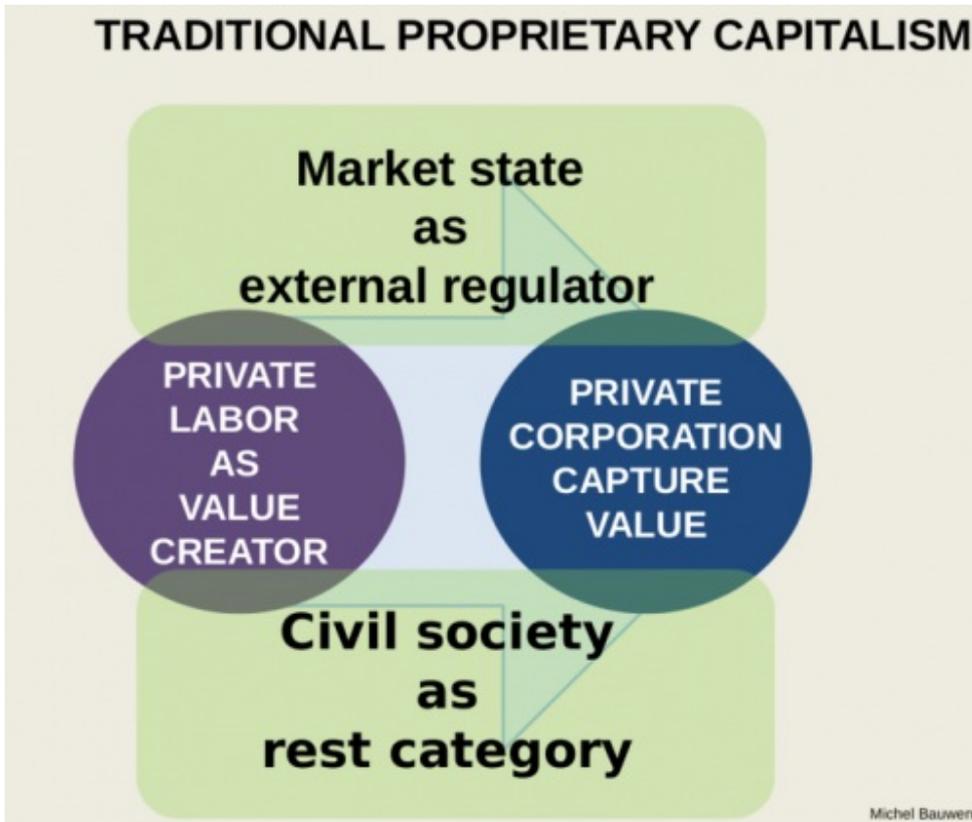
ignores natural limits, and to the artificial scarcities imposed by 'intellectual property' legislation, which inhibits and criminalizes the free cooperation of humanity. And all countries and peoples of the world suffer from the social injustice which accompanies the other two flaws. The emancipatory forces of the world urgently need to move away from the simple market/state duopoly and the false binary choices between 'more market' or 'more state'. As an alternative, we propose that we move to a commons-centric society in which a post-capitalist market and state are at the service of the citizens as commoners. While there are already substantial, if not thriving, social movements in favor of the commons, the sharing society and peer-to-peer dynamics, this is the first coherent effort to craft a transition program in which this transformation is described in political and policy terms.

The reader will find original analysis of the new forms of networked capitalism and how they can be overcome; a critique of the predatory forms of the sharing/commons economies that already exist; and new conceptions of civil society, the market and the state, which must be transformed simultaneously and convergently if we want to achieve such a transition. The aim, of course, is not to remain in the analytical phase, but to craft localized adapted transitions that can also produce global convergences for action, and to build the social and political movements that can make it happen.

The Framing of the Proposal

The Three Value Models and the transition to a Social Knowledge Economy

In order to frame the transition to a ‘social knowledge economy’ or a Commons-based societal model, we use a framing of three particular ‘value extraction and distribution’ systems, which determine how economic value is created, extracted, and distributed. The traditional capitalist value model is of course well known, but the emergence of a knowledge society has already changed these dynamics to a fundamental extent. In the traditional model, before the era of networked and cognitive production, private capital actors invest in capital and labor, and sell the industrial and consumer products with a surplus value. But the new models of cognitive capitalism work with different models of value extraction and distribution, and we distinguish three different models, which includes the post-capitalist model of the social knowledge economy. In the context of this Commons Transition Plan, we define cognitive capitalism generically as that model of capitalism where the ownership and control of information flows is the key factor for the extraction of value^[3].



Of the three models we will distinguish, one form is still dominant, but rapidly declining in importance; a second form is reaching dominance, but carries within itself the seeds of its own destruction; a third is emerging, but needs vital new policies in order to become dominant.

The first model: ‘Classic’ Cognitive Capitalism based on IP extraction

The first form is the classic form of cognitive capitalism, based on a “rentier” capitalism that extracts rent from Intellectual Property, and in which financial capital dominates. A good description of this form is McKenzie Wark’s *Hacker Manifesto* (2004), in which he describes the logic of “vectoral capitalism”, where the ‘vectors’ of communication are in the hands of mass media and the multinational corporations that organize production.

This first form of cognitive capitalism was dominant in the first era of networked computing, before the emergence of the civic internet and the web, when the networks were exclusively in the hands of multinational companies and/or governments and their centralized public channels. In this system, the profit of capital is increasingly

dependent on ‘intellectual property’ regulations that keep technical, scientific, commercial and other forms of knowledge artificially scarce, and therefore allow the realization of super-profits.

The profits of purely industrial production have become low, but the benefits of IP and the control of the networks of production through IT, allow for the generation of huge monopolistic profits. This first form of cognitive capitalism is far from dying, is still in fact dominant, but is nevertheless undermined in the second era of networked computing, where internetworks are now diffused throughout society, and the vectors of production can no longer be monopolized. Furthermore, the ubiquity of digital technology, and its ability to reproduce informational products at reduced marginal cost, severely undermines the maintenance of an intellectual property regime based on maintaining artificial scarcity, through legal repression or technological sabotage (such as the use of Digital Rights Management [\[4\]](#)).

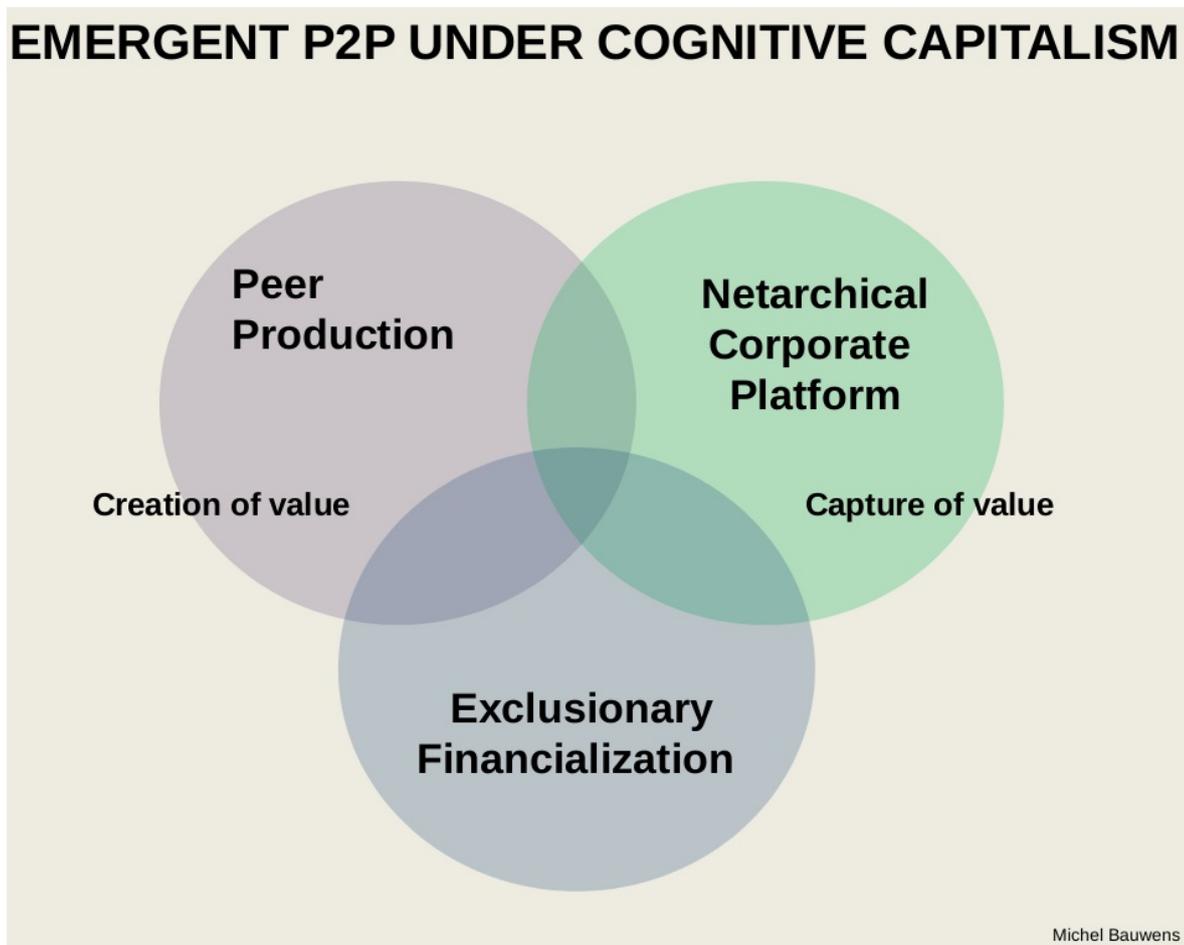
The second model: Netarchical Capitalism based on the control of networked platforms

Indeed, the second era of massively networked computing, born with the publicly accessible internet, has undermined the control of the “vectoral” class, and created a new class of controllers, that of “netarchical capital”, the type of capital investment that controls proprietary social media platforms, but that nevertheless enables direct peer to peer communication between individuals.

This second form of netarchical capitalism is a form where capital no longer controls the direct production of information and communication, but extracts value through its new role as platform intermediary. This model relies much more marginally on IP protection, but rather allows p2p communication while controlling its possible monetization through the role and the ownership of the platforms for such communication. Typically, as in proprietary social media such as Facebook or Google, the front end is peer to peer, i.e. it allows p2p sociality, but the back end is controlled, the design is in the hands of the owners, as are the private data of the users, and it is the attention of the user base that is marketed through advertising. The financialization of cooperation is still the

name of the game.

This form is a hybrid form however, because it also allows the further growth of p2p sociality in which media exchange and production is largely available to an ever large user base. This form thus co-exists with multiple forms of grassroots p2p production and exchange, and sees for example the emergence of more monetary diversity, in the form of more localized complementary or community-driven currencies which act as defenders of local economic flows; and in the form of a global reserve crypto-currency like Bitcoin, a shadow currency that is useful as a 'civic' post-Westphalian currency but at the same time exhibits the features of financial capitalism in an exacerbated fashion. Netarchical capitalism suffers from a severe 'value crisis', in which the logic of use value strongly emerges and grows exponentially, but in a demonetized form. The remaining monetized value rests on speculative valuation of cooperative value creation by financial markets.



The Value Crisis under conditions of netarchical capitalism

Neoliberalism was characterized by a particular ‘value crisis’ which exploded in the systemic crisis of 2008. Under the general conditions of the neoliberal regime, the wages of the workers have stagnated, and the part that goes to the owners of capital increased, creating a crisis of accumulation, which was solved through credit. When corporations, governments and the general consumer’s credit became over-extended, by 2008, the neoliberal system entered into a systemic crisis.

Already under neoliberalism, the material value of the assets of production are but a small part of the evaluation of a company’s value, and the excess value can be considered already as a form of extraction of the human immaterial cooperation. Under conditions of cognitive capitalism, especially under its netarchical form, this value crisis is exacerbated. The period since the 1990s, when civic internetworks became increasingly available to the wider population, and commons-based peer production, and other forms of networked value creation became possible, saw the birth of a mixed regime. Through the different forms of peer production and networked value creation, use value is increasingly created independently of the private industrial and financial system, and takes place through the civic contributory form, where immaterial use value is deposited in common pools of knowledge, code and design.

In ‘pure’ peer production, which we can call a form of ‘aggregated distribution’ of labor, contributors, voluntary or paid, contribute to a common pool where the immaterial value is deposited; for-benefit associations, such as the FLOSS Foundations, enable the continued cooperation to occur; and entrepreneurial coalitions of mostly for-profit capitalist enterprise, capture the added value in the marketplace. In this model, though there is continued creation of use value in the commons, and thus, ‘an accumulation of the commons’ based on open input, participatory processes of production, and commons-oriented output which is available to all users; capital accumulation continues through the form of labor and capital in the entrepreneurial coalitions. But an increasing amount of voluntary labor is extracted in this process.

In the sharing form of networked value, characterized by social

media/networking taking place over proprietary platforms, the use value is created by the social media users, but their attention is what creates a marketplace where that use value becomes extracted exchange value. In the realm of exchange value, this new form of 'netarchical capitalism' (the hierarchies of the network) may be interpreted as hyper-exploitation, since the use value creators go totally unrewarded in terms of exchange value, which is solely realized by the proprietary platforms.

Finally, in the form of crowdsourced marketplaces - which we call 'disaggregated distribution' because the workers are isolated freelancers competing without collective shared IP - capital abandons the labor form and externalizes risk on the freelancers. According to preliminary research by 'digital labor' researcher Trebor Scholz [\[5\]](#) the average hourly income in some cases does not exceed 2 dollars per hour, which is way below the U.S. Minimum wage. A typical example is the skills marketplace TaskRabbit, where the workers cannot communicate with each other, but clients can.

Under the regime of cognitive capitalism, use value creation expands exponentially, but exchange value only rises linearly, and is nearly exclusively realized by capital, giving rise to forms of hyper-exploitation. We would argue that it creates a form of hyper-neoliberalism. While in classic neoliberalism, labor income stagnates, in hyper-neoliberalism, society is deproletarized, i.e. waged labor is increasing replaced by isolated and mostly precarious freelancers; more use value escapes the labor form altogether.

Under the mixed regime of cognitive capitalism in its netarchical form, networked value production grows, and has many emancipatory effects in the social field of use value creation, but this is in contradiction with the field of exchange value realization, where hyper-exploitation occurs. This is what we mean when we say that there is an increased contradiction between the proto-mode of production that is peer production, and associated forms of networked value creation; and the relations of production, which remain under the domination of financial capital.

In this new hybrid form, a sector of capital, netarchical capitalism, has liberated itself to some significant degree of the need for

proprietary forms of knowledge, but it has actually increased the level of surplus value extraction. At the same time, use value escapes more and more its dependency on capital. This form of hyper-neoliberalism creates a crisis of value. First, the part of exchange-value mediated labor, diminishes compared to the role of direct use value creation, making capital increasingly superfluous and parasitical; second, the forms of value creation explode, but the continued reliance on monetized exchange value does not allow for the realization of that value by the use value producers; profits in the industrial economy diminish as well, making the financial sector and its reliance on IP rent the increasingly dominant power; at the same time, the power of IP rent extraction is undermined by direct use value creation.

In any case, all these trends create a crisis for the accumulation of capital; the feedback loop between use value creation, and the exchange-value capture, ideally redistributed either as wages or through social payments, is broken; over-reliance on debt renders massive lending moot as a solution. Capital becomes more reliant on the externalities of social cooperation, yet fails to reward it. As the concept of 'value' becomes increasingly unclear and complex (and de-linked from a clear correlation to hourly labor), financial capitalism attempts to realize the value of this social cooperation through speculative mechanisms instead, but which then potentially increase the amount of fictitious capital in the system (the fictitious capital is actually the unrealized use value that is no longer rewarded because of the value crisis).

These correlated issues are examined in depth by Adam Arvidsson and Nicolai Peitersen in their book on the Ethical Economy (2013). We could call this value regime neo-feudal, because it relies increasingly on unpaid 'corvee' and creates widespread debt peonage. Finally, ownership is replaced by access, diminishing the sovereignty that comes with property, and creating dependencies through the one-sided licensing agreements in the digital sphere.

Towards a third model: a mature 'civic' peer-to-peer economy

The third is the hypothetical form we believe we may successfully

transition to, if we succeed in rebuilding transformative social movements, and hence succeed also in transforming the state so that it can act as a Partner State which facilitates the creation of new civic infrastructures. In this model, peer production is matched to both a new market and state model, create a mature civic and peer-based economic, social and political model, where the value is redistributed to the value creators.

These changes have been carried forward in the political sphere by an emerging commons movement, which espouses the value system of peer production and the commons, driven by the knowledge workers and their allies.



Solving the value crisis through a social knowledge economy

Since the mixed model seems to create untenable contradictions, it becomes necessary to imagine a transition to a model where the relations of production are not in contradiction with the evolution of the mode of production. This means a system of political economy

which would be based on the recognition, and rewarding, of the contributive logic at work in commons-oriented peer production.

If we look at the micro-level, we recommend the intermediation of cooperative accumulation. In today's free software economy, open licences enable the logic of the commons, or even technically, 'communism' (each contributes what he/she can, each uses what is needed), but created a paradox: 'the more communistic the license, the more capitalistic the economy', since it specifically allows large for-profit enterprises to realize the value of the commons in the sphere of capital accumulation. Hence, ironically, the growth of a 'communism of capital'. We propose to replace the non-reciprocal 'communistic' licenses, with socialist licenses, i.e. based on the requirement of reciprocity.

Hence, the use of a peer production license [\[6\]](#) would require a contribution to the commons for its free use, at least from for-profit companies, to create a stream of exchange value to the commoners/peer producers themselves; in addition, commoners would create their own market entities, create added market value on top of the commons, realize the surplus value themselves, and create an ethical economy around the commons, where the value of the production of rival goods would be realized.

Such ethical entrepreneurial coalitions would likely enable open book accounting and open supply chains, that would coordinate the economy outside of the sphere of both planning and the market. The ethical entrepreneurial coalitions could expand the sphere of the commons by the use of commons ventures, such as in the 'venture communist' model proposed by Dmytri Kleiner.

In this model, cooperatives in need of capital would float a bond that would allow the purchase of means of production. These means of production would belong to the commons; in other words, the machines would be rented from the common pool, but this rent would also be redistributed to all the members of the commons. In this binary economic form, the commoners-cooperators would receive both a wage from their cooperative, but also an increasing part of the common rent. (In addition, all citizens would benefit from a basic income provided by the Partner State).

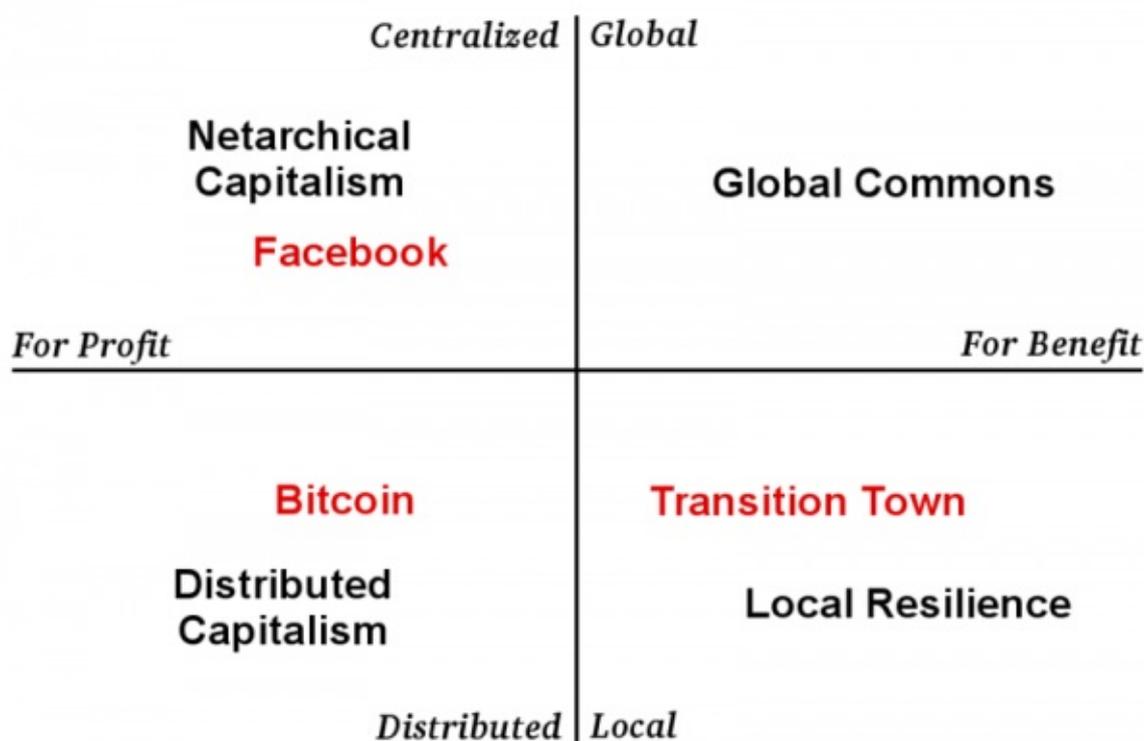
Such entrepreneurial coalitions, intrinsically in solidarity with their commons, could also move to practices such as open accounting and open logistics, which would allow for widespread mutual coordination of their productive capacities, hence ushering a new third model of allocation that would be neither a market, nor a planning system. (In such a system, action and production are coordinated through open mutual signalling in a fully transparent system. [7]) In other words, the stigmergic coordination, which is already operating in the sphere of 'immaterial' production such as free software and open design, would gradually be transferred to the sphere of 'material' production.

To the degree that such stigmergic systems create the possibility of resource-based economic models, such spheres of the economy would be gradually demonetized and replaced by measurement systems (i.e. commodity currencies with 'store of value' systems would gradually disappear). However, such changes at the level of the micro-economy would not survive a hostile capitalist market and state without necessary changes at the macro-economic level; hence the need for transition proposals, carried by a resurgent social movement that embraces the new value creation through the commons, and becomes the popular and political expression of the emerging social class of peer producers and commoners - allied with the forces representing both waged and cooperative labor, independent commons-friendly entrepreneurs, and agricultural and service workers.

Four Technology Regimes

Value regimes are more or less associated with technology regimes, since the forces at play want to protect their interests through the control of technological and media platforms, which encourage certain behaviors and logics, but discourage others. The powers over technological protocols and value-driven design decisions are used to create technological platforms that match proprietary interests. Thus, even as peer to peer technologies and networks are becoming ubiquitous, ostensibly similar p2p technologies have very different characteristics which lead to different models of value creation and distribution, and thus different social and technological behaviors.

In networks, human behavior can be subtly or not so subtly influenced by design decisions and invisible protocols that are designed in the interest of the owners or managers of the platforms. The following graphic is organized around two axes, which determine at least four distinct possibilities. The first top-down axis distinguishes centralized technological control (and an orientation towards globality) from distributed technological control (and an orientation towards localization); the horizontal axis distinguishes a for-profit orientation (where any social good is subsumed to the goal of shareholder profit), from for-benefit orientations (where eventual profits are subsumed to the social goal).



The four potential scenarios are discussed here:

Netarchical Capitalism as a technological regime: peer to peer front end, hierarchical back-end

Netarchical capitalism, the first combination (upper-left quadrant), matches centralized control of a distributed infrastructure with an orientation towards the accumulation of capital. Netarchical capital is that fraction of capital which enables and empowers cooperation and P2P dynamics, but through proprietary platforms that are under centralized ownership and control. While individuals will share through these platforms, they have no control, governance or

ownership over the design and the protocol of these networks/platforms, which are proprietary. For examples, think of Facebook or Google. Typically under conditions of netarchical capitalism, while sharers will directly create or share use value, the monetized exchange value will be realized by the owners of capital. While in the short term it is in the interest of shareholders or owners, this also creates a longer term value crisis for capital, since the value creators are not rewarded, and no longer have purchasing power to acquire the goods that are necessary for the functioning of the physical economy.

Distributed Capitalism as a technological regime: the commodification of everything

The second combination, (bottom-left quadrant) called “distributed capitalism”, matches distributed control but with a remaining focus on capital accumulation. The development of the P2P currency Bitcoin, the Kickstarter crowdfunding platform, and the privately owned sharing platforms, are representative examples of these developments. Under this model, P2P infrastructures are designed in such a way as to allow the autonomy and participation of many players, who are allowed to interact without the classic intermediaries, but the main focus rests on profit-making. In Bitcoin, all the participating computers can produce the currency, thereby disintermediating large centralized banks. However, the focal point remains on trading and exchange through a currency designed for scarcity, and thus must be obtained through competition. The conscious deflationary design of the currency insures a permanent increase in value, and thus encourages hoarding and speculation.

On the other hand, Kickstarter functions as a reverse market with prepaid investment. Under these conditions, any Commons is a byproduct or an afterthought of the system, and personal motivations are driven by exchange, trade and profit. Many P2P developments can be seen within this context, striving for a more inclusionary distributed and participative capitalism. Though they can be considered as part of, say, an anti-systemic entrepreneurialism directed against the monopolies and predatory intermediaries, they retain the focus on profit making. Here

distribution is not understood as “local”, as the vision is rather of a virtual economy where small players can have a global compact, and create global aggregations among themselves. However, despite the ideals expressed by the political and social movements associated with such a model (such as anarcho-capitalism and the Austrian School of Economics), in practice, these dynamics inevitably lead to consolidation and concentration of capital.

Resilience Community Platforms Designed for Re-Localization

The following model associates distributed local control of technological platforms with a focus on the community or Commons, and aims to create “resilience communities” that can withstand the vagaries of an unstable global marketplace. (the bottom-right quadrant). The focus here is most often on relocalization and the re-creation of local community. It is often based on an expectation for a future marked by severe shortages of energy and resources, or in any case increased scarcity of energy and resources, and takes the form of lifeboat strategies.

Initiatives like the Degrowth movement or the Transition Towns, a grassroots network of communities, can be seen in that context. In extreme forms, they are simple lifeboat strategies, aimed at the survival of small communities in the context of generalized chaos. What marks such initiatives is arguably the abandonment of the ambition of scale and the focus on strong and resilient local communities. Though global cooperation and web presence may exist, the focus remains on the local. Most often, political and social mobilization at scale is seen as not realistic, and doomed to failure. In the context of our profit-making versus Commons axis though, these projects are squarely aimed at generating community value. A generic critique of this model is that it does not generate counter-power or a counter-hegemony for the model, as the globalization of capital is not matched or kept in check by a counterforce of the same scale. Hence the need for a second alternative model, which also recognizes the importance of scale and pays attention to the dynamics of global power and governance.

The Global Commons Scenario as the desired alternative

The “Global Commons” approach (upper-right quadrant) is against the aforementioned focus on the local, focusing on the global Commons. Advocates and builders of this scenario argue that the Commons should be created for, and fought for, on a transnational global scale. Though production is distributed and therefore facilitated at the local level, the resulting micro-factories are considered as essentially networked on a global scale, profiting from the mutualized global cooperation both on the design of the product, and on the improvement of the common machinery. Any distributed enterprise is seen in the context of transnational phyles, i.e. alliances of ethical enterprises that operate in solidarity around particular knowledge Commons, on a global and not simply local scale.

Thus, though the production is local, the social, political and economic organization is global, and able to create a counter-power at that scale. In addition, political and social mobilization, on regional, national and transnational scale, is seen as part of the struggle for the transformation of institutions at every level of scale. Participating enterprises are vehicles for the commoners to sustain global Commons as well as their own livelihoods. This latter scenario does not take social regression as a given, and believes in sustainable abundance for the whole of humanity.

Cognitive/Netarchical Capitalism vs. an Open-Commons based Knowledge Society

It may be useful here to directly compare two synthetic and countervailing scenarios. On the one hand, the for-profit driven scenarios that are in harmony with the present political economy of capital; and on the other hand, the alternative scenario of the social knowledge economy based on open-commons principles.

So: What exactly is an open-commons based economy and society? To understand it we must first look at the older social and economic model that it replaces. The neoliberal and capitalist economic forms combine three basic elements, fundamental choices that guide their operation. The first is the belief that the earth’s resources are infinite, which allows an idea of permanent and compound

economic growth in the service of capital accumulation. Neoliberal capitalism is therefore based on an illusion of a fake or 'pseudo-abundance'; and its growth mechanism is dedicated to the senseless accumulation of material riches.

The second is the belief that the flow of knowledge, science and culture should be privatized, and therefore serves the exclusive benefit of property owners. Knowledge is made to serve capital accumulation and the profits of the few. The privatization of knowledge through excessive copyrights and patent regimes have a dramatically slowing effect, and allow for an exclusionary financialization. This leads to the creation and maintenance of artificial scarcity. While markets can be considered to be an allocation mechanism for scarce and rival goods (a scarcity allocation mechanism), contemporary IP-proprietary capitalism is a scarcity-engineering mechanisms which creates and increases scarcities.

Finally, the two first elements are configured in such a way that they do not serve social justice, equality, and benefits for all, but rather the benefits and profits for the few. Under cognitive capitalism, the fruits of social cooperation are enclosed and financialized, and the majority of the population has to pay for knowledge that is largely socially produced. Only those with money can benefit from technical and scientific innovations. Then, we must look at the positive counter-reactions that have emerged and which have been particularly strengthened after the crisis of neoliberalism, which was felt by southern countries in the previous decades, but became global in 2008.

A first reaction has been the recapture of the state by citizen movements, such as particularly in the Andean countries like Ecuador. The second is a re-emergence and flowering of new economic forms based on equity, such as the cooperative economy, the social economy, and the solidarity economy. The new progressive governments, and a few others, are all committed to the strengthening of these more socially just economic forms.

Third, we have seen the emergence of a sharing economy, which is mutualizing physical infrastructures (though often in the form of

private platforms) in order to re-use and make available the enormous amount of surplus material and resources that have been created in the last thirty years. Apart from the explosion of carsharing and bikesharing, they often take the form of ‘peer to peer marketplaces’, allowing citizens to create more fine-grained exchanges of their surplus.

Fourth, and perhaps most importantly, we have seen, thanks largely to the potentiality of the global networks, the emergence of commons-based peer production. Globally and locally, productive communities of citizens have been creating vast common pools of knowledge, code (software), and design, which are available to all citizens, enterprises and public authorities to further build on. Often, these productive knowledge commons are managed by democratic foundations and nonprofits, which protect and enable the common productive infrastructure of cooperation, and protect the common pool of knowledge from exclusionary private enclosure, most often using open licenses; they are sometimes called ‘for-benefit associations’. Very often, these productive communities co-exist with a dynamic entrepreneurial coalition of firms co-creating and co-producing these common pools, thereby creating a dynamic economic sector. It is very common for these open ecosystems to displace their proprietary-IP based competitors.

A U.S. report on the ‘Fair Use Economy’, i.e. economic activities based on open and shared knowledge, estimated its economic weight in that country to be one-sixth of GDP. Yet there is also a paradox: it is most likely that it is the capitalist forms that first see the potential of the new commons-based economic forms, and ally with them; on the other hand, cooperative economic forms rarely still practice and co-produce open knowledge pools. However, there is an emerging trend to transform the existing cooperative tradition based on single-stakeholder governance, into multi-stakeholder governance, and which introduce the care of the common good in their statutes. What this means is that the emerging global knowledge economy, can today take two competing forms. In the first form of the knowledge-economy, under the regime of cognitive capitalism, we have on the one hand the continuation of proprietary IP, and the realization of economic rent by financial capital; combined with a new form of ‘netarchical’ capital, which enables

but also exploits social production. It is not difficult to see that the riches of giants like Facebook and Google are based on the hyper-exploitation of the free labor of the citizens using their social networks. The other, more desirable form of the knowledge-based economy is based on open commons of knowledge, but which are preferentially linked to an ethical and equitable economy.

The Socio-Economic Implications of a Social Knowledge Economy

John Restakis, expert in cooperatives, research coordinator for [FLOK's Social Infrastructure and Institutional Innovation investigation](#) and author of "Humanizing the Economy: cooperatives in the Age of Capital" [8] offers the following positive description of the social knowledge economy [9]:

In the current debate concerning the rise and consequences of "cognitive capitalism" a new discourse is developing around the concept of a "social knowledge economy". But what does a social knowledge economy mean and what are its implications for the ways in which a society and an economy are ordered? Cognitive capitalism refers to the process by which knowledge is privatized and then commodified as a means of generating profit for capital. In this new phase of capitalism the centralization and control of knowledge overtakes the traditional processes of material production and distribution as the driving force of capital accumulation. In the past, capitalism was concerned primarily with the commodification of the material. Essential to this process was the gradual enclosure and privatization of material commons such as pasturelands, forests, and waterways that had been used in common since time immemorial. In our time, capitalism entails the enclosure and commodification of the immaterial – knowledge, culture, DNA, airwaves, even ideas.

Ultimately, the driving force of capitalism in our age is the eradication of all commons and the commodification of all things. The colonization and appropriation of the public domain by capital is at the heart of the New Enclosures. This process is sustained and extended through the complex and ever-evolving web of patents, copyright laws, trade agreements, think tanks,

and government and academic institutions that provide the legal, policy, and ideological frameworks that justify all this. Above all, the logic of this process is embedded in the values, organization, and operation of the capitalist firm.

By contrast, a social knowledge economy is based on the principle that knowledge is a commons that should be free and openly accessible for the pursuit of what Rene Ramirez, Minister of the Senescyt innovation agency in Ecuador, describes as “good living”, not as an instrument of commercial profit. Knowledge is perceived as a social good. A starting point for answering this question is the recognition that knowledge in a society – its creation, utilization, and value – is a construct that is molded by the social and economic forces that define the power relations in a community. Knowledge has always been at the service of power.

Cognitive capitalism, the process by which human knowledge is both privatized and commodified, results from the domination and power of capitalist economic and social relations, and in particular, the undemocratic and privatized nature of economics, markets, and the organizational structure of firms. In previous ages knowledge was also controlled and monopolized, to the extent that it was possible, by king or church. Today’s information technology, combined with global corporate power, has made such centralization and control far easier and far more extensive.

If the character and use of knowledge in a society is a product of existing power relations, the pursuit of a social knowledge economy must also entail a re-visioning and re-aligning of social, political, and economic relations such that they, in turn, embody and reinforce the values and principles of what knowledge as a commons implies. Absent this, how would a social knowledge economy operate, or be sustained, in an overwhelmingly capitalist economy? Where are the social and economic spaces in which an open knowledge commons could be used in the service of the broader community or for collective aims? What kinds or organizations are needed to in order for knowledge to be used in this way? What are the conditions

necessary for them to thrive? How can they provide a counterweight to the overwhelming power and influence of capital?

Without strong civic institutions committed to the idea of the commons and the public good, open knowledge systems are vulnerable to appropriation and ultimate commodification by capitalist firms as is currently the case with the internet itself. The recent ruling of the U.S. Federal Communications Commission in the United States undermining net neutrality [\[10\]](#) is a major advance in the privatization of what has until now been an equitably accessible global commons of information.

An economy in which knowledge is a commons in the service of social ends requires the corresponding social and economic institutions that will mobilize and protect knowledge for the realization of these ends. The operation of a social knowledge economy ultimately depends on social and economic institutions that embody the values of commons, reciprocity, and free, open and democratic association that are pre-requisites for the pursuit of social ends. In short, a social knowledge economy ultimately rests on social economy values.

Just as cognitive capitalism depends on the manifold institutional supports supplied by government policy, legislation, free market ideology, and the collective power of firms and the institutions that serve them, even more so does a social knowledge economy require the corresponding civic and economic institutions that can support and safeguard the value of commons, of collective benefit, of open and accessible markets, and of social control over capital. These civic institutions are embodied in the structure of democratic enterprises, of peer-to-peer networks, of non-profits and community service organizations, of mutually supporting small and medium firms, and of civil society and the social economy itself. It is these social and economic structures, based on the principles of reciprocity and service to community, that can best utilize knowledge as a commons and safeguard its future as an indispensable resource for the common good and the wellbeing of humanity as a whole. The identification of these institutions

and of the public policies needed for their development and growth is the overarching aim of this research.

Discussion: IP and patents impede and slow down innovation

By George Dafermos, a researcher in distributed manufacturing based in Crete, Greece – and the coordinator of [FLOK's Commons-oriented Productive Capacities investigation](#).

Intellectual property rights and their supposed role in cognitive capitalism

“Capitalist knowledge economies use intellectual property (IP) rights as means of enclosing knowledge and as mechanisms by which to realize the extraction of monopoly rents from knowledge that has been thus privatized. That is ideologically justified as follows: exclusive IP rights provide incentives for individuals and companies to engage in research and develop new products and services. That is, they promote innovation: the expectation of profitable exploitation of the exclusive right supposedly encourages economic agents to turn their activities to innovative projects, which society will later benefit from (e.g. Arrow 1962). But is that actually an accurate description of the function of IP rights in capitalist knowledge economies? Do they really spur innovation?”

A synopsis of empirical evidence on the effect of exclusive intellectual property regimes on innovation and productivity

To answer this question, it is instructive to look at the available empirical data on the effect of exclusive IP rights on technological innovation and productivity. The case of the United States is indicative of a capitalist knowledge economy in which the flow of patents has quadrupled over the last thirty years: in 1983 the US Patent Office granted 59.715 patents, which increased to 189.597 in 2003 and 244.341 in 2010 (US Patent Office 2013).

Looking at these numbers begs the question: how has the dramatic increase in the number of patents issued by the US Patent Office over time impacted technological innovation and productivity in the US? Well, according to the US Bureau of Labor Statistics, the annual growth in total factor productivity in the decade 1970–1979 was about 1,2%, while in the next two decades it fell below 1%. In the same period, R&D expenditure hovered around 2,5% of GDP (***)).

In short, what we see is that the dramatic increase in patents has not been paralleled by an increase in productivity or innovation. No matter which indicator of productivity or innovation we use in the analysis, we are invariably led to the conclusion that ‘there is no empirical evidence that they [patents] serve to increase innovation and productivity, unless productivity [or innovation] is identified with the number of patents awarded’ (Boldrin and Levine 2013, p. 3; also, see Dosi et al. 2006).

Another argument often voiced by proponents of exclusive IP rights in defense of patents is that they promote the communication of ideas and that, in turn, spurs innovation. They claim that if patents did not exist, inventors would try to keep their inventions secret so that competitors would not copy them (e.g. Belfanti 2004). From this standpoint, the solution to the problem is a trade between the inventor and society: the inventor reveals his innovation and society gives him the right to exploit it exclusively for the next twenty or so years. Hence, the argument goes, to the extent that they replace socially harmful trade secrets, patents promote the diffusion of ideas and innovations (Moser 2013, pp. 31–33). In reality, however, patents have exactly the opposite effect, encouraging ignorance and non-communication of ideas.

In what has become a standard practice, ‘companies typically instruct their engineers developing products to avoid studying existing patents so as to be spared subsequent claims of willful infringement, which raises the possibility of having to pay triple damages’ (Boldrin & Levine 2013, p.9; Brec 2008). Even if that were not always the case, the way in which patent documents are written actually renders them incomprehensible to anyone

except lawyers (Brec 2008; Mann & Plummer 1991, pp. 52-53; Moser 2013, p. 39).

The real function of intellectual property rights in cognitive capitalism: how do capitalist firms actually use them? What, however, more than anything else disproves the claimed positive effect of patents on innovation and creativity is the way in which patents are actually used by capitalist firms. In a capitalist knowledge economy, patents are used primarily as (a) means to signal the value of the company to potential investors, (b) as means to prevent market-entry by other companies (so they have strategic value independently of whether they are incorporated in profitable products) and (c) as weapons in an 'arms-race', meaning they are used defensively to prevent or blunt legal attacks from other companies (e.g., see Boldrin & Levine 2013; Cohen et al. 2000; Hall & Ziedonis 2007; Levin et al. 1987; Pearce 2012). It would take a heroic leap of logic for any of these applications of patents to be seen as productive.

On the other side, there is a plethora of cases in which the effect of patents on innovation and productivity has been undoubtedly detrimental. Indicatively, consider how Microsoft is currently using a patent (no. 6370566) related to the scheduling of meetings in order to impose a licensing fee on Android mobile phones (Boldrin & Levine 2013***). In this case, patents become a mechanism for sharing the profits without any participation in the actual process of innovation. As such, they discourage innovation and constitute a pure waste for society.

Interestingly, not that long ago, Bill Gates (1991), Microsoft founder, argued that 'if people had understood how patents would be granted when most of today's ideas were invented, and had taken out patents, the industry would be at a complete standstill today...A future startup with no patents of its own will be forced to pay whatever price the giants choose to impose'. It is ironic, of course, that Microsoft, not being able to penetrate the mobile telephony market, is now using the threat of patent litigation to raise a claim over part of Google's profits.

The way in which patents are used in capitalist knowledge

economies makes it blatantly obvious that ‘in the long run... patents reduce the incentives for current innovation because current innovators are subject to constant legal action and licensing demands from earlier patent holders’ (Boldrin & Levine 2013, p.7). This becomes readily understood, considering that technological innovation is essentially a cumulative process (Gilfillan 1935, 1970; Scotchmer 1991): Cumulative technologies are those in which every innovation builds on preceding ones: for example, the steam engine (Boldrin et al. 2008; Nuvolari 2004), but also hybrid cars, personal computers (Levy 1984), the world wide web (Berners-Lee 1999), YouTube and Facebook.

But if patents have at best no impact and at worst a negative impact on technological innovation and productivity (Dosi et al. 2006), then how is it possible to explain – especially from the legislator’s side – the historical increase in patents and the expansion of IP-related laws? Many analysts have pondered this question. The conclusion to which they have been led is rather unsettling: the actual reason behind the proliferation of patents and the expansion of IP-related laws consists in the political influence of large, cash-rich companies which are unable to keep up with new and creative competitors and which use patents to entrench their monopoly power.

Discussion: the role of Indigenous Peoples and (Neo)Traditional Knowledge

Arguments for the specific role of (neo)-traditional knowledge and peoples in a social knowledge transition

The original commons transition project in Ecuador (FLOK), was rooted in the adaptation of the indigenous concept of ‘*Buen Vivir*’ (good living), which points to the importance of reconnecting with the commons values and principles of the original native people and the experiences of pre-capitalist, and pre-modern societies, which did not prioritize the accumulation of material goods. Such neotraditional approaches, if they are based on a mutual dialogue, are a very important part of a transition to a social knowledge economy. In the following section, we make the case why this is so

important.

*** The Main Argument: the common immateriality of traditional and post-industrial eras**

It is not difficult to argue that modern industrial societies are dominated by a materialist paradigm. What exists for modern consciousness is material physical reality, what matters in the economy is the production of material products, and the pursuit of happiness is in very strong ways related to the accumulation of goods for consumption. For the elite, its powers derive essentially from the accumulation of capital assets, whether these are industrial or financial.

Infinite material growth is really the core mantra of capitalism, and it is made necessary and facilitated by the very design of the contemporary monetary system, where money is mostly created to interest-driven bank debt. But this was not the case in traditional, agriculture-based societies. In such societies, people of course do have to eat and to produce, and the possession of land and military force is crucial to obtain tribute from the agricultural workers, but it cannot be said that the aim is accumulation of assets.

Feudal-type societies were based on personal relations consisting of mutual obligations. These are of course very unequal in character, but are nevertheless very removed from the impersonal and obligation-less property forms that came with capitalism, where there is little impediment for goods and capital to move freely to whomever it is sold to. In these post-tribal but still pre-modern societies, both the elite and the mass body of producers are united by a common immaterial quest for salvation or a similar core spiritual pursuit like enlightenment, etc... , and it is the institution that is in charge of organizing that quest, like the Church in the western Middle Ages or the Sangha in South-East Asia, that is the determining organization for the social reproduction of the system. Tribute flows up from the farming population to the owning class, but the owning class is engaged in a two-fold pursuit: showing its status through festivities, where parts of the surplus is burned up; and gifting to the religious institutions. It is only this way that salvation/enlightenment, i.e. spiritual value or merit in all its forms,

can be obtained. The more you give, the higher your spiritual status. Social status without spiritual status is frowned upon by those type of societies.

This is why religious institutions like the Church or the Sangha end up with so much land and property themselves, as the gifting competition was relentless. At the same time, these institutions serve as the welfare and social security mechanisms of their day, by ensuring that a part of that flow goes back to the poor and can be used in times of social or natural emergencies. In the current era, marked by a steady deterioration of ecosystems, is again undergoing a fundamental and necessary shift to immateriality.

Here are just a few of the facts and arguments to illustrate my point for a shift towards once again an immaterial focus in our societies. The cosmopolitan elite of capital has already transformed itself for a long time towards financial capital. In this form of activity, financial assets are moved constantly where returns are the highest, and this makes industrial activity a secondary activity. If we then look at the financial value of corporations, only a fraction of it is determined by the material assets of such corporations. The rest of the value, usually called “good will”, is in fact determined by the various immaterial assets of the corporation, its expertise and collective intelligence, its brand capital, the trust in the present and the future expected returns that it can generate.

The most prized material goods, such as say, Nike shoes, show a similar quality; only 5% of its sales value is said to be determined by physical production costs, all the rest is the value imparted to it by the brand (both the cost to create it, and the surplus value created by the consumers themselves). The shift towards an immaterial focus can also be shown sociologically, for example through the work of Paul Ray on cultural creatives, and of Ronald Inglehart on the profound shift to postmaterial values and aspirations.

For populations who have lived for more than one generation in broad material security, the value system shifts again to the pursuit of knowledge, cultural, intellectual and spiritual experience. Not all of them, not all the time, but more and more, and especially so for the cultural elite of ‘cultural creatives’ or what Richard Florida has

called the Creative Class, which is also responsible for key value creation in cognitive capitalism.

One more economic argument could be mentioned in the context of cognitive capitalism. In this model of our economy, the current dominant model as far as value creation is concerned, the key surplus value is realized through the protection of intellectual properties. Dominant Western companies can sell goods at over 100 to 1,000 times their production value, through state and WTO enforced intellectual rents. It is clearly the immaterial value of such assets that generate the economic streams, even though it requires creating fictitious scarcities through the legal apparatus. We have argued before that this model is undermined through the emergence of distributed infrastructures for the production, distribution and consumption of immaterial and cultural goods, which makes such fictitious scarcity untenable in the long run. The immaterial value creation is indeed already leaking out of the market system.

While we need such a transition towards a focus on immaterial value, it also creates very strong contradictions in the present political economy, one of the main reasons why a shift towards an integrated social knowledge economy, is a vital necessity.

*** The Second Argument: the nature of post-deconstructive trans-modernism**

Industrial society, its particular mental and cultural models, are clearly antagonistic to tradition. The old structures must go: religion is seen as superstition, community is seen as repressive of individuality, and tradition is seen as hampering the free progress of dynamic individuals. This makes modernism both a very constructive force, for all the new it is capable of instituting in society, but also a very destructive force, at war with thousands of years of traditional values, lifestyles and social organization. It attempts to strip individuals of wholistic community, replacing it with disciplinary institutions, and commodity-based relations.

The subsequent postmodernist phase is a cultural (but also structural as it is itself an expression of capitalist re-organization) reaction against modernity and modernism. Postmodernism is above

all a deconstructive movement. Against all 'reification' and 'essentialisation', it relativises everything. No thing, no individual stands alone, we are all constituted of fragments that themselves are part of infinite fields. Through infinite play, the fragmented 'dividual' has at its disposal infinite constitutive elements that can be recombined in infinite ways.

The positive side of it is that along with freeing us with fictitious fixed frameworks of belief and meaning, it also re-opens the gates of the past and of tradition. Everything that is usable, is re-usable, and the war against tradition ends, to make place for pragmatic re-appropriation. But as the very name indicates, postmodernism can only be a first phase of critique and reaction against modernity and modernism, still very much beholden to it, if only in its reactivity to all things modern. It is deconstructive, a social regression of the collective ego that can only receive ultimate therapeutic meaning if it is followed by a reconstructive phase. For postmodernism to have any ultimate positive meaning, it must be followed by a transformative, reconstructive phase. A trans-modernism if you like, which goes 'beyond' modernity and modernism.

In that new phase, tradition can not just be appropriated any longer as an object, but requires a dialogue of equals with traditional communities. They are vital, because they already have the required skills to survive and thrive in a post-material age.

*** The Third Argument: the problematic nature of un-changed tradition**

Using or returning to a pre-modern spiritual tradition for transmodern inspiration is not a path that is without its problems or dangers: it can very easily become a reactionary pursuit, a fruitless attempt to go back to a golden age that has only existed in the imagination. The core problem is that many spiritual traditions all occurred within the context of exploitative economic and political systems. Though the exploitation was different, most traditional spirituality and its institutions developed in systems that were based on tribute, slavery, or serfdom. These systems usually combined a disenfranchised peasant population, a warrior or other ruling class, in which the traditional Church or Sangha played a crucial role for

its social reproduction.

For example, Buddhism only became acceptable to the 'mainstream' society of its time when it accepted to exclude slaves. Despite its radical-democratic potential, it became infused with the feudal authority structure that mirrored the society of which it was a part. These spiritualities are therefore rife with patriarchy, sexism and other profoundly unequal views and treatments of human beings. Though the logic was profoundly different from capitalism, these forms of exploitation, and their justification by particular religious or spiritual systems and institutions, should prove to be unacceptable to contemporary (post/trans-modern) consciousness.

Perhaps a symmetrical but equally problematic approach would be the pure eclecticism that can be the result of postmodern consciousness, in which isolated parts of any tradition are simply stolen and recombined without any serious understanding of the different frameworks. Another problem we see is the following: contemporary communication technologies, and globalized trade and travel, and the unification of the world under capitalism, have created the enhanced possibility for a great mixing of civilizations. Though contact and interchange was always a reality, it was slow, and it different civilizational spheres really did exist, which created profoundly different cultural realities and individual psychologies. To be a Christian or a Buddhist meant to have profoundly different orientations towards life and society (despite structural similarities in religious or spiritual organization).

But a growing part of the human population, if not the whole part, is now profoundly exposed to the underlying values of the other civilizational spheres. For example, Eastern Asian notions have similarly already profoundly impacted western consciousness. In this context, rootedness in one's culture and spiritual traditions can no longer be separated with a global cosmopolitan approach and a continuous dialog with viewpoints and frameworks that originate elsewhere. Increasingly global affinity networks are becoming as important as local associations in influencing individuals and their identity-building.

*** Fourth Argument: the road to differential post-industrial**

development

I believe it would be fair to say that contemporary capitalism is a machine to create homogeneity worldwide, and that this is not an optimal outcome, as it destroys cultural biodiversity. In its current format, which got a severe shock with the current financial meltdown, which combines globalization, neoliberalism and financialization, it is also an enormous apparatus of coercion. It undermines the survivability of local agriculture and creates an enormous flight to the cities; it destroys long-standing social forms such as the extended family, and severely undermines traditional culture.

Of course, I do not want to imply that all change or transformation is negative, but rather stress that it takes away the freedom of many who would make different choices, such as those who would want to stay in a local village. It is here that neotraditional approaches offer real hope and potential. Instead of the wholesale import of global habits and technologies, for which society has not been prepared and which is experienced as an alien graft, it offers an alternative road of choosing what to accept and what to reject, and to craft a locally adapted road to post-industrial development. It reminds us of Gandhi's concept of Swadeshi and appropriate technology. He rejected both western high tech, which was not adapted to many local situations, but also unchanged local agrarian tradition and technology, which was hardly evolving. Instead, he advocated appropriate technology, an intermediary level of technology which started from the local situation, but took from modern science and technology the necessary knowledge to create new tools that were adapted to the local situation, yet offered increases in productivity. Neotraditional economics could take a similar approach, but not limited to an attitude to technology selection, but to the totality of political and social choices.

In this way, in harmony with local values, those aspects can be chosen which increase the quality of livelihoods, but do not radically subvert chosen lifestyles and social forms. It represents a new approach which combines the high tech of globalized technical knowledge, with the high touch elements of local culture. For example, it becomes imaginable to conceive of local villages,

adapting localized and small-scale manufacturing techniques based on the latest advances in miniaturization and flexibilization of production technologies, and which are globally connected with global knowledge networks.

*** Fifth Argument: Adapting to Steady-State Economies in the Age of the Endangered Biosphere**

The essence of capitalism is infinite growth, making money with money and increasing capital. An infinite growth system cannot infinitely endure with limited resources in a limited physical environment. Today's global system combines a vision of pseudo-abundance, the mistaken vision that nature can provide endless inputs and is an infinite dump, with pseudo-scarcity, the artificial creation of scarcities in the fields of intellectual, cultural and scientific exchange, through exaggerated and ever increasing intellectual property rights, which hamper innovation and free cooperation.

To be sustainable, our emerging global human civilization and political economy needs to reverse those two principles. This means that we first of all need a steady-state economy, which can only grow to the degree it can recycle its input back to nature, so as not to further deplete the natural stock. And it requires a liberalization of the sharing and exchange of technical and scientific knowledge to global open innovation communities, so that the collective intelligence of the whole of humankind can be directed to the solving of complex problems. The first transformation is closely linked to our contemporary monetary system and alternative answers can be found in the traditional conceptions of wealth of pre-industrial societies. For example, traditional religions associated with agriculture-based societies and production systems, outlawed interest. There is a good reason for that: when someone extends a loan with interest, that interest does not exist, and the borrower has to find the money somewhere else [\[11\]](#). In other words, to pay back the interest, he has to impoverish somebody else. This of course, would be extremely socially destructive in a static society, and therefore, it could not be allowed to happen, which explains the religious injunction against interest. However, in modern capitalist

societies, a solution has been found: growth.

As long as the pie is growing, the interest can be taken from the growing pie. The problem however, is that such a monetary system requires growth, infinite growth. Static businesses are an impossibility, since that would mean they cannot pay back the interest. Now that we have reached the limits of the biosphere, now that we need again a steady-state economy, we need interest-free monetary systems, and paradoxically, the religious injunctions again make sense. This is just one of the connections between the transmodern challenges, and the value of traditional, and religious systems rooted in the pre-modern era, such as Buddhist Economics, and of course, the traditions of '*Buen Vivir*'.

We could take many other examples: for example, modern chemical agriculture destroys the quality of the land, and depletes it, so that here also, pre-modern traditional practices become interesting again. However, as we stated in the third argument, and refined in the fourth argument: since tradition is also problematic, it cannot be simply copied, it can only be used in a critical manner. An example of such a critical approach is the appropriate technology movement. In this approach, it is recognized that traditional technology as such is insufficient, that hypermodern technology is often inappropriate in more traditional settings, and that therefore, an intermediate practice is needed, that is both rooted in 'tradition', i.e. the reality of the local situation, but also in modernity, the creative use of technological solutions and reasoning, so as to create a new type of 'appropriate' technological development.

*** Conclusion: Can the ethos of the social knowledge economy be mixed with neotraditional approaches?**

With the emergence of the social knowledge economy and commons-based peer production, and practices like open and distributed manufacturing, a new alliance becomes possible: that between the most technologically advanced open design communities, with the majority of the people who are still strongly linked to traditional practices. Through such an alliance, which combines the traditional injunction for a steady-state economy in harmony with natural possibilities, a differentiated post-industrial

future can be created, which can bypass the destructive practices of industrial-era modernism, and can create an ‘appropriate technology’ future, whereby more traditional communities can more freely decide what to adapt and what to reject. While on the other hand, transmodern open design communities can learn from the wisdom of traditional approaches. Such an alliance needs an ideological vehicle, and ‘*Buen Vivir*’ is its expression.

The potential role of commons-based reciprocity licenses to protect traditional knowledge

Reciprocity-based licenses for traditional knowledge

Today, indigenous and other communities who want to share their knowledge for the good of the rest of humanity are in somewhat of a moral bind. If they share their knowledge without any IP protection, or if they share their knowledge using the classic open licenses from the free software movement, such as the General Public License, they intrinsically allow any outside forces, include the monopolistic multinationals, to profit from their knowledge and traditions, without any guaranteed reciprocity, and they may not benefit themselves from the wealth that is generated from their contributions. On the other hand, if they use a license like the Creative-Commons Non-Commercial license, they allow sharing, and the spreading of benefits through the shared knowledge, but also reduce the potential for economic development based on that knowledge. Finally, not sharing the knowledge at all, would prevent the rest of humanity from benefitting from potential new medicines that could save millions of human lives.

It is therefore important to introduce into the debate the possibility of reciprocity-based open licenses. Let’s first summarize the issue as it has evolved in the economies based on free software, open design and open hardware. These fields are dominated by fully open licenses such as the GPL, which allow anyone to use the code, but obliges those that modify the code, to add it to the common pool, so that all may benefit from it. While this had led to an exponential growth of free and open source software, it has also subsumed this

new model of open, commons-based peer production to an economic development that is dominated by large companies. Hence, the mode of peer production is not autonomous and not capable of self-reproduction, since commons-contributors are obliged to work as labor for capital. Hence, we have the paradox that licenses which allow for full sharing, in practice promote the accumulation of capital.

In the cultural sphere, one of the answers for this has been the invention and use of the Creative Commons Non-Commercial License. These type of licenses allow anyone to use and reproduce the cultural product, on the condition that no commercial profit is intended and realized. This solution raises two issues. One is that such a license does not create a real commons, but only a scale of sharing that is determined by the producer of the cultural product; in other words, there is no common creation of a common pool. The second is that it prohibits further economic development based on that protected work. Is there an alternative to this conundrum?

Dmytri Kleiner has proposed a Peer Production License, which has already been discussed by open agricultural machining communities such as Adabio Autoconstruction in France. The PPL basically allows worker-owned and commons-contributing entities to freely use the common pool of knowledge, code, and design, but demands a license fee from for-profit companies that want to use the same common pool for the realization of private profit. Hence, several advantages.

One is a stream of income from the private sector companies in direction of the commons; the second is that economic development is not prohibited, but simply conditioned on reciprocity; finally, there is the added possibility that those entities that sign on to the license and the common pools that it protects, could create a powerful entrepreneurial coalition based on ethical principles. While the precise wording of the present PPL may not be appropriate 'as is' for traditional and indigenous communities, it opens up the possibility to create adapted reciprocity-based open licenses for traditional knowledge. This would offer several advantages:

- 1) the traditional communities would be willing to share and thus the knowledge would benefit humanity as a whole

- 2) it would allow economic development based on that knowledge
- 3) the contracted reciprocity would benefit and profit to the traditional communities
- 4) members of traditional communities could themselves become active in the solidarity economy through ethical market entities that are based on the use of such licenses
- 5) traditional communities and their own ethical market entities could unite in entrepreneurial coalitions using the same common pools
- 6) these traditional communities could unite with ethical market entities active in other parts of the world, confident in the common values and principles that are enshrined in the reciprocity-based open licenses

Discussion: Gender Aspects

There is a remarkable structural similarity between the role of women in the domestic 'contributory' sector and the structural situation of peer production (as a really existing social knowledge economy) in the dominant economy. Women contribute more than males for the well-being of the family commons, and this work is mostly (nearly always) un-remunerated. Contributors to the commons also often volunteer their contributions for the commons. If women want to insure their own self-reproduction and a more equal place in the family, they must find work in the capital-labor nexus, as must peer producers in the social knowledge economy. Neither the domestic care economy nor the production of social knowledge currently allow for the self-reproduction of their owners.

Though many structural constraints for family equality (equality within the family) have been removed, it is very often the cultural constraints that determine that women are producing more homework than their male partners. Similarly, in the peer production economy, though it is structurally open for all to participate, it is most often male-dominated and these male-dominated cultures create not just inertia but sometimes real impediments for female participation. This shows that the transition

to a social knowledge economy must be accompanied by strong policies that solve the structural conditions of women in society and the economy. And within the already existing communities that produce social knowledge, the forces that strive for gender equality must be supported, and the structural and cultural elements that maintain gender inequality must be tackled. It is not enough for a transition project to simply enable participation in social knowledge creation and use, it must promote the equipotential participation of all citizens, and create the conditions for it. A failure to do this may lead to the opposite effect, i.e. the creation of further inequalities due to the non-participation of women in the social knowledge economy.

Introducing the new configuration between State, Civil Society and the Market

What can we learn from the already existing social knowledge economy

The social knowledge economy is not an utopia, or just a project for the future. It is rooted in an already existing social and economic practice, that of commons-oriented peer production, which is already producing commons of knowledge, code, and design, and it has produced real economies like the free software economy, the open hardware economy, the free culture economy, etc... In its most broad interpretation, concerning all the economic activities that are emerging around open and shared knowledge, it may have reached already 1/6th of GDP in the USA, employing 17 million workers, according to the Fair Use Economy report. A lot is known about the micro-economic structures of this emerging economic model, which we can summarize as follows:

- at the core of this new value model are contributory communities, consisting of both paid and unpaid labor, 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, i.e. technical, organizational, and legal infrastructures, are very often enabled, certainly in the world of free software commons, by democratically-run Foundations, sometimes called FLOSS Foundations, or more generically, ‘for-benefit associations’, which may create code depositories, protect against infringements of the open and sharing licenses, organize fundraising drives for the infrastructure, and organize knowledge sharing through local, national and international conferences. They are an enabling and protective mechanism.
- finally, the successful projects create an economy around the commons pools, based on the creation of added value products and services that are based on the common pools, but also add to it. This is done by entrepreneurs and businesses that operate on the marketplace, and are most often for-profit enterprises, creating a ‘entrepreneurial coalition’ around the common pools and the community of contributors. They hire the developers and designers as workers, create livelihoods for them, and also support the technical and organizational infrastructure, including also the funding of the Foundations.

On the basis of these generic micro-economic experiences it is possible to deduce adapted macro-economic structures as well, which would consist of a civil society that consists mainly of communities of contributors, creating shareable commons; of a new partner state form, which enables and empowers social production generally and creates and protects the necessary civic infrastructures; and an entrepreneurial coalition which conducts commerce and create livelihoods.

The new configuration

In the old neoliberal vision, value is created in the private sector by workers mobilized by capital; the state becomes a market state protecting the privileged interests of property owners; and civil society is a derivative rest category, as is evidenced in the use of our language (non-profits, non-governmental). Nevertheless, the combination of labor and civic movements has partially succeeded in socializing the market, achievements which are now under threat. In

the new vision of cognitive capitalism, the networked social cooperation consists of mostly unpaid activities that can be captured and financialized by proprietary 'network' platforms. Social media platforms almost exclusively capture the value of the social exchange of their members, and distributed labor such as crowdsourcing more often than not reduce the average income of the producers. In other words, the 'netarchical' version of networked production creates a permanent precariat and reinforces the neoliberal trends.

In the contrary vision of an open-commons based knowledge economy and society, value is created by citizens, paid or voluntary, which create open and common pools of knowledge, co-produced and enabled by a Partner State, which creates the right conditions for such open knowledge to emerge; and preferentially ethical entrepreneurial coalitions which create market value and services on top of the commons, which they are co-producing as well. The ideal vision of an open-commons based knowledge economy is one in which the 'peer producers' or commoners (the labor form of the networked knowledge society), not only co-create the common pools from which all society can benefit, but also create their own livelihoods through ethical enterprise and thereby insure not only their own social reproduction but also that the surplus value stays within the commons-cooperative sphere. In this vision, the social solidarity economy is not a parallel stream of economic production, but the hyper-productive and hyper-cooperative core of the new economic model.

Thus in the new vision, civil society can be seen as consisting as a series of productive civic commons, common pools of knowledge, code and design; the market consists of preferentially actors of the cooperative, social and solidarity economy which integrate the common good in their organizational structures, and whose labor-contributing members co-produce the commons with the civic contributors. Finally, in this vision, the Partner State enables and empowers such social cooperation, and creates the necessary civic and physical infrastructures for this flowering of innovation and civic and economic activity to occur.

The Partner State is not a weak neoliberal state, which strips public

authority of its social functions, and retains the market state and repressive functions, as in the neoliberal model; it is also not the Welfare State, which organizes everything for its citizens; but it is a state that builds on the welfare state model, but at the same time creates the necessary physical and civic infrastructures for social autonomy, and for a civic production model that combines civic immaterial commons and cooperative social solidarity enterprise. The ethical economy and market, is not a weak and parallel economy that specializes in the less competitive sectors of the economy; on the contrary, the ethical market is the core productive sector of the economy, building strong enterprises around competitive knowledge bases. It is however, at the service of civil society and co-construct the open knowledge commons on which society and commerce depends.

Why is this a post-capitalist scenario?

Capitalist-driven societies produce for exchange value, which may be useful, or not; and continuously strives to create new social desires and demands. By way of contrast, the open-commons based knowledge economy consists of 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 labor 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; but around the immaterial abundance of non-rival or even anti-rival goods, is deployed a market of cooperatives and social solidarity players which add and sell scarce resources on the marketplace.

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 the private capital accumulation of property owners, but is at the service of the value accumulation and equitable value distribution taking place in the commons-cooperative sector.

It is at the service of the open-commons 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 commons-supporting partner state will look at the development of public-social or public-commons partnerships. Where appropriate the Partner State looks at the possible commonification of public services.

For example, following the model of Quebec and Northern Italy in creating Solidarity Cooperatives for Social Care, in which the state enables and regulates the direct provision of care by multi-stakeholder governed civil society based organizations. It is very 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 example, developing commons-based housing development policies, which keep social housing outside of the speculative sphere.

A society and state which desires to develop a commons in the immaterial sphere of knowledge, will 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 free software production, nearly all free software knowledge communities have their own for-benefit association which enables the cooperation, protects the licenses, etc... This is mostly likely because engagement requires knowledge and access to networks, which have been largely socialized 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 which need to be purchased privately, which favors the owners of capital and weakens the productive community that contributes to the commons. In such a scenario, the idea that open hardware developers could mutualize their means of production, would re-establish more balance between developers and company owners. Our illustration also mentions the commons-oriented ownership and governance forms which can assist citizens in having more control over crucial infrastructures such as land and housing.

Discussion: The role of the capitalist sector

What is the role of the capitalist sector in such a scenario?

The first key issue here is the creation of a level playing field between the social solidarity sector and the private sector. Whereas 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 Partner State encourages transitions from extractive to generative ownership models, while the association of private companies with the commons will assist them in adapting to the new emerging models of co-creation and co-design of value with the commoners. Hyper-exploitation of distributed labor will 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 socialized in the new practices, as well as ownership and governance forms. The aim is to create a level playing field, in which hyper-exploitation of social value becomes a gradual impossibility, and in which extractive rent-taking becomes equally impossible and counter-productive through the existence of well-protected open commons.

The second key issue concerns the self-reproduction capabilities of the commons contributors. 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 many and most commoners to work for private capital. What needs to be achieved is a new compact between the commons and the private companies, that insures 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 IP, 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 the Partner State, in a context in which all players can benefit from the commons. Private capital must recognize, and must be made to recognize, that the value being captured is overwhelmingly derived from the benefits of social cooperation in knowledge creation: just as they had to recognize the necessity for better and fair pay for labor, they must recognize fair pay for commons production.

A description of the new triarchy of the Partner State, the Ethical Economy and a Commons-based Civil Society

The concept of the partner state and the commonification of public services

Thus is born the concept of the Partner State, which is not opposed to the welfare state model, but 'transcends and includes' it. The Partner State is the state form which enables and empowers the social production of knowledge, livelihoods and well-being, by protecting and enabling the continuation and expansion of commons. The Partner State is the institution of the collectivity which creates and sustains the civic infrastructures and educational levels, and whose governance is based on participation and co-production of public services and collective decision-making. The Partner State retains the solidarity functions of the welfare state, but de-bureaucratizes the delivery of its services to the citizen. It abandons its paternalistic vision of citizens that are passive recipients of its services.

The Partner State is therefore based on wide-spread participation in decision-making, but also in the delivery of its services. Public services are co-created and co-produced with the full participation of the citizens. The means to this end is the 'commonification of public services' through public-commons partnerships. Public-

private partnerships do not only add to the cost of public services, and create widespread distrust and 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. In a commentary, Silke Helfrich defines the general relationship of the state with the commons as such:

“For me the role of the state is at least fourfold: not only - to stop enclosures, but to trigger the production/construction of new commons by - (co-) management of complex resource systems which are not limited to local boundaries or specific communities (as manager and partner) - survey of rules (charters) to care for the commons (mediator or judge) - kicking of or providing incentives for commoners governing their commons - here the point is to design intelligent rules which automatically protect the commons, like the GPL does (facilitator)”.

David Bollier adds that:

“The State already formally delegates some of its powers to corporations by granting them corporate charters, ostensibly to serve certain public purposes. Why can't the state make similar delegations of authority to commons-based institutions, which would also (in their own distinct ways) serve public purposes? If the key problem of our time is the market/state duopoly, then we need to insist that the state authorize the self-organizing and legal recognition of commons-based institutions also. James Quilligan has called for commoners to create their own “social charters,” but the legal standing of such things remains somewhat unclear. The public value of state-chartered commons-based institutions is that they would help 1) limit the creation of negative externalities that get displaced onto others (as corporations routinely do); 2) declare certain resources to be inalienable and linked to communities as part of their identity; 3) assure more caring, conscientious and effective stewardship and oversight of resources than the bureaucratic state is capable of providing; and 4) help commoners internalize a different set of stewardship values, ethics, social practices and long-term commitments than the market encourages.” (email, July 2012)

But it is Tommaso Fattori, a leading activist of the Italian Water Commons movement, which has the most developed concept of the commonification of public services:

“The field of Commons can be for the most part identified with a public but not-state arena, in which the actions of the individuals who collectively take care of, produce and share the Commons are decisive and fundamental. In this sense, Commons and commoning can become a means for transforming public sector and public services (often bureaucracy-bound and used to pursue the private interests of lobby groups): a means for their commonification (or commonalization). Indeed, there are many possible virtuous crossovers between the traditional public realm and the realm of Commons. Commonification goes beyond the simple de-privatization of the public realm:

Commonification basically consists of its democratization, bringing back elements of direct self-government and self-managing, by the residents themselves, of goods and services of general interest (or participatory management within revitalized public bodies). Commonification is a process in which the inhabitants of a territory regain capability and power to make decisions, to orientate choices, rules and priorities, re-appropriating themselves of the very possibility of governing and managing goods and services in a participatory manner: it is this first-person activity which changes citizens into commoners.

Generally, there are a series of circumstances (including living space and time schedules, job precariousness and other difficult work conditions, the urbanization of land and the complexity of infrastructures) which do not physically allow the inhabitants of a large metropolis to completely self-manage fundamental services such as water utilities or public transport, bypassing the Municipalities and the public bodies (or managing without public funds to finance major infrastructure works): it is on the other hand possible to include elements of self-government and commoning in the distinct stages of general orientation, planning, scheduling, management and monitoring of the services.

At the same time it is necessary to also give back public service workers an active role in co-management. Which means going the other way down the road as compared to the privatization of that which is “public”. But there are also other overlaps possible between the idea of public and that of Commons, apart from the necessary creation of legislative tools which can protect and encourage Commons and commoning. Several forms of Public-Commons partnership can be developed, where the role of state is re-aligned, from its current support and subsidizing of private for-profit companies, towards supporting commoning and the creation of common value. This can be achieved through tax exemptions, subsidies and empowerment of sharing and commoning activities, but also, for example, by allocating public and state-owned goods to common and shared usage thanks to projects which see public institutions and commoners working together. This is a road which could be the beginning of a general transformation of the role of the state and of local authorities into partner state, “namely public authorities which create the right environment and support infrastructure so that citizens can peer produce value from which the whole of society benefits”.

Tommaso Fattori has offered an in-depth understanding of the precise relationship between the new state form and the commons:

“To understand in what sense and under what conditions public services can be considered commons, it is necessary to offer some brief notes on what is meant by public service and what by commons. In both cases it is difficult to be concise, because of the breadth of the debate on the areas and the issues.

Public Services: As is well known, in most legal systems, the laws do not provide any definition of what is meant by the concept ‘public service’. In short, in the doctrinal reconstruction, there are two main positions: the subjective theory focuses attention on the public nature of the subject supplying the service, whereas the objective theory focuses attention on the public interest which distinguishes the activity performed. According to the subjective theory, the elements necessary to identify public service are the direct or indirect

responsibility of the State or another public body for the service, and its supply for the benefit of its citizens.

On the other hand, for the objective theory, the necessary element is that the service be provided to the collectivity and place public interest at its heart. The EU however prefers to duck the issue and speak of “services of general interest”: services (both market and non-market) which are considered of central interest for the collectivity and that for this reason must be subjected to “specific obligations of public service”. In these pages, by public services we mean the services of general interest, that is, that plethora of fundamental services which were once an integral part of welfare services but nowadays have mostly been privatized, following political decisions, or are supplied by public bodies but run along the lines of privatized companies. These services include, although this is not an exhaustive list, health services, schools and universities, power supply, transport and other local utilities such as the water or waste services.

Commons: The definition of what is meant by commons, and what commoning is, is more complex, as this is an area in which different approaches and paradigms clash. In very general terms, commons is everything we share; in particular gifts of nature and creations of society that belong to all of us equally, and should be preserved for future generations: material or immaterial, rival or non-rival, natural or artificial resources that elude the concept of exclusive use and build social bonds. In addition to shared resources, there are another two fundamental building blocks of the commons: commoners and commoning. Commoners are all the members of a community, or even loosely connected groups of people, who steward and care for the shared resources, or produce common resources, adopting a form of self-government based on their capacity to give themselves rules (and incentives and sanctions to ensure they are respected, as well as mechanisms for monitoring and resolving conflicts), called commoning. Commoning is a participatory and inclusive form of decision-making and a governance system for sharing, producing and reproducing commons in the interest of present and future generations and

in the interest of the ecosystem itself, where natural commons are concerned. Still in general terms, although almost all goods and resources can potentially become objects of sharing, after a choice and decision by people, and thus become “shared resources” or “commons”, it is however probable that most of humanity would agree on a nucleus of resources which, at least in principle, “cannot not be commons”, on pain of denying life itself and the possibility of free individual and collective development: primary, fundamental, natural or social resources, which range from water to knowledge. A future without couch-surfing, where all beds are given a monetary value and not shared, is certainly less desirable than a future with couch-surfing; but a future without access to water for all is unacceptable.

These primary commons must not allow discrimination in access to them according to individual wealth, re-introducing the element of equality and fairness, as well as a relationship of care —rather than one of domination or subjection— between humanity and the rest of nature of which it is a part. These are resources which do not belong to and which are not at the disposal of governments or the State-as-person, because they belong to the collectivity and above all, to future generations, who cannot be expropriated of their rights. Distributed participatory management and self-government, inclusion and collective enjoyment, no individual exclusive rights, prevalence of use value over exchange value, meeting of primary and diffuse needs: commons, in this understanding, means all these things.”^[12].

One of the mechanisms for the delivery of commonified public services are through contracts between the state as funding and quality control mechanism, and “Solidarity cooperatives”, which are multi-stakeholder coops, bringing together all parties involved in a particular endeavor—workers, consumers, producers and members of the larger community—in a democratic structure of ownership and control. This new system of delivery has been pioneered in the field of social care, for health and support services for particular populations such as the elderly, the physically handicapped etc... and is particularly strong in northern Italy (Emilia-Romagna, the

region around Bologna), as well as in Quebec. The examples are described in [the policy report from John Restakis](#).

To conclude: In a mature social knowledge economy, the state will still exist, but will have a radically different nature. Much of its functions will have been taken over by commons institutions, but since these institutions care primarily about their own commons, and not the general common good, we will still need public authorities that are the guarantor of the system as a whole, and can regulate the various commons, and protect the commoners against possible abuses. So in our scenario, the state does not disappear, but is transformed, though it may greatly diminish in scope, and with its remaining functions thoroughly democratized and based on citizen participation. In our vision, it is civil-society based peer production, through the Commons, which is the guarantor of value creation by the private sector, and the role of the state, as Partner State, is to enable and empower the creation of common value. The new peer to peer state then, though some may see that as a *contradictio in terminis*, is a state which is subsumed under the Commons, just as it is now under the private sector.

The Ethical Economy

What exactly is the nature and the role of the ethical economy in the social knowledge economy? First of all, the ethical economy “realizes” the value that is created by the ‘commoners’ in the common pools, by creating added value for the ethical market sector. The realized surplus goes directly to the workers who are also the contributors to the commons, thereby realizing their self-reproduction, independently of the classic capital accumulation economy. A new ‘cooperative accumulation’ process is thereby created that mediates between the commons and the classical capital sector, and directly serve the commons and the commoners. The ethical economy can realize profits, but the realized profits serve a purpose, a mission, at the direct service of the creation of use value. It doesn’t coincide therefore to the civic nonprofit sector, but is better called a Not-For-Profit sector, since the profits are subsumed to the social goal. This is in essence why the new sector is called an ethical economy, because the goals are not the accumulation of profit, but of ‘benefits’. So a synonym is to talk about a ‘for-benefit’

sector. The ethical companies, can take very different form, or 'open company formats', with their common goal being to contribute to the 'common good' generally, 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 B-Corporations, Fair Trade companies, social entrepreneurs, worker's or other form of cooperatives ... One of the key innovations has been the development of 'Solidarity Cooperatives', whose emergence has been described elsewhere by John Restakis. Solidarity Coops integrate the common good in their statutes, and are multi-stakeholder governed. The ethical economy may be focused on re-localized production for reasons of sustainability, but its workers cooperate globally directed through the open design communities that are essential for their operations. Organizationally, they can be globally organized through models like solidarity franchising, or "Phyles", i.e. through global community-supportive or mission-oriented ethical 'transnational' forms.

Discussion: Material and Immaterial Infrastructural Requirements for the Ethical Economy

The emergence and strengthening of the Ethical Economy as a core of the social knowledge society will require both material and immaterial infrastructural development. The first is the development of a series of alternative 'corporate' structures, which are not linked to the realization of profit as a primary goal, but allow market entities to operate for social goals, missions, purposes, etc... This is an area which we call Open Company Formats, and is a shift which is already well under way in various countries. The second is the support to create viable "Open Business Models". These are models for financial resilience and sustainability that are geared towards the recognition and development, and not the suppression, of socialized knowledge pools. The third is the development of distributed finance, both crowdfunding directly from citizens, 'cloudfunding' directed to ethical finance partners, and state or public financing [\[13\]](#).

The key issue is that without the super-profits realized through

Intellectual Property rents, private risk capital will be much less keen to invest in patent-free innovations, and an alternative financial system needs to be built and supported through public policy frameworks. Thus, a new legal, pro-sharing, pro-social knowledge, infrastructure needs to be developed as well, one which supports the ethical economy and its logic, and promotes and eases the mutualization of knowledge and other immaterial resources, and of the material infrastructures of production as well. A legal infrastructure is needed to promote and develop forms of 'sharing' and 'cooperative' economics. A technical infrastructure will be needed, not only a generic and open internet infrastructure, but the support for the development of collaborative platforms that are appropriate for the different industrial and economic sectors.

Examples are the depositories of design objects that are needed in each sector; and the infrastructure for the interconnection of smart objects, the so-called 'Internet of Things'. An infrastructure will be needed for both open and distributed manufacturing, and for distributed production of renewable energy, close to the place of need. New forms of open value accounting will need to be developed in order to recognize the new forms of value creation in a commons-based contributory economy. In this context, we see the role of the Partner State as being responsible for incubating the Ethical Economy through various support policies, which may take the following institutional form:

- **The Institute for the Promotion and Defense of the Commons:** this is an institute which promotes the knowledge about the commons and their legal and infrastructural forms, for example, the promotion and protection for the use of Commons-Based Licenses, such as the GPL, the Creative Commons, etc... This Institute supports the creation of common pools of knowledge, code and design, both generically and for specific sectors and regions.
- **The Institute for the Incubation of the Ethical Economy,** supports the emergence of economic practices around the common pools of knowledge. It helps the civic and ethical entrepreneurs to create livelihoods around these common pools. It teaches entrepreneurial commoners what the possibilities are

to create added value around the commons, and what the legal, commercial and technical enablers are. It promotes the creation of entrepreneurial coalitions in new sectors, and supports established ethical economy players to solve common problems.

- **The Transition Income:** before commons can create thriving ethical economies, a period of civil engagement and investment is needed, which may not immediately yield livelihoods. Thus, a structure can be created which can materially support the creators of new common pools to sustain themselves in such transition periods. This will be a vital mechanism in combating precarity in the early stages of commons creation, before the entrepreneurial coalitions can take up their role in the new commons economies in various sectors.

The Commons-Based Civil Society

A contribution from John Restakis:

In its broadest and most accepted sense, civil society is the social impulse to free and democratic association, to the creation of community, and to the operations of social life, which includes politics. This is the sense of civil society that is used by writers such as Vaclav Havel. Civil society is distinguished from the state as it is from the operations of the private sector. Some writers also stress a distinction from the family as well. For Havel and a long line of writers extending back to Aristotle, civil society remains the elementary fact of human existence. It is what makes human life possible. For Aristotle it was both the means and the end of human association as the pursuit of the good life, which is in essence a social life. And in this sense, it is the institutions that arise from civil society (the schools, the voluntary associations, the trade unions, the courts, the political parties, etc.) that provide the individual with the means to realize their own humanity and by so doing to perfect the whole of society in the process. The state is an outgrowth of this impulse.

As Thomas Paine wrote: “The great part of that order which reigns among mankind is not the effect of government. It has its

origins in the principles of society and the natural constitution of man. It existed prior to government, and would exist if the formality of government was abolished. The mutual dependence and reciprocal interest which man has upon man, and all the parts of civilized community upon each other, create that great chain of connection which holds it together. In fine, society performs for itself almost everything which is ascribed to government.”

Alex De Toqueville, visiting America in the late seventeen famously attributed the vitality of the young democracy to the richness and diversity of its associational life. Within civil society, a huge portion of civic activities are carried out by organizations created to provide goods and services through collaboration, by people acting together to realize mutual interests. They constitute that sector which is composed of non-profit and voluntary organizations, service groups, cultural organizations such as choral societies, charities, trade unions, and cooperatives. This economic aspect within civil society has also been described as the civil economy, the third sector or the social economy. For all these conceptions – the commons, civil society and civil economy – the notion of reciprocity is fundamental.

On Reciprocity

Reciprocity is the social mechanism that makes associational life possible. It is the foundation of social life. In its elements, reciprocity is a system of voluntary exchange between individuals based on the understanding that the giving of a favor by one will in future be reciprocated either to the giver or to someone else. Willingness to reciprocate is a basic signal of the sociability of an individual. Taken to an extreme, the complete unwillingness of an individual to reciprocate is tantamount to severing the bonds between themselves and other people. Reciprocity is thus a social relation that contains within itself potent emotional and even spiritual dimensions. These elements account for an entirely different set of motivations within individuals than behavior in the classical sense of “maximizing one’s utility” as a consumer. Reciprocity animates a vast range

of economic activities that rest on the sharing and reinforcement of attitudes and values that are interpersonal and constitute essential bonds between the individual and the human community.

What is exchanged in reciprocal transactions are not merely particular goods, services and favors, but more fundamentally the expression of good will and the assurance that one is prepared to help others. It is the foundation of trust. Consequently, the practice of reciprocity has profound social ramifications and entails a clear moral element. Reciprocity is a key for understanding how the institutions of society work. But it is also an economic principle with wholly distinct characteristics that embody social as opposed to merely commercial attributes. When reciprocity finds economic expression in the exchange of goods and services to people and communities it is the civil economy that results. It is in turn, a key principle underlying the formation and use of commons.

Civil economy organizations are those that pursue their goals, whether economic or social, on the basis that individuals' contributions will be reciprocated and the benefits shared. Reciprocity and mutuality are the economic and social principle that define both the activities and the aims of these organizations - whether they are cooperatives, voluntary associations, or conventional non-profits. Their primary purpose is the promotion of collective benefit. Their social product is not just the particular goods or services that they produce, but human solidarity - the predisposition of people in a society to work together around mutual goals. Another name for this is social capital. And, as opposed to the capitalist principle of capital control over labor, reciprocity is the means by which a social interest - whether it takes the form of labor, or citizen groups, or consumers - can exercise control over capital.

As a sub division of civil society, the use of reciprocity for economic purposes is what distinguishes the civil or social economy from the private and public sectors. There is no question that the long-term success and the implementation of

a social knowledge economy, will rely heavily on the strength and development of a civil economy that is strong, autonomous, democratic, innovative, and capable of playing the central role that is assigned to it. The civil economy is the social and economic space that most reflects the values and principles of the socialist and civic ideals of the government and the source of those civil institutions that will, in the long run, defend and advance those ideals. For this reason, public policy and legislation must serve as a vital political and legal resource for building the values, skills, and institutions that enable the civil economy to flourish and to provide the indispensable social foundations that will ultimately serve to transform the political economy of the country. In our view, progressive public policy and legislation with respect to the civil economy will serve as the primary mechanism for creating a new social contract and social praxis that reflects the complementary aims and purposes of the state on the one hand and the collective values of civil society on the other.

Beyond the market, beyond planning?

The key role of Commons-Based Reciprocity Licenses

Here we are making a key strategic argument about the precise interaction between the commons and the new ethical market sectors, through the intermediation of a new type of commons license that supports the actual emergence of a reciprocity-based ethical economy. Today, the labor/p2p/commons and other social change movements are indeed faced with a paradox. On the one hand, we have the re-emergence of the cooperative movement and worker-owned enterprises, but they suffer from structural weaknesses. Cooperative entities work for their own members, are reluctant to accept new cooperators who would share existing profits and benefits, and are practitioners of the same proprietary knowledge and artificial scarcities as their capitalist counterparts. While they are internally democratic, they often participate in the same dynamics of capitalist competition which, over time, tend to undermine their own cooperative values.

On the other hand, we have the emergent field of open and commons-oriented peer production in fields such as free software, open design and open hardware. While these do create common pools of knowledge for the whole of humanity, they are at the same time dominated both by start-ups and large multinational enterprises using those same commons. Our proposed solution is a new convergence or synthesis, an 'open cooperativism' that combines commons-oriented open peer production models with common ownership and governance models, such as those of cooperatives and solidarity economic models. These open cooperatives would use a more restrictive form of sharing, which would ensure a stronger reciprocity in the ethical market coalitions that are generated around the commons. The arguments for the open cooperative model are the limitations of the current cooperative form, so what follows is the argumentation for the new license.

Today, we have a paradox. The more shareable the license we use in the peer production of free software or open hardware, the more capitalistic the practice of the entrepreneurial coalition which forms around it. An example of this is the Linux commons becoming a corporate commons, enriching IBM and the like. It works, in a certain way, and seems acceptable to most free software developers, but it is insufficient for the creation of a true ethical economy around the commons. Indeed, the General Public License (and its variants) allow anyone to use and modify the software code (or design), as long as the changes are also put back into the common pool under the same conditions for further users. This is, in fact, technically 'communism' as defined by Marx (from each according to his abilities, to each according to their needs) but which then paradoxically allows multinationals to use the free software code for profit and capital accumulation. The result is that we do have an accumulation of immaterial commons, based on open input, participatory process, and commons-oriented output, but that it is subsumed to capital accumulation.

It is at present not possible, or at least not easy, to have social reproduction (i.e. livelihoods) within the sphere of the commons. Hence, the free software and culture movements, however important they are as new social forces and expressions of new

social demands, are also in essence 'liberal'. This is not only acknowledged by its leaders, such as Richard Stallman, but also by anthropological studies like those of Gabriela Coleman. Without being terribly tongue-in-cheek, we could say they are liberal-communist and communist-liberal movements, which create a 'communism of capital'. True to the liberal tradition, they care for the freedoms, but not for the fairness of the conditions in which these freedoms can be exercised. Is there an alternative? We believe there is. This would be to replace non-reciprocal licenses, i.e. those which do not demand direct reciprocity from users, to one based on reciprocity. Technically, we could call it a switch from 'communist', to 'socialist' licenses', socialism being traditionally defined as that intermediary stage in which everyone receives according to effort. This is the choice of the Peer Production License as designed and proposed by Dmytri Kleiner; it is not to be confused with the Creative Commons non-commercial license, as the logic is different. The logic of the CC-NC is to offer protection to individuals who are reluctant to share, as they do not wish a commercialization of their work that does not reward them for their labor. Thus, the Creative Commons 'non-commercial' license stops further economic development based on this open and shared knowledge, and keeps it entirely in the not-for-profit sphere. The logic of the PPL is to allow commercialization, but on the basis of a demand for reciprocity. We see it as a forerunner of better - or at least broader - reciprocity licenses, as the PPL is geared exclusively to worker-owned cooperatives.

The PPL is designed to enable and empower a counter-hegemonic reciprocal economy that combines commons that are open to all that contribute, while charging a license fee to the for-profit companies who want to use without contributing. Not that much changes for the multinationals. In practice, they can still use the code if they contribute, as IBM does with Linux, and for those who don't, they would pay a license fee, a practice they are used to. Its practical effect would be to direct a stream of income from capital to the commons, but its main effect would be ideological, or, if you like, value-driven. The entrepreneurial coalitions linked around a PPL commons would be explicitly oriented towards their contributions to the commons and the alternative value system that that represents.

From the point of view of peer producers or commoners, i.e. the communities of contributors to the common pool, this would allow them to create their own cooperative entities in which 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. It links the commons to an entrepreneurial coalition of ethical market entities (coops and other models), and keeps the surplus value entirely within the sphere of commoners/cooperators instead of leaking out to the multinationals.

In other words, through this convergence, or rather, combination of a commons model for the abundant immaterial resources, and a reciprocity-based model for the 'scarce' material resources, the issue of livelihoods and social reproduction would be solved, and surplus value is kept inside the commons sphere itself. It is the cooperatives that would, through their cooperative accumulation, fund the production of immaterial commons, because they would pay and reward the peer producers associated with them. In this way, peer production would 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 creates a counter-economy that can be the basis for reconstituting a 'counter-hegemony' with a for-benefit circulation of value, which, allied to pro-commons social movements, could be the basis of the political and social transformation of the political economy.

Hence we move from a situation in which the communism of capital is dominant, to a situation in which we have a 'capital for the commons', increasingly insuring the self-reproduction of the peer production mode. The PPL is used experimentally by Guerrilla Translation, and is being discussed in various places, for example, in France, in the open agricultural machining and design communities. There is also a specific potential inside the commons-oriented ethical economy, such as the application of open book accounting and open supply chains, which would allow a different value circulation whereby the stigmergic mutual coordination that already works at scale for immaterial cooperation and production would move to the coordination of physical production, creating post-market dynamics of allocation in the physical sphere.

Replacing both the market allocation through the price signal, and central planning, this new system of material production would allow for massive mutual coordination instead, enabling a new form of 'resource-based economics'. Finally, this whole system can be strengthened by creating commons-based venture funding, so as to create material commons, as proposed by Dmytri Kleiner. In this way, the machine park itself is taken out of the sphere of capital accumulation. In this proposed system, cooperatives needing capital for machinery would post a bond, and the other coops in the system would fund the bond, and buy the machine for a commons in which both funders and users would be members. The interest paid on these loans would create a fund that would gradually be able to pay an increasing income to their members, constituting a new kind of basic income.

So, to summarize our proposal for the new Commons-Based Reciprocity License, it would allow the free usage of a particular commons on the following conditions:

- that the entity is a common good institution or enterprise, structurally linked to a social or common good objective through its internal statutes.
- that the activity or entity is non-commercial.
- that the for-profit usage of the particular commons is based on reciprocity.
- small and cooperative, worker-owned enterprises with for-profit activities or goals can also make use of the particular commons governed by a CBRL.

The key exception is that for-profit, shareholder owned enterprises that do not contribute to the particular commons are required to pay a licensing fee or another form of negotiated reciprocity. The interpretations of the rules, particular cases, and any exceptions, are decided by the democratically elected and managed for-benefit association that is linked to the particular commons. Let us now return briefly to our proposal for a new format for the cooperative economy, i.e. the ethical entrepreneurial coalitions that are formed around the commons: The new open cooperativism is substantially

different from the older form. In the older form, internal economic democracy is accompanied by participation in market dynamics on behalf of the members, using capitalist competition. Hence, an unwillingness to share profits and benefits with outsiders. There is no creation of the commons.

We need a different model in which the cooperatives produce commons, and are statutorily oriented towards the creation of the common good, with multi-stakeholder forms of governance which include workers, users-consumers, investors, and the communities concerned. Today we have a paradox that open communities of peer producers are oriented towards the start-up model and are subsumed to the profit model, while the cooperatives remain closed, use IP, and do not create commons.

In the new model of open cooperativism, a merger should occur between the open peer production of commons, and the cooperative production of value. The new open cooperativism integrates externalities, practices economic democracy, produces commons for the common good, and socializes its knowledge. The circulation of the commons is combined with the process of cooperative accumulation, on behalf of the commons and its contributors. In the beginning, the immaterial commons field, following the logic of free contributions and universal use for everyone who needs it, would co-exist with a cooperative model for physical production, based on reciprocity. But as the cooperative model becomes more and more hyper-productive and is able to create sustainable abundance in material goods, the two logics would merge. In summary, open cooperatives are characterized as follows:

- The cooperative is structurally aligned, through its internal statutes or regulations, to a social goal or common good objective, to which profit-making is subordinated (profit is used to achieve the social goal or common good).
- The cooperative is democratically co-managed and co-owned by its various stakeholders, i.e. the key social groups that are affected by its activities, services and products.
- The cooperative actively co-produces commons, immaterial or

material.

- The cooperative has a global orientation.

Mutual coordination mechanisms in the new ‘ethical’ entrepreneurial coalitions: Cybersin [\[14\]](#) redux?

Traditional economic debates are often between the options of state-initiated planning on the one side, and the allocation through market pricing signals on the other hand. But the social knowledge economy shows the increasing likely path of a third method of allocation, that of transparent mutual coordination. The first attempt to such a type of resource-based economy, in the Soviet Union of the 1960’s, when the construction of a proto-internet was initiated, is well documented in the book by Francis Spufford, *Red Plenty*. The effort failed because the opposition of the bureaucratic forces in the state apparatus. The second attempt took place in Allende’s Chile in the early seventies, under the advise and leadership of complexity thinker Stafford Beer, and was successfully used on a smaller scale to overcome a crippling strike of the transportation industry, where with 25% of the fleet, and using telexes for coordination, the strike was overcome. Thus the project Cybersin was born, a project to mutually and democratically coordinate Chilean industry, but the project was destroyed through the military coup, and the effective bombing of its headquarters.

Nevertheless, under the impulse of the social knowledge communities, mutual coordination of complex activities is making a very strong appearance, even if it is limited at present to the production of ‘immaterial’ value, i.e. knowledge products. This emergence nevertheless has implications for a transition to a new type of economic coordination, that will co-exist with both state planning and traditional market pricing mechanisms. Indeed, the really-existing social knowledge economy of commons-oriented peer production of free software, open design and hardware, is known to function according to the principle of mutual coordination, or “stigmergy”. The open design communities that already exist construct and coordinate their construction of common pools of knowledge, code, and design, through mutual signaling systems

because their infrastructures of cooperation are fully open and transparent. In the world of physical production, we can see an emergence of open supply chains and open book accounting on a much smaller scale. Nevertheless, there is a historical opportunity for an emergence of mutual coordination of physical production, if the ‘ethical entrepreneurial coalitions’, which may emerge around the social knowledge economy, decide to share their accounting and logistical information streams, within those coalitions. In this scenario, which is hypothetical at present but could be an integral part of a mature p2p/commons oriented social knowledge economy, we would see the gradual emergence of a third way for the coordinated allocation of resources for economic production.

The historical and present importance of mutualization in times of increasing resource scarcity

Discussion: The issue of ecosystem sustainability

Faced with the grave ecological crisis such as climate change and species extinction, but also in terms of impending resource crises, it is important to keep the historical perspective in mind of how humankind has faced such systemic crises in the past. One of the paradoxes of globalized capitalism is indeed its reliance on economies of scale, which are in contradiction with the needs of the balance of the ecosystem. In short, economies of scale create competitiveness through the production of more units at lower cost, which necessitates more energy and more resource use to be competitive. What is needed in times of resource scarcity is the opposite approach: economies of scope, or in other words, “doing more with the same”. This is exactly how past civilizational crises were solved. Faced with the crisis of the Roman Empire, which was also a globalized system faced with a resource crisis, medieval Europe responded with a relocalization of production through the feudal domains, with the mutualization of livelihoods and production through the monastic orders, and a Europe-wide open design community, i.e. the unified culture of the Catholic Church and the exchange and distribution of technical knowledge through the monastic orders. Very similar responses can be seen in Japan and

China. Today, the response of the sectors of society that are most sensitive to the combined crises are very similar, i.e. the mutualization of knowledge through the open source movements, and the mutualization of physical infrastructures through the 'sharing economy'. Thus the shift to the social knowledge economy is also the vital and appropriate response to the crises of the ecosystems.

Why innovation should be located in open design communities

There are several reasons why it is crucial to move towards a system of open innovation that is located in common pools of knowledge, code and design, especially as it relates to the issue of sustainability. The first and general reason is that patenting technology results in unacceptable delays for invention and diffusion, as shown by the studies cited by George Dafermos. In times of climate change, species extinction and other biospheric dangers, it would be highly damaging to keep the development and diffusion of such innovations under the control of private monopolies, if not to allow patented technologies to be shelved altogether for reasons like the protection of legacy systems or market share. The second reason is equally structural and system. When innovation is located in corporate R&D departments, the design is always influenced by market and artificial scarcity considerations. In private R&D, planned obsolescence is not a bug, but a feature, a generalized practice. By contrast, open design, open hardware, open technology communities lack any motivation for planned obsolescence and design by their very nature for inclusion, modularity, and sustainability. A quick check of the 25+ open source car projects immediately shows that all of them have thought about sustainability as part of the design process.

Thus, open design communities have a much greater potential to design inherently for re-use, recycling, upcycling, circular economy processes, biodegradable material, interoperability, modularity, and other aspects that have direct effects on sustainability. Each innovation in this area is instantly available for global humanity through open access to the shared open pools of knowledge. Corporations and market entities which produce and sell on the

basis of such designs, are naturally aligned to the sustainability which is inherent in the open design processes. Open design pools can be strategically allied to sustainable practices that increase this potential. For example, by allying itself with the 'sharing economy' practices of shared use in terms of consumption practices.

Open distributed manufacturing of open hardware comes with enormous cost savings; it is estimated that open hardware is generally produced at one eighth of the cost of proprietary hardware. For countries embarking on this road, this has important implications for the balance of payment, the neo-colonial dependency on the globalized neoliberal system. The cost-savings frees substantial resources that can be invested in other areas of development, to increase the diffusion of a particular good or service, etc... Finally, in terms of production, the combination of open design with distributed machinery can or will have a tremendous effect on the geography of production, by allowing a relocalization of production in micro-factories. Currently, studies show that the transportation of goods, is three-quarters of the real ecological cost of production. Many of these transportation costs can be eliminated by the stimulation of local and domestic industries that combine the generalization of the micro-factory system with the global engineering by open design communities, under the general motto: 'what's heavy is local, what's light is global'.

The role of 'idle-sourcing' and the sharing economy

The emergence of the social knowledge economy, as a process of mutualization of immaterial resources, is also accompanied by the emergence of a 'sharing economy', i.e. a process of mutualization of material resources. This sharing economy is emerging as a partly crisis-driven responses to the global economic crisis, and partly because current networked technologies drastically diminish the coordination and transaction costs necessary to manage such mutualization. In one of the earlier book treatments on this emergence, i.e. Rachel Botsman's 'Rise of Collaborative Consumption', the author distinguishes three major categories of sharing:

- Product Service Systems like Bikesharing and Carsharing, based

on a 'usage mindset' whereby you pay for the benefit of a product – what it does for you – without needing to own the product outright.

- Redistribution Markets like Freecycle and eBay, used or pre-owned goods are redistributed from where they are not needed to somewhere or someone where they are
- Collaborative Lifestyles like Couchsurfing, and the Lending Club: sharing and exchange of resources and assets such as time, food, space, skills, and money.

The sharing economy is an important response to resource and energy scarcity challenges, and in particular to the enormous waste in material resources that is the result of a profit-driven consumptive economy. The sharing economy allows massive idle-sourcing, i.e. the re-use of little use material possessions. Mutualizing certain infrastructures, like car-sharing for examples, allows for substantial savings in the use of energy and material resources, necessary to fulfill certain functions like transportation. The sharing economy is ideally supported and enable by a social knowledge economy, which allows open information about idle resources to be shared across user communities. It is important however, to look at the ownership and governance issues underpinning this emergence.

One part of the sharing economy is driven by privately owned platforms that monetize such idle resources; another part of the sharing economy consist of social and non-profit initiatives that aim for non-monetary sharing of such resources. The part of the sharing economy that is clearly driven by privately-owned, profit-driven platforms that act as intermediaries between users can clearly derail some of the advantages. For example, the use of dis-aggregated distributed labor, where isolated freelance workers are facing a demand side that is clearly empowered by the platform design, can exert a downward trend on wages.

A social knowledge policy should make sure that ownership and governance forms do not derail the free sharing of knowledge amongst all users, and needs to make sure that private ownership of

platforms does not endanger such possibilities. However, many of the activist forces in the sharing economy are working for socially progressive policies. This for example the case for the eBook “Guide”: *Policies for Shareable Cities*, co-produced by Shareable magazine and the Sustainable Economies Law Center. Other policy productions, like for example the campaigns of peers.org in the U.S., are the product of an organization that blur the social contradictions between the users and the owners of the sharing infrastructures. However, it remains a priority for a transition towards a social knowledge economy, to systematically enable and empower the mutualization of infrastructures that the emergent sharing economy represents, while matching it to ownership and governance forms that include the user communities.

A historical opportunity: The Convergence of Material/Technical P2P Infrastructures, Digital/Immaterial Commons, and Commons-Oriented Governance and Ownership Models

The transition towards a social knowledge economy is today favored by a strong convergence of technological, social and technological trends and ‘affordances’, i.e. technological possibilities that can be embraced by emancipatory political and social forces. The first is of course the peer to peer logic of open technical infrastructures like the internet, which allow for permissionless self-organization and value creation by productive communities that can operate both on a local and global scale. The internet is in effect not just a communication medium, but more properly a production medium. The second is the ‘distribution’ of the means of production through 3D Printing and other trends in the miniaturisation of machinery. This allows much lower entry barriers for the self-organization of a civic and cooperative economy. This is the ‘Internet of Manufacturing’.

The so-called Sharing Economy allows for the mutualization of critical infrastructures and the ‘idle-sourcing’ of isolated and scattered resources. The Internet of Things allows for a more fine-grained control and the autonomy and interconnection of objects.

The third is the distribution of financial capital, through crowdfunding, social lending and other possibilities, which allow a more fine-grained allocation of investments by citizen's themselves. This is the Internet of Ethical Financial Capital. The fourth is the development of renewable distributed energy, which allows for an Internet of Energy, and energetic autonomy at more local levels, such as village, neighborhood and even household. Free software, open knowledge, open design show the possibilities for the increased networking and mutualization of immaterial resources. The three other forms of distribution point to a potential for the networking and mutualization of physical resources.

In other words, we have a great potential to engineer a convergence of both the immaterial and material commons. Thus we can envisage the social knowledge economy as enabling a vast series of interconnected knowledge commons, for every field of human activity, but which is enabled both by material conditions (the internet of manufacturing and energy), and immaterial conditions (metrics, legal frameworks, etc...). However, as we have shown in our introduction to the value regimes, such commons can still be the subject of an 'extractivism of knowledge' which benefits privileged elite players. And as we have shown in our distinctions regarding technology regimes, the p2p technical affordances can be embedded in value-sensitive design that privileges certain players, like the owners of the platforms.

The great danger is therefore that what we disintermediate and decentralize with one hand, can be re-intermediated by new dominant players through the other hand. The promise of the social knowledge economy will therefore not be realized without profound changes in the regimes of property and governance. This is why we must insist that the social knowledge economy, i.e. commons-oriented peer production by autonomous productive communities, goes hand in hand with both peer property and peer governance. Today, social media like Facebook, search engines like Google, are in the hands of a new type of 'netarchical' oligopolies. Many enabling platforms, such as those for crowdfunding and social lending, are merely forms of distributed capitalism, functioning like reverse market mechanisms (such as the Kickstarter crowdfunding platform), that do not create and sustain commons. Hence, the

distribution of the means of knowledge creation and diffusion, of production machinery and financial capital, of distributed energy and of the vital land resources, needs to be matched by distributed and common ownership and land. While the immaterial commons of non-rival and shareable goods can be protected by open licenses, the material production resulting from them should take place through ethical entities that are the property of the value producers themselves.

There is today an emergence of a wide range of dynamic governance and property regimes, that can guarantee distribution and democratization of decision-making power. Governance innovations such as the Viable Systems Model, sociocracy and holocracy, have been developed to allow for democratic decision-making in productive communities; Dynamic property regimes as the FairShares Model of Enterprise, Solidarity Coops, Community Land Trusts, and many others, have been developed to common-ize and distribute property. The legal and regulatory frameworks of the social knowledge economy should facilitate the development and choice of such modalities. The key is to enable a pluralistic Commonwealth rich in choices, that have as key requirement both productive democracy and the integration of environmental and social externalities. As we have seen above in our introduction to four distinct socio-technical regimes, p2p infrastructures and practices can be embedded in netarchical models (hierarchical control, ownership and governance of the enabled p2p social logic); distributed capitalism (monetising of idle and shareable resources), but also in local community and global commons oriented property and governance regimes. Our recommendation is for the creation of two institutions that can insure democratic ownership and governance within the sphere of the immaterial and material commons:

*** The Institute for Pluralistic Ownership**

This institute, in cooperation with the Institute for the Commons presented above, assists individuals and communities and actors of the social knowledge economy to know the ownership alternatives that are available, facilitates access to that knowledge, to legal

enablement, etc... It can be modeled on successful civic initiatives like the Sustainable Economics Law Center in San Francisco, under the leadership of Janelle Orsi; and of the ShareLex movement in Europe.

*** The Institute for Pluralistic Governance**

This institute, in cooperation with the Institute for the Commons presented above, assists individuals, communities and actors of the social knowledge economy to know the governance alternatives that are available, facilitates access to that knowledge, to legal enablement, etc... It helps find training in the human capabilities that favor multi-stakeholder forms of governance.

Elements of Idealized and Integrative Full Transition Plan to a mature Social Knowledge Economy

This is a very synthetic summary of the logic of the transition strategy

Analysis

1. Under conditions of proprietary (industrial) capitalism

- Workers create value in their private capacity as providers of labor
- Deskilling of workers production knowledge; creation of managerial and engineering layers which manage collective production on behalf of the owners of capital
- Codified knowledge is proprietary and the value is captured as IP rent
- Owners of capital capture and realize the market value, partial redistribution in the form of wages
- Under conditions of capital-labor balance, the state redistributes

wealth to the workers as consumers and citizens

- Under contemporary conditions of labor weakness, the state redistributes the wealth to the financial sector and creates conditions of debt dependence for the majority of the population

2. Under conditions of emerging peer production under the domination of financial and 'cognitive', 'netarchical' capitalism

- Civic voluntary contributors, paid labor and independent entrepreneurs create value codified in common pools of knowledge, code, and design
- Capital owners realize and capture the market value of both contributors and labor; proprietary network and collaboration platforms capture and realize the attention value of the sharers/contributors
- Capital owners profit from the benefits of disaggregated distributed labor (crowdsourcing)
- Capital co-created through the financing of labor and platforms, the continued accumulation of common pools of knowledge, code and design; under conditions of precarity for the voluntary civic contributors and unsupported commons-oriented entrepreneurship
- Commons are managed by for-benefit institutions which reflect the balance of influence between contributors, labor, and capital owners, but continue to expand the common pools; the commons sector lacks solidarity mechanisms to cope with precarity; civil society is still derivate to the market and state sectors
- The state weakens its public service and solidarity functions, in favor of its repressive functions and subsidizes financial capital; the state only minimally co-creates the conditions for commons-oriented peer production, and redistribution to financial capital continues

3. Under conditions of strong peer production under civic dominance

- Civic voluntary contributors and autonomous cooperative labor create codified value through common pools; labor and civic reskilling occur through commons-oriented distributed manufacturing which places value creators at the helm of distributed manufacturing and other forms of value creation
- Commons contributors create cooperative commons-oriented market entities that sustain the commons and their communities of contributors
- Cooperative and other commons-friendly market entities co-create common pools but engage in the cooperative accumulation on behalf of their members; commons contributions are codified in their legal and governance structures;
- Creation of entrepreneurial coalitions and phyles (structured networks of firms working around joint common pools to sustain commons-producing communities).
- Societal mutual coordination of production through open supply chains direct the market activities.
- The commons-enabling for-benefit institutions become a core civic form for the governance of common pools; the associated market entities create solidarity mechanisms and income for the peer producers and commoners, supported by the Partner State.
- The state, dominated by the civic/commons sectors becomes a Partner State, which creates and sustains the civic infrastructure necessary to enable and empower autonomous social production.
- The market becomes a moral and ethical economy, oriented around commons production and mutual coordination, supported by the Partner State functions.
- The market sector is dominated by cooperative, commons-

oriented legal, governance, and ownership forms; the remaining profit-maximizing entities are reformed to respect environmental and social externalities, including redistribution of extracted 'commons-benefits'.

- Governance mechanisms are reformed towards commons-orientation and multi-stakeholder governance models; ownership models are reformed from extractive to generative models.
- The Partner State model renews public service provision, solidarity mechanisms and social care through the commonification of public services and public-commons partnerships.
- Social redistribution takes place through basic income provisions and reduction of necessary labor participation to create conditions for civic contributions and a contributory economy.

Transition Dynamic

The State

- The state becomes a Partner State, which aims to enable and empower autonomous social production, which it also regulates in the context of common good concerns
- The state strives to maximal openness and transparency
- The state systematizes participation, deliberation, and real-time consultation with the citizens
- The social logic moves from ownership-centric to citizen-centric
- The state de-bureaucratizes through the commonification of public services and public-commons partnerships
- Public service jobs are considered as a common pool resource and participation is extended to the whole population

- Representative democracy is extended through participatory mechanisms (participatory legislation, participatory budgeting, etc...)
- Representative democracy is extended through online and offline deliberation mechanisms
- Representative democracy is extended through liquid voting (real-time democratic consultations and procedures, coupled to proxy voting mechanisms)
- Taxation of productive labor, entrepreneurship and ethical investing is minimized; taxation of the production of social and environmental goods is minimized; taxation of speculative unproductive investments is augmented; taxation on unproductive rental income is augmented; taxation of negative social and environmental externalities is augmented
- The state sustains civic commons-oriented infrastructures and ethical commons-oriented market players
- The state reforms the traditional corporate sector to minimize social and environmental externalities
- The state engages in debt-free public monetary creation and supports a structure of specialized complementary currencies

The Ethical Economy

- Creation of a commons and common good oriented social / ethical / civic / solidarity economy
- Ethical market players coalesce around commons of productive knowledge, eventually using peer production and commons-oriented licenses to support the social-economic sector
- Ethical market players integrate common good concerns and user-driven and worker-driven multistakeholder in their governance models
- Ethical market players move from extractive to generative forms

of ownership; open, commons-oriented ethical company formats are privileged

- Ethical market players practice open book accounting and open supply chains to augment non-market coordination of production
- Ethical market players 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 create support structures for open commercialization, which maintain and sustain the commons
- Ethical market players interconnect with global productive commons communities (open design communities) and with global productive associations (phyles) which project ethical market power on a global scale
- The ethical market players adopt a 1 to 8 wage differential and minimum and maximum wage levels are set
- The mainstream commercial sector is reformed to minimize negative social and environmental externalities; incentives are provided that aim for a convergence between the corporate and solidarity economy
- Hybrid economic forms, like fair trade, social entrepreneurship, B-Corporations are encouraged to obtain such convergence
- Distributed microfactories for (g)localized manufacturing on demand are created and supported, in order to satisfy local needs for basic goods and machinery
- Institutes for the support of productive knowledge are created on a territorial and sectoral basis
- Education is aligned to the co-creation of productive knowledge in support of the social economy and the open commons of

productive knowledge

The Commons Sector

- Creation of commons infrastructures for both immaterial and material goods; society is seen as a series of interlocking commons, that are supported by an ethical market economy and a Partner State that protects the common good and creates supportive civic infrastructures
- Local and sectoral commons create civil alliances of the commons to interface with the Chamber of the Commons and the Partner State
- Interlocking for-benefit associations (Knowledge Commons Foundations) enable and protect the various commons
- Solidarity Coops form public-commons partnerships in alliance with the Partner State and the Ethical Economy sector represented by the Chamber of Commons
- Natural commons are managed by public-commons partnership and based on civic membership in Commons Trusts

Political reconstruction of social movements in a conjuncture of post-industrial transformation

The shift to an open knowledge-based commons society also crucially depends on the reconfiguration of politics. This section aims to be a generic blueprint for re-constitution of political forces around a pro-commons agenda, based on a bottom-up process: The proposal is to create three institutional coalitions, two for domestic use (local, regional, national) and one that aims to play a role in reconstituting global governance (supra-regional and global):

*** The 'local' civic/political institution: The Alliance of the Commons**

An alliance of the commons is an alliance, meeting place and network of p2p-commons oriented networks, associations, places;

who do not have economic rationales. These alliances can be topical, local, transnational, etc... An example is the initiative Paris Communs Urbains which is attempting to create a common platform for urban commons initiatives in the Paris region; another Parisian/French example is the freecultural network Libre Savoirs, which is developing a set of policy proposals around digital rights. (both examples were communicated to me by Lionel Maurel). An alliance of the commons is a meeting place and platform to formulate policy proposals that enhance civic infrastructures for the commons. An alliance of the commons, could, in cooperation with the Chamber of Commons (see infra) or autonomously, produce a social charter to reconstitute political forces around a pro-commons political agenda.

*** The 'local' political-economy institution: The Chamber of the Commons**

In analogy with the well-known chambers of commerce which work on the infrastructure for for-profit enterprise, the Commons chamber exclusively coordinates for the needs of the emergent coalitions of commons-friendly ethical enterprises (the for-benefit, mission or purpose-driven, ethical/solidarity/social economy actors concerned with the common good and not profit or capital accumulation), but with a territorial focus. Their aim is to uncover the convergent needs of the new commons enterprises and to interface with territorial powers to express and obtain their infrastructural, policy and legal needs. In cooperation with the civic alliance of the commons discussed above, the Chamber can produce social charters to reconstitute politics around the priorities of a commons-oriented ethical economy.

*** The global economic institution: the P2P/Commons Globa-local <<Phyle>>**

A phyle (as originally proposed by lasindias.net) is a coalition of commons-oriented, community-supportive ethical enterprises which trade and exchange in the market to create livelihoods for commoners and peer producers engaged in social production. The use of a peer production licence keeps the created exchange value

within the sphere of the commons and strengthens the existence of a more autonomous counter-economy which refuses the destructive logic of profit-maximisation and instead works to increase benefits for their own, but also the emerging global commons. Phyles created integrated economies around the commons, that render them more autonomous and insure the social reproduction of its members. Hyperproductive global phyles that generate well-being for their members will gradually create a counterpower to the hitherto dominant MNO's. Phyles are necessary to project ethical economic power beyond the nation-state into the sphere of global governance that is presently dominated by multinational private for-profit companies.

*** In conclusion:**

In short, we need an alliance of the commons to project civil and political power and influence at every level of society; we need phyles to strengthen our economic autonomy from the profit-maximizing dominant system; and we need a Chamber of the Commons to achieve territorial policy; legal and infrastructural conditions for the alternative, human and nature-friendly political economy to thrive. Neither alone is sufficient, but together they could be a powerful triad for the necessary phase transition.

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Remarks

Please see Discussion

1. [↑](#) Plan Nacional del Buen Vivir 2013-2017, p.19 : “La Revolución del Conocimiento, que propone la innovación, la ciencia y la tecnología, como fundamentos para el cambio de la matriz productiva, concebida como una forma distinta de producir y consumir. Esta transición llevará al país de una fase de dependencia de los recursos limitados (finitos) a una de recursos ilimitados (infinitos), como son la ciencia, la tecnología y el conocimiento.”
2. [↑](#) Speech at the Campus Party event, <https://www.youtube.com/watch?v=Zjajy-ia-SE>
3. [↑](#) Here is a related definition: “Semio capitalismo es el modo de producción en el cual la acumulación de capital se hace esencialmente por medio de una producción y una acumulación de signos: bienes inmateriales que actúan sobre la mente colectiva, sobre la atención, la imaginación y el psiquismo social. Gracias a la tecnología electrónica, la producción deviene elaboración y circulación de signos. Esto supone dos consecuencias importantes: que las leyes de la economía terminan por influir el equilibrio afectivo y psíquico de la sociedad y, por otro lado, que el equilibrio psíquico y afectivo que se difunde en la sociedad termina por actuar a su vez sobre la economía.” Franco Berardi (Bifo); Retrieved at <http://www.lavaca.org/notas/quien-es-y-como-piensa-bifo/>
4. [↑](#) This subject is covered by the companion paper: Torres, Jenny. Open Technical Infrastructures (stream 4) - Free Software. Retrieved at <https://flokksociety.coment.com/text/pW2QAip4w79/view/>
5. [↑](#) This research result, communicated orally, is as yet unpublished but is prefigured in the following publication: Trebor Scholz, “Cheaper by the Dozen: An Introduction to Crowdsourcing,” pp. 47-54; a chapter from Xtine Burrough, Net Works, Routledge, 2012.
6. [↑](#) Text, details and discussion via http://p2pfoundation.net/Peer_Production_License

7. [↑](http://p2pfoundation.net/Stigmergy#Bibliography) A scientific bibliography on stigmergy is available here at <http://p2pfoundation.net/Stigmergy#Bibliography>
8. [↑](http://www.newsociety.com/Books/H/Humanizing-the-Economy) Humanizing the Economy: cooperatives in the Age of Capital: <http://www.newsociety.com/Books/H/Humanizing-the-Economy>
9. [↑](https://flokksociety.com/ment.com/text/HBlnwquAi25/view/) For more details, see the paper by John Restakis: Institutions for social knowledge economy (stream 3) – Social Knowledge and the Social Economy; retrieved at <https://flokksociety.com/ment.com/text/HBlnwquAi25/view/>
10. [↑](http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/d14-61A1.pdf) The ruling, FCC 14-61 is available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/d14-61A1.pdf
11. [↑](http://p2pfoundation.net/What%27s_Wrong_with_the_Current) http://p2pfoundation.net/What%27s_Wrong_with_the_Current
12. [↑](#) Source: Excerpts from a text prepared by Tommaso Fattori as part of the book-project “Protecting Future Generations Through Commons”, organized by Directorate General of Social Cohesion of the Council of Europe in collaboration with the International University College of Turin. The text will be published soon in “Trends in Social Cohesion” Series, Council of Europe publications.
13. [↑](#) An example of such financing is the ‘Artistic Voucher System’, which has been inscribed in the ‘Organic Code for Social Knowledge’ (COESC+1)
14. [↑](http://p2pfoundation.net/Cybersyn) Cybersyn was a democratic planning / mutual coordination project for Chilean industry, undertaken by Stafford Beer for the government of Salvador Allende, you can find details here at <http://p2pfoundation.net/Cybersyn>

Acknowledgements

The Commons Transition Plan is a non-region specific adaptation of the 1st Commons Transition plan developed by Michel Bauwens for [Ecuador's FLOK Society project](#). The Ecuadorian plan was itself built on the original FLOK Proposal “Sumak Yachay. Devenir Sociedad del Conocimiento Común y Abierto. Designing the FLOK Society. v.1.5.2. By Xabier E. Barandiarán & Daniel Vázquez, 2013.”, i.e. Designing the FLOK Society, by Xabier E. Barandiarán & Daniel Vázquez. The FLOK Society team leaders were Daniel Vázquez and Xabier Barandiarán, with Michel Bauwens, as research director, assisted by five research stream coordinators and the assistant coordinator Daniel Araya. Building on those proposals, the plan specifically calls for an integrative or ‘wholistic’ approach, which goes beyond technology, and calls for measures that take into account different aspects of social change that need to occur if not simultaneously, then at least linked through a positive feedback loop, in which various measures reinforce each other. It also broadens and deepens the call by looking at commons-based infrastructures not just for knowledge, but for other social and productive activities.

Public Policy for a Social Economy

by John Restakis

“The fundamental premise of democracy is that governments are accountable to their citizens and that government policies serve and protect the common interest. An irreplaceable aspect of this common interest are the commons themselves that underlie the operations, attitudes, and skills that make possible the collective forms of living and acting that define the social and solidary character of a healthy civil society. It follows that unless the collective values of civil society and the common good can determine how economies operate, the present model of political economy will do no more than tinker with a system that is in dire need of radical reform. The Partner State is one way of ushering in this reform.”

Over the last 20 years, there has arisen a global interest in the role that the social economy plays in the economic and social life of nations. This interest has spawned a growing literature on the nature and role of the social economy, its size and composition, its operating rules and organizing principles, its relevance for the economic and social well being of societies, and its relation to the state on the one hand and the private sector on the other.

Increasingly, the social economy is being viewed as the repository of those social, cultural, and political values that are most relevant for protecting and advancing the collective good. These values include the idea of reciprocity as the driving force of social economy organizations, the pursuit of social aims through the practice of mutuality, and the promotion of social solidarity through the advancement of social and economic equity.

For these reasons, and as a result of the upheavals brought on by free market capitalism, the social economy is also emerging as a complement to the state for the social welfare of citizens – a role made increasingly necessary by the abrogation of this duty on the

part of governments. The economic crisis and the domination of neoliberal ideology have thus combined to thrust the social economy into a historic spotlight and to play a central role in the reconfiguration of the body politic of nations the world over.

However, the social economy is far more than the application of co-operative or self-help strategies operating at the margins of the economy to help the poor as is sometimes believed. Nor is the social economy merely a collection of economic self-defense measures against the failures and depredations of the “free market” economy. Rather, the social economy represents a wholly different conception of economics in which market forces and economic practice serve social or collective interests, rather than just those of capital or the individual. The social economy is the testing ground for a kind of economics that can actually deliver on the promises of social justice, equity, and collective wellbeing that are manifestly beyond the capacity of the capitalist paradigm.

The Case of Ecuador

All these questions have come into the foreground in Ecuador, where the government has adopted the concept of *Buen Vivir*, or “Good Living” as the centerpiece of its National Plan and its (proclaimed) political outlook. ¹It is with reference to this plan that this paper was originally penned, with the intention of showing how the social economy, and its relation to the state and to the question of governance, plays a central role in realizing an alternative to the market logic of neo-liberalism through the establishment of a social knowledge economy ² as the framework for a new kind of political economy. This, in essence, was the aim of the FLOK Society Project (Free/Libre Open Knowledge) launched in 2013.

As envisaged in Ecuador’s National Plan, *Buen Vivir* relates to a model of political economy that opposes neo-liberalism and attempts a unique balance between free and open access to knowledge; an informed and mobilized citizenry; a form of decentralized, democratic, and locally accountable governance; an economic and public policy in service to the collective good; and above all respect and stewardship of the rights of nature as

guaranteed by the constitution.

This paper relates the ideas and policy proposals developed for Ecuador to a larger framework for the promotion of social economy principles and the concept of the Partner State as components of a radical re-visioning of political economy in general. In our view, these are two fundamental elements for understanding how economics can be reconnected to social values and to the pursuit of the common good as the foundation of a new, ethical model of political economy. The work undertaken in Ecuador for the articulation and realization of a social knowledge economy³ and the aims of the National Plan have a universal relevance and as such, the case of Ecuador serves as a valuable springboard and reference for the exploration of a radical alternative to neo-liberalism as the governing paradigm for economic and social development.

While Ecuador was the initial reference for this work, in this broader context, we examine how bold public policy can place the social economy in a central role for transforming the productive matrix of a country. Whether we are speaking of the provision of human and social services, or of the material production of goods and services in the commercial economy, we argue that within the prevailing neo-liberal paradigm the logic and organization of the social economy is fundamental to any meaningful transformation of a nation's economic structure. As such, the social economy and the Partner State appear as central elements in any transition to a Commons and Co-operative-Based Economy.

In contrast to neoliberalism, in which capital (with the help of compliant governments) undermines and displaces the state through the colonization and privatization of the public domain, we examine how governments can strengthen the social economy through the creation of policies that reinforce the civic principles and purposes that are the basis of public goods and services.

In Ecuador, where the state is playing an increasing role in the nations' body politic, this requires a wholly new relationship between the state and civil society. It is a relationship that embodies fundamental principles of shared power, of collaboration and co-construction of public policy, and the creation of new institutions

capable of transitioning to a model of Partner State in which the state is the enabler and promoter of civic values and the common good as the primary aims of government. But these are also principles that apply equally to countries – many of them in the industrialized north – in which the state is being diminished and where public services are being privatized and colonized by capital.

A central purpose of this strategy is to also address the dependence of civil society institutions on government. This is especially true with respect to the production of human and social services. In this arena, and despite its formal distinctions from the state, the social economy remains a dependent sector – in many ways a client sector of the state. At a time when governments in many countries have all but erased the distinctions between the private and public sectors, this continuing dependence is a fatal weakness that allows capital interests to continue their domination of public policy and to perpetuate an economic system that is subservient to these interests. This is one reason why special attention is paid to the vital area of social goods and services.

This is not to say that social economy enterprises operating in the commercial economy are to be ignored. Social economy enterprises such as co-operatives are absolutely vital to the economic interests of small producers in the agricultural economy, to artisans and crafters, to community-based financial services such as credit unions and community banks, and increasingly to the emergence of immaterial goods and services provided by digital technology through the operation of peer-to-peer networks that are also based on co-operative and commons values and practices.

One of our key arguments is that if the social economy is to mature as an independent social and political force, then a true social market corresponding to the unique role of the social economy as a force for democratizing the economy is fundamental. Only in this way might the overwhelming power and influence of the capitalist market be brought into balance with civic values. A strong and autonomous social economy based on reciprocity, mutuality, and civic values makes possible also the political power necessary to negotiate a new social contract for a post neo-liberal age.

Toward a New Paradigm – Beyond the Welfare State

In the global south, the questions concerning the traditional operations of the welfare state are quite different from those of the industrialized north. For a very long period of time, countries like Ecuador suffered from a weak state infrastructure that was unable to provide the kinds of social services that citizens had come to expect in the industrialized states. The idea of the welfare state was still a work-in-progress – something to be aimed for in the future as opposed to being dismantled in the present.

In these cases, where national economies have been growing – along with state institutions – the situation is often one of growing state intervention and involvement in the public economy. In education, in health services, in the provision of social security, governments have developed universal public services that were never available before. In these cases, the challenges lie rather with the statist forms of these services and the weaknesses inherent in a purely statist conception of social care.

What we are arguing is that rather than repeating the mistakes of mass production state welfare systems of the mid-20th century, that a new form of *social economy* welfarism can be developed which takes further the social innovations developed by such jurisdictions as Italy and Quebec. There is an opportunity here to create new models of social welfare that learn from, and move beyond, the weaknesses of the old statist structures. Health, education, and other forms of social welfare are all open to more responsive, more flexible, and ultimately more effective forms of care when coupled with the untapped power and potential of the social economy.

The application of social economy principles and practices such as reciprocity and co-operation, and the emergence of democratic, distributed, and user-controlled social care systems, may allow nation states to move to a new configuration of social welfare – that of the Partner State – which reinforces the rise of civil networks, supports new forms of social innovation, and recognizes the central role of civil society in promoting the common good, especially in the

area of social care.

Both in the industrialized north and the “developing” south, the stewardship role of the state is under siege. The colonization of public and social space by capital in the north is one of the effects of shrinking opportunities for profit making in the private sector. In the south, and now in the debt-ridden regions of southern Europe, it is also the method by which global capital and its institutions (e.g. the IMF) impose austerity on national economies by dismantling the public economies of these countries. At the very moment when weak economies and rising unemployment demand a strong social safety net, public services are being turned into sources of private profit. With governments as willing partners, the privatization of public goods and the monetization of social care now beckon as a new frontier from which profits might be wrung – from the provision of health care and clean water, to the running of education systems and prisons.

It is quite clear how the institutions of private capital might invest in – and profit from – what were once public services. What is far from clear is whether the institutions of the social economy are equipped to respond to this new reality. The market failures in human services in both the private and the public economies are now arguably the central public policy issue of modern societies. It is for this reason that we focus much of our discussion below on this question.

How might governments respond to this dilemma? Can they foster civic solutions that provide an alternative to the privatization of social goods on the one hand, and the stifling effects of top-down statism on the other? How might these solutions be fashioned to reflect, and reinforce, those social-serving values, operations, and principles that are the greatest strength of the social economy itself?

Finally, how might the social economy enlarge its presence and influence in the broader commercial economy? How do social economy enterprises acquire the resources and skills they need to flourish within an overtly hostile environment dominated by private capital? How do they build on their successes and scale up and out? And finally, how do they capitalize on the new logic of networks,

distributed production, and digital technology that are so consonant with their inherent social values and strengths?

The creation of what we may call a social market for these purposes, and the development of free and open knowledge systems that serve them, is essential to this task.

The Social Economy and the Social Market

The rise of interest in the social economy has also given rise to an interest in measuring its economic value and its relative size within the broader economy. In Ecuador, according to the Institute for Social Security, the social/solidarity economy comprises 25.7 % of the nation's GDP and 48.9 % of employment generated in enterprises of fewer than 11 employees. A study by the DGRV (Cruz, 2003) also shows that in 1999–2002, the current portfolio of credit unions experienced a growth of 384.73% compared to 49.94 % for the banks. ⁴ These figures are impressive and help to gauge key aspects of the social economy. But while appropriate for the measure of commercial exchange, the determination of value solely on the basis of commercial principles – of monetary value – is antithetical to the character and needs of the social economy. A different valuation is required.

The purpose of the social economy is not primarily about the production and exchange of goods and services in pursuit of *private* ends, or of monetary value – but rather the creation and use of social relations for the production of *social* value. This is true whether social economy organizations are producing social goods and human services or whether they are engaged in commercial production within the mainstream economy. It is the social aims and collective nature of these enterprises that distinguish them from capitalist firms. Social values are embedded in the structure of these organizations and a market for the creation of social value is not the same as a market for capitalist accumulation. What then *is* a market for social value?

In most countries, the character of social economy organizations and their role in society is implicitly acknowledged as different from that of private businesses and requiring a different approach. For

example, governments provide tax supports to social economy organizations such as co-operatives, non-profits and charities because they create social benefits that are worth supporting and are in the public interest.

Around the world, the principle of tax exemption to non-profits is well established. Traditionally, the work of these societies was conceived as relieving a burden that would otherwise be borne by the state for such things as providing relief to the poor, running hospitals, caring for the vulnerable and indigent, etc. In return for these services, the state compensated societies through an exemption on tax. But it was also a condition of the exemption that no profits could be retained by the society nor distributed to its governors or members. This is the constraint on the distribution of profits that today defines non-profits under legislation that governs their operation, as is the case in Ecuador.

But in an age where the sophistication and complexity of social economy organizations extends far beyond simple charity models, and where hybrid models such as social enterprises and community benefit companies employ market mechanisms to pursue social goals, the old tax exemptions based on constraints to the distribution of profit are wholly inadequate. They fail to capture both the reality and the potential of the social economy as an economic sphere deserving equal treatment, on its own terms, to that granted the private and public sectors. They also perpetuate the false notion that the generation of profit is incompatible with the pursuit of social benefit.

The reason for this is that profit is still conceived strictly in capitalist terms, which is to say as a private good. But what of profit that is a social good, a collective asset, as in the case of co-operatives, where it is designated as a “surplus”? The real question is not the issue of profit but rather the purposes for which this profit or surplus is created and utilized. Recognition of profit as a social asset has paradigm changing implications – not only for the social economy but also for how the public interest is defined, developed and defended.

One of the key tasks before us in this age of unfettered privatization

is how to reverse the colonization of the public domain by capital and instead, to foster and expand the social control of capital for the common good. This is the essential attribute of the social economy – its *social* character and the embeddedness of market exchanges within a network of social relations that are driven not by the private interests of the capitalist market, but by the collective and mutualist aims of friends, neighbours, communities and society as a whole.

A New Approach

What are needed are social and economic policies that recognize the social and mutual foundations of the social economy as a distinct paradigm that relates social principles to the economy, to resource allocation, and to a new understanding of wealth creation. A nation's social economy contributes to the socialization and democratization of markets and the economy and is a key force for transforming the productive matrix. In short, the social economy is a unique space with its own requirements and in need of institutions that reflect the logic and aims of its operations. This entails a holistic and integrated approach to social economy development and the creation of what might be called an “ecosystem” of institutional supports analogous to the existing ecosystem of capitalist institutions that service the capitalist economy.

With respect to the production of *social* or *relational* goods and services, there is also an urgent need to understand and to construct a type of *social market* that supports and values the production and exchange of social relations without turning them into commodities as is the case in capitalist markets.

On what basis could such a policy, and such a market, operate? The answer lies in the socio/economic principles that lie at the heart of social economy organizations and of the social economy as a whole – *reciprocity, mutuality* and *social benefit*.

Unlike the drive for private profit that animates the behavior of firms in the private sector, *social economy organizations are animated by the principles of reciprocity and mutuality for the pursuit of collective economic and social aims, largely through the social control of capital.*

Reciprocity and mutuality in pursuit of social aims define both the activities and the aims of social economy organizations – whether they are co-operatives, volunteer organizations, or social enterprises. Their primary purpose is the promotion of collective benefit. Their product is not just the particular goods or services that they produce, but human solidarity and social capital. And, as opposed to the capitalist principle of capital control over labour, reciprocity and mutuality are the means by which a social interest – whether it takes the form of labour, or citizen groups, or consumers – can exercise control over capital.

With respect to public services and social goods the key question therefore, is this:

How can reciprocity and mutuality be actualized as institutional forces to provide for the human services that are not being met by government or the private sector?

Taxation, Capital Formation, and Social Benefit

One of the key ideas we propose is the central role that social markets play in preserving and expanding the social economy's role with respect to social goods.

The creation of social markets entails two things: allowing social economy organizations to raise capital directly through the issuance of social capital shares or through the use of social currencies, and the development of a social market exchange that functions as a parallel institution to the stock market for capital, except for use by the social economy. Both these concepts are explored more fully below.

But the first point to be made is that of all the challenges that impede the growth and potential of the social economy, the difficulty in accessing and controlling capital is surely the most crippling. Solving this problem is therefore essential for all types of social economy organizations, whether they operate in the field of human and social services or in the commercial economy.

There are many ways that public policy can expand the capacity of

social economy organizations. Rethinking and reforming tax policy is among the most important and the most potent.

Social Goods

One line of approach is to provide tax benefits and exemptions to investments in social economy organizations. But there is a strong case for extending these benefits to contributions made by supporters – whether association members or other community members – to *any* organization whose primary purpose is the provision of a social good.

It is essential that non-profits and a wide range of social enterprises be able to generate capital for their services through tax-exempt contributions sourced from within civil society itself. Not only would the dependence of social economy organizations on the state be mitigated, but the perpetual rationing of capital due to the social economy's dependence on state funding could also be lessened. But for this to happen, the idea of non-profits as organizations whose goals are incompatible with the generation and utilization of capital (profit) has to be left behind. It is a relic of a false understanding of profit as a private good, and associated with an equally outmoded understanding of markets as exclusively capitalist.

All enterprises, whether commercial or social, must generate a profit (or surplus in the case of co-operatives) if they are to survive. The question is: to what purpose is this profit or surplus put? Is it private or is it social? The case of co-operatives clearly shows how profit can be a social good as well as a private one.

Co-operatives are a form of social economy organization whose surplus is collectively owned and utilized by its members for their mutual benefit. When non-profits generate a surplus that is then reinvested in services to community this too, is profit transmuted into a common good. And just as private capital is bent on privatizing social wealth, so should the social economy be focusing on ways to *socialize* capital.

A social economy understanding of the market, and of profit, makes it possible to rethink society legislation so as to allow non-profits to

issue shares to raise capital, to accumulate capital in the form of undistributed reserves for the pursuit of social ends, and to invest in other social economy organizations and institutions that have the same purpose. The development of the kinds of social purpose capital that are now possible in the case of co-operatives should be extended to the whole of the social economy, with the proviso that their use be transparent and democratically accountable to contributors and service users.

This is essential. Without such accountability, there is the risk that capital accumulated by an organization for social purposes may ultimately be used to pursue private interests – as is sometimes the case with non-profits that have no structure for accountability to stakeholders. *What is central in protecting the pursuit of social ends is not the conventional prohibition on the accumulation and distribution of profit, but rather the social constraint imposed by democratic accountability for the use of that profit.* It is exactly the same principle that serves to protect the public interest when applied to the taxing and spending practices of the state.

Let us now examine a case study from Japan that illustrates well the main points we are making with respect to how such a system might work with respect to the provision of social goods and in particular, the use of social currencies for this purpose.

Case Study – Fureai Kippu, Japan

Japan currently has the most numerous and diverse forms of social, or complementary currencies in use in the world. ⁵There were approximately 258 complementary currencies in use across Japan in 2008.

Fureai Kippu is a reciprocity-based time banking system that was developed over 40 years ago to provide care for the elderly. Fureai Kippu literally means “Ticket for a Caring Relationship” and refers to the ticket or credit that is earned when one volunteers their time helping seniors. According to the first published research in Japanese in 1992, Fureai Kippu is:

A generic term for various time-based systems, such as Time

Deposit, Point Deposit, Labour Bank, etc. ... where members can earn time credits or points for the hours they volunteer, providing physical care, home help and emotional assistance to the care-dependent members. These credits can then be registered by the host organization and saved in their personal accounts. Time credit holders can withdraw and use their credits to buy care for themselves or relatives as required (Sawayaka Welfare Foundation (SWF), 1993).

Fureai Kippu adheres to a strict time banking model which tracks and then reimburses volunteer time on the basis of earned credits. However there are variations in how banked time is reimbursed. The traditional model is one that is strictly reciprocal and where earned credits are redeemed in received services, either for oneself or for one's relatives. A second model also includes the redemption of volunteer time through a combination of earned time credits and cash. In both models, dependent users of services may pay a small user fee if they are unable to earn time credits because of ill health or incapacity. These user fees are paid to the host organization, which in turn can offer a cash payment in combination with time credits to volunteers.

Like time banking studies elsewhere, (Seyfang, 2004; Collom, 2007; Ozanne, 2010), Fureai Kippu generates a number of positive impacts, in addition to the obvious social benefit of offering an effective means of providing care to the elderly. These include building personal relationships and expanding social connections, improving the mental and physical health of participants, promoting mutuality and responsibility with respect to the care of vulnerable people; and helping to create a more equal relationship between caregivers and recipients. ⁶ Moreover, the system offers a civil model of care that is more cost-effective, flexible, and humane than expensive "top-down" models typically associated with state care provision.

The Fureai Kippu model is not without its problems, however. One of these has to do with designing reciprocal exchange systems that effectively match earned credits to services received. In the case of NALC, during 2010 a total of 12,367 volunteer members assisted 3,126 dependent members, earning 198,091 credits in total while

only redeeming 10,548 (5%). The balance was redeemed by user fees or by the organization (these were paid in return for non-person based activities or work for the organization such as office work or training). Over time, a total of nearly 1.7 million credits have been accumulated in individual members' accounts. User fees are thus a key means of guaranteeing a means for volunteer members to earn their time credits while allowing dependent members to purchase services they cannot otherwise earn.

Meanwhile, the system has adapted to the challenge of matching time credits to services by expanding the ways in which reciprocal exchanges can be made. Unlike the traditional model where credits are exchanged for elder services within the host system, either later in life for oneself or currently for one's relatives, a new "horizontal" system of exchange has been developed in which time credits may be redeemed in a short time frame in exchange for such services as child care and a range of other local services (museums, recreational facilities, cash vouchers with local businesses, etc.). This allows local municipalities and local businesses to support the system while promoting both community building and the local economy. Time credits may also be used to pay for the monthly insurance premiums of the state elder care system. Finally, unredeemed credits may be donated to a shared pool for use by those who haven't the means to access services otherwise.

While the Fureai Kippu system is not a panacea, the model is a successful complement to formal state care systems. It is a key reason why governments at both local and federal levels have supported the system, including state efforts to recruit volunteers for the programs. Starting in 2009, Yokohama City near Tokyo attracted over 4,000 volunteers in a single year, largely due to the scheme that allows members to exchange time credits for services other than elder care.

Moreover, with the proven value of Fureai Kippu to the communities it serves and to state efforts to provide care to its ageing population, the model has been receiving serious attention for application in countries like the UK where civil alternatives to state systems have become a priority for government.

Lessons

A key lesson provided by Fureai Kippu in Japan, is that reciprocity and mutualism can be valued in strictly social as opposed to monetary terms. Time banking is one approach that continues to offer non-commercial solutions to the provision of social services, especially if these are complemented by the role of the state. Fureai Kippu shows how a reciprocity-based system rooted in local communities can work with state systems to form the basis of public-civil partnerships that offer an alternative to the privatization and commodification of what should remain *social* relationships of caring.

There is no reason why vouchers or other mechanisms for placing market power in the hands of citizens should be associated exclusively with the political Right – as they are. The use of market power for social care is just as amenable for socially progressive purposes *if the market in question is structured around civic principles*. Markets are *not* necessarily commercial, or capitalist, and the sooner this is understood the sooner society can address the contradiction between social goods on the one hand and chronically under funded and antisocial delivery systems on the other.

Governments and civil society must both grapple with how economics can be made to work for civic purposes, and the creation of social markets is essential to this. Innovative tax policy is also central to this aim.

What we are talking about is the creation of an institutional social market through the formal valuation of social goods and the capitalization of these goods directly by citizens and the promotion of informal social markets through communitarian mechanisms like social currencies that both value and expand reciprocity and social capital in the provision of social goods. *The state retains a central role however, as co-funder and facilitator of these systems.*

To be clear: this is not to advocate for the commodification of social relations, nor is it the promotion of atomized and utilitarian relations in place of social ones as is now the case with privatization. Rather, we are proposing forms of social currency that act as

mediums of circulation for the expansion of a new kind of *social* relationship between producer and user based on the reciprocal and mutual character of social relations that are characteristic of the social economy itself.

The Social Market Exchange

What would such a social market exchange look like? There are currently a number of social stock exchanges and they all share a common feature: the ability to invest in a social enterprise through the purchase of shares that yield a limited return to investors. This is one approach, and so long as returns are not speculative and contained by clear social priorities they can be a key source of needed capital. Otherwise, returns to investors for support of social enterprise moves away from reciprocity and toward a capitalist conception of social investment.⁷ By contrast, what we are proposing is something that values both contribution and return in terms of reciprocity. This is the reason we use the term *contributor* as opposed to *investor*.

What does this entail? First, it would mean the extension of tax exemptions and benefits to contributions that support the creation and distribution of social goods. In this way, the provision of a tax benefit to social contributors acknowledges the key notion of a public benefit compensated by the tax system on the reciprocity principle. It also embodies the fundamental principle of public responsibility for social care as a civic right. This is what taxes should do. But in addition, there needs to be a re-alignment of powers with respect to control over the design and delivery of social care itself. A number of factors seem essential.

The first requires shifting the production of some social care services from government to democratically structured civil institutions. Government would retain its role as a prime funder for these services and for the regulation and oversight that is necessary to protect the social character and public interest entailed in these services. The first part of this equation is already well underway. Governments have been unloading social services to private and non-profit providers for over two decades. It is the second aspect,

the need for user control and service accountability that is lacking (as too, is the funding). Social services that receive public funding and are not under the direct control of the state should be conveyed only to those organizations that provide control rights over the design and delivery of those services to users.

This applies equally to non-profit and for-profit services. Examples include organizations that provide elder care, family services, services to people with disabilities, or childcare. Moreover, those services that remain under state control (social security, public pensions, public auto insurance, public schools, health care services, etc.) should be democratized through the provision of control rights to users.

Second, government funding should, at least in part, flow directly to social care recipients who would then select the services they need from accredited organizations of their choice. To qualify for receipt of public funds, these organizations must have provisions for user control in their operations. In addition, funds must be made available for the organization of independent consumer-run organizations to assist users and their families in the identification, evaluation, and contracting of services to their members. This is crucial, especially in the case of users that haven't the means, or the capacity, to adequately select and contract services on their own.

Third, social care organizations must have the legal ability to raise capital from among users and from civil society in general, on the basis of social investing. Both users and community members would be able to purchase capital shares for the purpose of capitalizing the association. As a social *investment*, these shares would yield a prescribed value in services to investors but unlike conventional social investment models, investor control within the association would be limited to ensure democratic control by members. As social investments these capital assets would not be taxed.

Fourth, surpluses generated by these organizations should be considered, at least in part, as social assets. All social care organizations receiving public funds – whether in the form of vouchers or direct payments from government – would establish an indivisible reserve for the expansion and development of that

organization and its services. ⁸ A portion of operational surplus would also have to be used for the partial capitalization of a social market exchange through the purchase of shares in the exchange.

Social capitalization requires the creation of a social market based on reciprocity and mutuality. For example, individual contributors could purchase shares yielding a monetary value that is redeemed through the use of a social good or service provided by any one of the accredited organizations in the system, as in the example of Furei Kippu.

A mechanism for mediating the issuance of social vouchers on the one hand and their redemption on the other needs to be established to balance what some organizations receive in contributions and others redeem in services. The creation of a collective capital pool to help organizations pay for redeemed shares might be one way of managing this. The collective pool would be capitalized by the contributions of participating organizations, and may include contributions of supporting individuals. A social capital exchange of this type generates an independent source of credit and investment capital to social economy organizations, in addition to what they would receive from the state. Shares would be eligible for tax credits on the basis that such contributions have a clear and direct social benefit, as would a capital pool.

In these models, the primary role of government would be to continue to provide public funds for social care services and to establish the rules of the system. In partnership with service deliverers, caregivers, and users, the state would regulate and monitor service delivery, establish service standards, license service providers, and enforce legal and regulatory provisions.

Finally, the locus of service design and the designation of service needs would take place, as much as possible, at the community and regional level of delivery. This requires the creation of civil and municipal associations of public and community stakeholders to ensure the accountability of services and the flow of information necessary for effective budgeting, service design and delivery.

The development of open knowledge systems whereby data and

information is transparent, open, and freely accessible by citizens and social economy organizations is a concrete way in which a social knowledge economy can be linked to the operations and social aims of social economy organizations.

Most importantly, this decentralization of service delivery must include the democratization of decision-making through the sharing of control rights with service users and caregivers. This is precisely the system that is in place in cities like Bologna where social co-ops and their federations deal directly with municipalities to determine the service needs of communities and to manage their delivery.

A word of caution however, must be noted. Such policies have proven highly effective in the cases of places like Quebec, Italy, and Japan because there existed fairly high levels of social capital that were in turn reinforced by a culture that valued reciprocity. This is especially true of Japan, and hence the Fureai Kippu system both reflected and reinforced this culture even though there did not exist a large number of non-profits, as was the case for example, in Quebec. ⁹ In Italy, a long tradition of co-operative organizations helped form the institutional foundation for the evolution and spread of social co-ops.

What this means in practical terms is that democratizing and de-centralizing policies from government are not enough. What must also be considered is the educational and community development work that is needed to provide for the ongoing evolution of the civil institutions and cultural attitudes that form the basis for this kind of civil and cultural transformation.

Crucial to this is the development of multi-stakeholder intermediaries that can act as interlocutors with government on behalf of the broader social economy. At a service level, multi-stakeholder organizations representing different stakeholders and interests can negotiate contracts and services, co-ordinate organization and production, and support the social economy providers with cross sectoral training, logistics support, collective purchasing, financing, etc.

Popular education programs to raise awareness and understanding

of this new approach among communities are also key. And, as outlined in more detail below, there is an urgent need for higher-level academic research, education, and professional training for both civil servants and social economy actors.

A Policy Ecosystem

A review of public policy trends and instruments for supporting the social economy reveals a highly developed array of strategies developed by many countries.

Most importantly, it is crucial that a government's social, educational, developmental, and financial policies combine to create an integrated, yet diversified, ecosystem of institutional supports that together create an environment within which the social economy might flourish *throughout the economy*. These integrated programs may be broadly organized along four mutually supportive axes:

1. Tax Policy and Public Subsidy
2. Financial Supports and Social Investment
3. Community Education, Mobilization, and Development
4. Research, Higher Education and Professional Training

In general, the role of government in administering these initiatives may be summarized as follows:

- a) Facilitating the co-construction and co-implementation of national Social Economy policy through direct collaboration with social economy and other primary stakeholders (e.g. municipalities, territorial governments);
- b) Direct financial injection (seed money, which is also a credit enhancement)
- c) Investment (interest free loans for a certain period and possibly renewed)
- d) Fiscal policy – tax measures/incentives
- e) Financial guarantees
- f) Enabling legislation and regulation

Many of these initiatives have proven successful in strengthening the capacity of social economy organizations to contribute to social

wellbeing through the production of much-needed social services and the increase in training and employment that these services provide. In particular, the use of co-operative models for the provision of social care has yielded not only an increase in the range and quality of services available to the public, but in jurisdictions like Italy and Quebec where public policy has supported their development, social co-ops have generated a high proportion of the new employment generated by the social economy.

In Quebec, the government funds 85% of the costs of daycare programs delivered by solidarity co-ops and other social economy organizations, making the sector the 4th largest employer in the province. ¹⁰ Solidarity co-ops in Quebec account for fully 40% of the home care services in that province. In Italy, although social co-ops compose only 2% of non-profits, they are responsible for 23% of jobs in that sector. In Bologna, 87% of the social services in that city are provided by social co-ops under contract to the municipality.

Within the broader commercial economy, social economy organizations like co-operatives have prospered when access to basic capital resources – owned and controlled by the social economy itself – has been bolstered by progressive tax policy, by enabling legislation, by education and professional development, and most of all, by the support of representative civil associations that can identify and address the collective needs of the sector. Multi-stakeholder structures representing a broad range of social economy actors have been key in this regard.

In summary, there is no question that a concerted use of public policies by government can have a decisive effect on the capacity of the social economy to play a much enhanced role in the provision of new goods and services, in generating new opportunities for training and employment, and in strengthening the productive capacities of key sectors through the use of co-operative and other collective systems.

But more than this, the growth of a country's social economy also lends to the diffusion of progressive ideas and practices that in turn reinforce a progressive political economy both in the state and in the broader society. This is essential for the pursuit and

institutionalization of those values that will, in the long term, be the foundation for a more socially just and equitable social order.

Public Policy for a Partner State

When the government of Ecuador introduced to the world its visionary constitution and its bold plan for reframing the direction of development according to the precepts of a social knowledge economy and *Buen Vivir*, it held open the possibility of a wholly new conception of governance and of the role of citizens in both defining and defending the common good.

This paper examines the concept of the Partner State in relation to the concept of *Buen Vivir* as proposed in Ecuador's National Plan for Good living. Drawing on both the theoretical and practical foundations of the Partner State as a model of governance, the paper argues that the proposed transition to an economy based on social knowledge and the realization of *Buen Vivir* requires a radical restructuring of the state apparatus toward a direction of increased empowerment and meaningful engagement of both civil society and economic agents in the small firm economy as prerequisites for this transition. ¹¹ In this context, the Partner State is presented both as the necessary vehicle for the fulfillment of *Buen Vivir* and as the culmination of this process. The idea of the social market is also advanced as a means of enlarging the scope of social economy activities throughout the economy and as a central aspect of a Partner State approach to empowering civil society.

Just as the vision of a social knowledge economy and *Buen Vivir* represent a radical departure from neo-liberalism, so does the Partner State represent a departure from the state as the command and control apparatus from which economic and social development proceed. The Partner state, in which active citizenship for the common good is a defining feature, is the political expression of a society in which knowledge, economics, and social policy are all in service to civic values and the common good.

At a time when many are searching for viable alternatives to the

traditional Welfare State on the one hand, and the emerging Corporate State on the other, the idea of the Partner State is a new formulation in which the state is both the guarantor of public welfare and the promoter of civic values.

Throughout Latin America, the rejection of neo-liberal policies by the region's electorate has been reflected in the ascension of governments that are reclaiming and resurrecting the state as an indispensable player in economic and social planning. This is certainly true in Ecuador where according to the National Plan for Good Living,

Recovering the state and its role in planning, administrating, executing, distributing and redistributing has ... been vital to guarantee and open up opportunities for participation by persons, communities, peoples and nationalities in order to formulate, implement, evaluate and oversee public policies and public services. ¹²

The question that needs to be answered however is: what kind of state best reflects these values and principles?

To achieve the kind of society envisaged by the National Plan, a fundamental reframing of the role of the state is necessary. As stated by Ana Ravegna, Director of Equity and Poverty Reduction at the World Bank, "This includes the implementation of structural policies aimed at providing all members of society with a far higher degree of socio-economic sovereignty and political agency so that citizens have "the wherewithal to operate normally and properly in... society without having to beg or borrow from others, and without having to depend on their beneficence." Access to the essentials of a productive and rewarding life are not a function of market power but rather of the rights of citizenship. Such a policy is also indispensable for the development of a society that is decent, which is to say, a society whose institutions do not humiliate its members. ¹³ The emergence of a decent society is thus intimately linked to the democratization and humanization of its public institutions.

The Partner State ¹⁴

In its evolution, the idea of the Partner State proceeds directly from the principle that civil society is the source of political legitimacy in a democracy. In this view, the state is in the service of civil society as a vehicle to advance and protect the common good.

The Partner State is an enabling state. Its primary purpose is to maximize the capacity of civil society to create social value and to act as an equal partner in the formation and delivery of public policy for the common good. The enabling role of the state is not confined to the promotion of social value. It also entails the promotion of open access to the economy. It provides space for many models of entrepreneurship, including collective and commons-based forms of enterprise such as co-operatives and peer-to-peer networks, and the promotion of participatory politics. The Partner State enlarges the scope of personal autonomy and liberty while reinforcing the social bonds that build healthy communities and a vibrant civil society. Central to this process is the democratization of the state itself.

Traditionally, the state has been viewed as the final arbiter for the regulation and operation of three broad economic sectors in society – the private sector, the public sector, and the social/solidarity economy. Each of these sectors operates on a distinct set of economic principles and values. The private sector utilizes the principle of exchange equivalence (price) to create profit – its values are wealth accumulation and market efficiency; the public sector (the state) uses the economic principle of wealth redistribution to provide for public goods – its values are equity; the social economy utilizes the principles of reciprocity and mutuality to promote social aims – its values are social utility and human solidarity, whether they operate in the area of social goods and services or in the broader market economy.

In modern times, the regulatory role of the state has habitually swung from the promotion of either the private sector through support of the capitalist economy, or the redistributive function of government through state control of economic planning. The first submits the public and social economies to the requirements of capital; the second submits the capitalist and social economies to the needs of centralized state planning. Both models have come at

unsustainably high economic and social costs. And while there have been varieties of these two models, mostly in some combination of public and private dominance, there has never been an instance in which the needs of civil society and the values of the social economy have predominated in the state's management of economic and social policy. In theory and practice, the Partner state is the first state formation to do this.

Consistent with the values and operating logic of the social economy, the use of reciprocity and mutuality as central tenets of economic and social development transforms and re-orientes the state toward civil society as the primary engine for the creation of social value for the common good. With social values, equity, and sustainability at the foundation of public policy the Partner State also re-orientes the role of government toward the private economy and the operations of the public sector. The private and public sectors still retain essential functions in the national economy and in society. The profit motive and private business continue to play a role. The difference is that in the Partner State the respective roles and powers of the commercial market and the public economy are counterbalanced by the primacy of the common good as the framework within which public policy is formulated and enacted.

The institutions of civil society are thus central to the realization of this vision as is the development of public policies and practices that translate this vision into meaningful political participation from the level of local neighborhoods to the directing institutions of government itself.

How then, may such a model be made real? What are the policies and practices that are essential to its operation? Where are the examples that may serve as models?

Social Economy and the State

Before discussing how a Partner State would operate, we must first consider the economic, cultural, and structural differences that differentiate the state from the social economy. As outlined above, the state and the social economy are two very different types of economy. ¹⁵ The state is structured in terms of bounties and levies

and its principle source of income is taxation that is levied on behalf of the entire citizenry. Its services are generally free and administered through a highly centralized system of hierarchical control. In a representative democracy, the operation of state services depends on a ladder of accountability that reaches from the front line worker up through the departmental hierarchy to a Minister who is then answerable to a representative Parliament, or directly to a head of state.

This is a system that is characterized by a high degree of control over functions and behaviours and which has a built-in bias against uncertainty, innovation, and individual initiative. Power is imposed and flows from top to bottom and the legitimate exercise of this power rests internally with the designated managers of the civil bureaucracy and the Ministers they report to, not to external stakeholders, except as mandated periodically, and very indirectly, through the broader electoral process. ¹⁶

The internal economy of this system is based on the negotiation of tax or debt-financed budgets that are bargained over by a small group of Ministers and senior civil servants. The main forms of control are over expenditures rather than outcomes (or desires), and insofar as power is exercised through control over budgets it is a system that encourages expenditure up to the budget allocated.

The social economy operates very differently. As Robin Murray remarks, ¹⁷ whether it involves social ventures selling into markets, or grant based organizations, or informal associations of households, the social economy is impelled by a strong element of enthusiasm and a sense of vocation. It relies on the willing contribution of time, finance and ideas in pursuit of an idea or social mission. It is the quality of this idea and the capacity to communicate, inspire interest, mobilize resources, and realize the idea in practice that determines the relative magnetism of the venture. If the idea or mission grows stale and/or the hope of its realization ebbs, then the willing contributions of citizens will decline. It is this which acts as the discipline – similar in some ways to the discipline of the market – as against the disciplines of accountability in relation to budgets and political aims that characterize the state. The social economy is mission driven rather

than cost controlled on the basis of budgets, as is the case with the state.

The structures, labour contracts, aims, and culture of the two systems follow from the above. And it is these differences that make effective partnering between state and civil society structurally difficult. The diagram below highlights some of the differences that need to be addressed for a partnership to function.

<i>Features</i>	<i>State</i>	<i>Social Economy</i>
Size	Large scale	Distributed
Structure	Vertical hierarchy	Horizontal
Culture	Rule based/impersonal	Entrepreneurial/affective
Accountability	Mediated taxpayers	Unmediated, voluntary energy, civil stakeholders
Source of finance	Tax	Voluntary/dues/grants/market
Organizational stability	Permanence	Fluctuating/fluid
Relational stability	Fluid	Stable
Knowledge	Aggregated/government through statistics, controlled	Granulated, distributed, open
Atmosphere	Routine, predictable	Uncertain, exploratory
System	Stable	Chaotic
Dynamic	Cost drift	Social Capital accumulation and mission achievement
Labour	Structured roles/unions	Structured around capacities and social vocation of labour and volunteers, non unionized
Wage structure	Unequal	Egalitarian
External relations	Transactional	Generative

Given these differences, it is easy to conclude that a working partnership – a new social contract in effect – is impossible between the state economy on the one hand and the social economy on the other. But this would be to ignore the fundamental commonality of purpose that is shared between the two systems. Both are concerned, and their legitimacy is derived, from a commitment to social as opposed to private goals. In this very fundamental sense, they are extensions of the solidary principles that constitute the operations and aims of the broader civil society that sustains and validates both systems. In pursuit of these civil aims, the state offers stability and scale while the social economy generates creativity and social connection.

All living things and all social systems, as with all matter, are a delicate balance of order and chaos. Order alone leads to entropy. Creativity alone leads to chaos. A state model based on public-civil partnership offers the potential of achieving a vitality and efficacy that each sector on its own is unable to achieve. The art is to establish a division of labour that corresponds to the aims and dispositions of the two cultures.

The state has the capacity to be a synthesizer and facilitator, to set the rules and provide a basic flow of core funds that allows a distributed system of social enterprises to flourish. It has the capacity to organize large projects, and at national scales. In its normative role, it has the mechanisms to reinforce behaviours that reflect a broader societal consensus. It represents the general interest, however mediated its mechanisms. The social economy on the other hand is a source of innovation, of distributed production, and in particular of relational production – something essential to the provision of human services. It is a space of personal and productive democracy in contrast to the state's representative and deliberative democracy. In a very real sense, the two domains manifest the requirements of collective versus personal citizenship and each is the necessary complement to the other. A new social contract must be based on this fundamental framework.

How then, might such a partnership work? How can the interface between these two admittedly contrasting economies be made more permeable and productive? The following discussion offers some

directions.

1. Democratization and Co-construction of Public Goods and Services

In the section “Public Policy and the Social Economy”, we explored the kinds of legal and policy instruments that are necessary for strengthening the institutions of the social/solidarity economy so that it is *able* to play the role of partner as envisaged in the Partner State. Chief among these are

1. The development of a true social market that enlarges the scope of the social/solidarity economy and of social economy organizations throughout the economy;
2. The creation of civil and community-based institutions that mediate between government and individuals for the creation of social goods and services; and
3. The progressive democratization of public goods and services through the transfer of institutional control from state bureaucracies to democratically-governed civic bodies.

Earlier, we also highlighted the economic, social, and quality of life benefits that are made possible by the democratization and decentralization of public goods and human services. ¹⁸ With respect to social care, these include the reduction of service costs due to the elimination of bureaucracy and rent-seeking; the increase in service quality and service innovation due to the involvement of users in the design and delivery of services; the increase in self-esteem and personal empowerment for service users through the exercise of their control rights; and most importantly the creation and expansion of caring relationships among persons as the primary purpose and outcome of social care systems.

Neither the privatization of social care, which instrumentalizes people for the generation of profit, nor the de-personalization of care by the state, which submits individuals to the impersonal requirements of bureaucracy, are capable of humanizing care or of responding adequately to the real needs of individuals and their communities. The creation of civil bodies, operating at local and

regional levels, and providing a mechanism whereby individuals may directly determine the nature of the care they receive, is one indispensable condition for the operation of a Partner State model with respect to the provision of social care. The other is a mechanism through which government and civil interests can collaborate on the design and delivery of human services, at local, regional, and national levels.

The use of subsidiarity is therefore a key principle of inclusive planning is central to the reform of public services as a defining characteristic of the Partner State. To this end, specific provisions that recognize and reinforce the role of social economy organizations in the development and delivery of social care to their communities are of paramount importance.

These provisions would include:

- The recognition of social co-ops and multi-stakeholder structures as unique models for the provision of social care;
- The recognition and promotion of mutual interests for serving the common good by local public authorities and social care co-operatives, with particular emphasis on social inclusion and service to the most vulnerable;
- The implementation of tax and financing supports that support the operation of social co-ops and other social organizations as key partners in the provision of human services and the advancement of public policy;
- The creation of local and regional councils that enable the collaboration and co-construction of human services through the joint participation of civil and governmental bodies; ¹⁹
- The development of participatory budgeting and the allocation of resources – including free and open access to government data – for the provision of human services at local, regional, and national levels.

Among the best examples of this approach to the decentralization and democratization of human services is to be found in Italy. ²⁰ In the Italian model, social co-operatives work closely with local government authorities to identify service needs, to design the provision of services, and to negotiate the terms for the delivery of

services, including budgets and quality control measures. The co-design and delivery of social care services is supported through a system of subsidiarity that grants local authorities the power to identify service needs and to commission the provision of these services through accredited co-operative or other non-profit service groups.

In this way, the progressive democratization of human services entails a new governance matrix that maximizes citizen participation in the design and delivery of human services at those levels closest to the actual provision of care.

In addition to facilitating a partnership approach at the local level, the matrix must also allow for efficient planning and governance of human services at regional and national levels. To this end, we propose the adoption of viable systems models (VSM) that maximize local decision-making and autonomy. Viable System Models enable scaling to higher orders of service delivery through the adoption of co-operative governance structures that engage both civil society and government in jointly controlled institutions at the provincial, regional, and local levels of governance. [21](#)

The co-construction of public goods and services through an institutional framework that fosters public-civic partnerships is at the heart of the Partner State as envisioned here. To this end, the following are the kinds of policies that help to recast the role of the state from one of dominating control over the production of public goods and services, to that of promoting and enabling the civic production of goods and services as a form of protected commons.

Institutional Support

Recommendations:

1. That regional and local governments participate in a social procurement policy that promotes social economy organizations for the production of social and human services;
2. That the provision of these services be designed and developed in collaboration with social economy associations in the local jurisdiction;

3. That a review of existing procurement policies, *including trade agreements*, be undertaken to identify and remove existing barriers to social procurement by social economy associations; [22](#)
4. That an office for social procurement be established to provide advice and technical assistance to government and social economy associations in the design, development, and procurement of public services.
5. That a strategic review be undertaken by government to examine how co-construction of public goods and services might best be undertaken and in which areas.

Shared Services

Recommendations:

1. That the government, in collaboration with social economy organizations, identify specific areas in which services may be shared, and co-produced, by social economy organizations working in co-operation;
2. That the creation of shared service consortia be supported to provide strategic shared services on the basis of local and regional jurisdictions;
3. That shared service consortia and centres be funded from the contributions of member associations and investments from social economy funds;
4. That shared service consortia and centres be collectively owned and controlled by their user members;
5. That shared service centres include the possibility of representation on their board by an appropriate government designate;
6. That a majority of consortia and centre board directors be derived from user members and that non-member directors may not exceed 20% of a board's directors.
7. That the government, in partnership with the co-operative sector, establish a co-op development program to fund the development and support of new co-operative enterprises, including the provision of technical assistance and training;
8. That the government provide incentives for co-operation among social economy organizations for the production of social goods

and services;

9. That a dedicated observatory for the social economy be mandated to study, monitor, track employment, identify strategic needs and trends, and provide educational and research services for the social/solidarity economy..

Strategic Planning & Design – Regional and Neighborhood Councils

Recommendations:

1. That each municipality be required to establish a joint municipal/civil council for the purpose of determining priority needs for the provision of social services;
2. That municipal/civil councils promote the production of goods and services by social enterprises that meet social and environmental objectives and contribute to job creation, responsible consumption, personal and social well being, and new services not provided by either the public or private sector;
3. That the council be composed of an equal number of local government and civil society representatives;
4. That civil representatives be selected through a free and open democratic selection process by social economy organizations in that jurisdiction;
5. That the chairmanship of the councils be shared between a Chair and a Vice Chair to be drawn from government on the one hand and civil society on the other;
6. That the positions of Chair and Vice Chair be held for a term of two years;
7. That the position of Chair alternate between the government and the civil representative every two year term.

2. Guarantee of Minimum Economic Independence

Social Income

Among the most significant achievements of the Ecuadorian state for the advancement of social protection is the use of the *Bono de*

Desarrollo Humano (BDH) for the alleviation of poverty and the improvement of educational and health outcomes. The BDH has led to increased school retention rates, increased health care visits, and a reduction of people living below the poverty line from 49 percent in 2002 to 37 percent in 2010. Additionally, the ratio of income inequality in Ecuador has been declining steadily since 2003. ²³ Compared to other Conditional Cash Transfers (CCTs) in use by governments in the region, Ecuador's BDH has also achieved a higher level of coverage as a percentage of the total population (44.3 percent for 2010). ²⁴

In conjunction with other social programs such as the *Red de Protección Solidaria* (RPS) – the family insurance program, *Cobertura de Protección Familiar* (CPF), and the *Crédito de Desarrollo Humano* (CDH), Ecuador's social protection programs are rights and opportunity-based policies. They are founded on the theoretical underpinnings of *Buen Vivir* as a strategy that looks beyond the quantitative measurements of economic performance and establishes a new vision for economic inclusion, transparency and citizen participation.

These are essential theoretical and political foundations for the transition to a Partner State. Not only do such social income programs ensure a measure of social security and equity; they also establish the socio-economic basis for the emergence of an autonomous economic space for a true social market. They provide a social form of capital that can be used to finance the development of new forms of social enterprise and to enlarge the scope of the social/solidarity economy as an autonomous, civil complement (not a substitute) to the public sector.

But important as such programs are, if they remain under the exclusive control of state institutions they are not yet in a form where they could play a transformative role for the inception of a Partner State. For this, a new mechanism for the shared management of these systems by government and individual citizen-users is required.

How then, might the idea of social income be re-imagined for it to become a building block in such a transition? That is to say, how

might a state-supported social income be fully integrated into the social/solidarity economy and so become a collective social resource that can be used by civil institutions for the production of social value? By social value we mean the creation of goods and services whose value is determined by their social utility and social benefit, not their exchange value as commodities in the market. *A key area for implementing such a transition is in the use of social income to create a social market for the production and consumption of human services.*

One avenue to explore is the creation of a universal social income that can be used to fuel the expansion of the social economy through the creation of a social market for human and social services. In the case of Ecuador, one approach is to provide an addition to the BDH in the form of a social voucher or social currency that may be exchanged for services that would be offered by social economy organizations that have been established for this purpose. Such a system could begin with a targeted social currency that provides support for human services such as home care, elder care, childcare, or services to persons with disabilities. A social income should not be restricted to the poor. For purposes of cultivating new forms of social service, the provision of a social income should be designed to include also higher income strata and adjusted to income levels. This approach would also remove any stigma associated with the program.

A social income for human services opens up a number of opportunities for increasing the capacity of the social economy to create the institutions that can deliver human services as a common good and also to establish an initial framework for a partnership between government and social economy organizations for jointly designing and producing these services. A number of institutional resources would be required for this approach to succeed:

1. There need to be social economy organizations with the skill, capacity, and resources to provide such services;
2. There needs to be a clear constituency of potential service users that would be prepared to participate in the development of such a model with prospective service providers;
3. There needs to be a long-term education and training program to support both service providers and users in the design and

development of this system;

4. There needs to be a strong community of interest where this model might be piloted, including the involvement of local government authorities, social economy organizations, key community stakeholders, and prospective users.

3. Democratization of the Economy and Restructuring the Productive Matrix

Economic and Sector Development

The democratization of the broader commercial economy is of fundamental importance to the evolution of a Partner State. But if an economy is truly to serve the common good, its driving values, its rewards and punishments, must reinforce the values and aims of civil society as a whole. For this reason, the economy as a whole must be socialized and humanized. By this, we mean the support and expansion of those forms of enterprise and economic relations that utilize the market for the pursuit of social objectives. This includes all types of co-operatives, social enterprises, and private companies that aim at social utility – not merely the pursuit of profit. In sum, it means the expansion of enterprises in which capital is under social control.

Presently, markets are treated as if they are the preserve of private, for-profit, capitalist firms. One outcome is that the space that is available for other forms of enterprise is increasingly reduced as more of the market comes to be dominated or monopolized by large corporate interests. By contrast, the Partner State fosters an economy whose institutions support and reward plurality, co-operation, sharing, social benefit, and *open access* to the market.

As an enabler of civic forms of economic development, the Partner State has a crucial role to play in the formation of economic policy that supports the growth of enterprises that promote social value, environmental sustainability, equity, and economic wellbeing. Central to this is the use of participatory planning and localized co-operative systems to support the emergence and operation of micro, small and medium sized enterprises (MSMEs) in strategic sectors of

the economy.

The Partner State seeks to develop policies that align economic development with the expansion of economic opportunity for all kinds of enterprises. Priority is placed on those enterprises that contribute to local and regional development through the growth and diversification of productive capacity that is rooted to community. Economic policy is thus geared to the strengthening of local economies that can maximize economic opportunity for individuals and micro, small, and medium enterprises, whether privately or collectively owned.

As in most developing economies, MSMEs comprise a significant portion of Ecuador's GDP and account for a high percent of employment. In Ecuador, they are predominantly in the sectors of small-scale agriculture, forestry, fishing, construction, artisan/craft production, and services. ²⁵ These enterprises constitute the seedbed from which local economies are grown; they are the basis for a localized generation and circulation of wealth.

For this reason, Ecuador's policies for transforming the productive matrix, including the democratization of land ownership and use, place a high priority on developing this vital component of the national economy. As stated in the policy documents produced by the Inter Institutional Committee for Transforming the Productive Matrix (2013),

The micro, small and medium enterprises have a strategic importance in the growth of the economy, for the transformation of the local production system, and the best competitive position for the country. In addition, these business segments contribute to reducing poverty and inequality...”

The aim is that MSMEs have priority treatment at all stages, from initiatives to improve productivity, quality, and marketing to those that promote strategic and rewarding participation in domestic and international markets.”²⁶

In the promotion of these aims, the government has initiated an analysis of the productive capacities of each of Ecuador's 23 regions,

itemizing and analyzing the operations of MSMEs as well as private and public actors in each region, identifying the relative importance of specific economic sectors, and identifying the relative strengths and challenges of the productive systems in each territory.

Throughout, the documents stress the central importance of collaboration among economic actors, the sharing of research and innovation, and the creation of institutions that facilitate economic and social solidarity in the region.

With respect to MSMEs, a number of general policies are proposed to advance this vision:

1. Facilitating and managing the interaction of the actors in different productive chains;
2. Supporting the participation of rural farmers in public procurement systems;
3. Establishing a program of continuous innovation tailored to the particularities of the region;
4. Creating preferential credit programs of public banks and strengthen microfinance institutions and co-operatives; and
5. Promoting entrepreneurship.

This focus on economic democratization through the support of local small and medium enterprises, as well as the promotion of representative Regional Councils in the development process, are key aspects of a Partner State approach. As enabling agent, the Partner State develops policies and resources that provide a supportive framework for this kind of development. A number of elements are essential to this. They include:

- The expansion of social/solidarity economy values throughout the economy through the promotion of co-operative and commons-based models of enterprise;
- The development of co-operative networks that encourage collaboration and the promotion of collective interests and a regional perspective among individual enterprises;
- The creation of institutions that enable joint planning between local enterprises and government;
- The identification of strategic sectors and the development of regional policies that understand and address sectoral strengths

- and weaknesses for the long-term;
- The development of localized service centres – controlled by the enterprises that use them – that are capable of providing specialized, shared services to enterprises operating in specific sectors;
 - The creation of localized institutions that support the capitalization of enterprise;
 - The creation of entrepreneurial networks that are capable of accessing and utilizing knowledge to advance enterprise development, to promote innovation, and to transform production through the sharing of information and technology (ICTs);
 - The provision of incentives for co-operation among sector enterprises for the promotion of shared production systems, the sharing of knowledge, research and technology, and the sharing of enterprise supports such as marketing, training, financing, accounting, bookkeeping, and ICT use;
 - The identification of research & development knowledge from the academy for practical adaptation and application to the advancement of individual enterprises and material production through the involvement of academic institutions;
 - The linkage of open knowledge systems to new forms of production that can adapt technology to the concrete needs of local enterprises, including the adoption of open source technology;

Most of these practices are now accepted as standard policy for strengthening the performance and resilience of small firm economies. However, the vital question remains... *How are these policies to be realized in practice so that the institutions that are vital to their success reflect the principles of a Partner State?*

Sector Development

Perhaps the most effective means of implementing a Partner State approach to economic development is to focus on sector development and the creation of partnering institutions at regional and local levels. This allows for a concentrated focus on strategic areas of economic activity and on the mobilization of partnerships and resources at those levels of governance that are most

appropriate for the implementation of policy. Focusing on sectors allows policy and practice to be tailored to the unique institutional and organizational characteristics of a defined area of economic activity and its actors. This approach also has the advantage of activating the governance structures and giving effect to the democratization and decentralization of decision-making and economic planning.

The first step in sector development using a Partner State approach is the establishment of a partnering agency that has the capacity to undertake a detailed sector analysis of the economy at both national and regional levels. The purpose of this development agency is to analyze the operations of key economic sectors; to forecast the role these sectors should play in the evolution of a country's economic future; to diagnose the strengths and weaknesses of each sector in the context of both a regional and a global marketplace; to diagnose the evolving trade, technological, and regulatory dynamics currently underway; and to identify those sectors that are most strategic for the transition to an economy that promotes resilience, sustainability, equity, and the social aims of *Buen Vivir*.

Needless to say, this development agency would be designed as a vehicle for the inclusion of both government and non-government stakeholders in the formation of strategic planning that relates regional development to global realities and provides a counterweight of regional and small-scale entrepreneurial interests to those interests that form the current power status quo. Included in the governance of this agency should be micro, small and medium sized business interests; organized labour; the co-operative and social enterprise sector; the credit union sector; and key academic institutions.

As with the co-construction of social goods and services, the second element in the development of a sector-based economic policy is the creation of specialized service centres that can promote the development of strategic sectors by assisting micro, small, and medium firms to succeed through the provision of shared services; the development of co-operative production networks; the promotion of shared use of technology, research, and equipment; and the utilization of open knowledge systems for collective

economic benefit in the region.

These centres would form the organizational infrastructure that facilitates the utilization of open knowledge and open source technology for greatest effect in the sectors they are intended to serve. The overall direction and control of these centres must rest primarily in the hands of those enterprises that use their services along with representation of other regional and sectoral stakeholders such as government, universities, and local financial institutions such as credit unions. The sectoral centres should also be closely linked to the strategic planning role played by the national economic development agency and the corresponding ministry in government. All these attributes of a sector strategy are well illustrated in the case of Emilia Romagna.

Case Study – Emilia Romagna

Emilia Romagna is a region of four million people in the north of Italy. It is one of the best examples of how a government can employ co-operative and commons-based principles as part of a Partner State approach for both economic and social development.

The co-operative economic system in Emilia Romagna has achieved an internal coherence and integration that is unique. Over 8,000 co-operatives account for almost 1/3 of the region's GDP which is the highest per capita in Italy. ²⁷ This is Italy's largest exporting region, accounting for thirteen percent of the country's total. ²⁸ But this wasn't always the case. In the 1950's this was one of Italy's poorest regions. Today, Emilia Romagna is among Europe's top ten performing economic regions. How was this accomplished?

Over a period of 30 years commencing with the formation of regional governments in 1971, Emilia Romagna's regional government blended the strengths of the co-op system with the power of government to create a co-operative economic model that extends beyond co-operatives to the economy as a whole.

The most distinctive feature of Emilia Romagna's industrial paradigm is the emergence of what has since become a key strategy for the successful development of a small firm economy – the

clustering of small firms in industrial districts. Industrial clusters were perfected in this region and an extensive literature has been devoted to what has since come to be known as the Emilian Model. And although the model has undergone significant changes since its discovery in the early '70s, the pattern of industrial development that it represents is a unique instance of successful co-operation in a capitalist framework.

ERVET and the Real Service Centres

One of the first tasks of the regional government was to create a mechanism through which the regional economy as a whole could be understood, its strengths and weaknesses diagnosed, and a program of development established. It created ERVET, the economic planning and development agency that had a lasting impact on the development of the region's strategic sectors.

ERVET was a public/private agency that was funded and directed by a partnership between the regional government and its key allies among business, labour, and academic institutions. It undertook a careful analysis of the regions' key economic sectors, diagnosed the particular strengths and weaknesses of the firms comprising these sectors, and established a series of what were called "real service centres" to provide strategic assistance to the firms and the industrial districts of which they were a part.

While the particular services provided by each service centre were tailored to the needs of the sector in which they operated – ceramics, agricultural machinery, footwear, clothing, etc. – the overall strategy was the same: to increase the productive capacity and competence of individual firms and to ensure that the linkages between firms in the industrial districts remained strong and were further mobilized to strengthen the system as a whole.

Some of these service centres (ASTER, Democentre) were engaged exclusively in research, training, and technology transfer. The service centres were structured on a co-operative model – they were funded through a mix of ERVET funds and member fees and directed by elected representatives of the firms that used their services. This ensured that the centres' services would correspond to the real

needs of the firms.

The co-operative nature of these networks were a key reason why SMEs were able to access the research, training, and knowledge that were central to creating the innovations that were indispensable to the success and survival of these enterprises. The programs and services of ERVET and the centres reinforced the co-operative bonds between firms and within the industrial districts. For example, research funds for product development or the development of new technology were granted only to groups of firms that had agreed to work together.

On the question of capital investment, firms would organize credit co-operatives. These groups, or consorzi, would then take responsibility for the loans taken out by their members, operating much as a loan circle for small firms. Adapted to the credit needs of Emilian firms, consortio loans are provided at very low rates by co-operative banks, many of which were first established as a source of credit for farmers. So successful are these consortia, and the default rates so low, that the large national banks have been trying to break into this market for years, but with little success. The smaller regional banks provide for almost all of the region's capital needs.

These and similar policies are already highlighted in the ideas and proposals promoted in Ecuador's National Plan and numerous policy documents. There is a strong affinity between Ecuador's social and economic aims and what Emilia Romagna has been able to achieve, and both cases rely on elements that are central to the idea of a Partner State.

Undoubtedly, countries and regions differ. The economic, social, and political antecedents that gave rise to the Emilian Model are in some ways unique. However, the lessons of co-operation as an instrument of regional development and of small firm empowerment are even more relevant in the case of countries like Ecuador where economic inequities and the domination of established power structures are even more adverse to the interests and prospects of small and medium firms.

In these contexts, co-operation among MSMEs at a regional level is

even more of an imperative if they are to develop and contribute significantly to a new, more pluralistic, productive matrix. And, just as the new digital technology of the 1970s and 80s gave impetus to the specializations and innovations of Emilia Romagna's small firms, the open source technology and commons-based knowledge systems of today provide a means for small firms to similarly adapt emergent technology to the particular conditions of MSMEs in Ecuador and elsewhere.

Today's Internet makes possible the adaptation of farm machinery to local needs through open source designs that can be shared at minimal cost. Open source technology provides a means for small farmers to access information online that greatly enhances their capacity to improve production by adjusting their practices to the particularities of crops, soils, and climates. New avenues for global marketing of local products are available, as is the integration of products into fair trade distribution networks that are meant to support the kinds of locally controlled production models described above.

Most important of all are the examples of successful development strategies that can benefit both private and collective forms of ownership through the use of co-operative systems. Just as these systems have proven successful in regions like Emilia Romagna and the industrial districts of Germany, France and the US, so too have these models been adapted to serve the needs of regional economies in countries like Sri Lanka, Mexico, and Costa Rica. Here, the challenges of small scale, isolation, absence of secondary processing, inaccessible markets, and the control of product distribution by intermediaries are identical to the problems faced by small producers and entrepreneurs in Ecuador.

4. Securing the Commons

The recognition, protection, and expansion of the society's commons are central features of The Partner State. What do we mean by the commons?

The commons refers to any resource whose use is freely accessible to a community of users and which in turn, is managed by them in

common. A commons is not owned in the conventional sense. Rather, its value lies in the fact of its free and open access. It is the antithesis to enclosure of a resource for private benefit. Instead, a commons is based on the social ethics of interdependence and co-operation and the value of a commons is generated through the practice of sharing. Most importantly, a commons is the product of those social relationships that enable this use.

Traditionally commons have referred to such natural goods as water, fisheries, forests, pastures, etc. However, the concept has been broadened to include also non-material common resources such as knowledge, culture, free software, and the Internet. These same qualities of open access, sharing, and collective management by the users are common to all of them. The commons then, are a manifestation of those same values of reciprocity, mutuality, and social benefit that underlie the operations of civil society and the social/solidarity economy.

Historically, the commons may be seen as the material and economic foundations that helped sustain collective forms of living. They were, and remain, both the product and the indispensable support of those social relations that bind people to each other and to their environment. The idea of the commons is thus central to the aims of *Buen Vivir* and is also intimately linked to the protections afforded to nature by the Constitution. These protections are deeply linked to the protection and promotion of the commons and to the notion of subsidiarity that grants local territories and indigenous peoples the constitutional right to participate in the decisions affecting the development of their territory and the enjoyment of their traditional ways of living. Protection of the material commons, especially natural resources, is intimately connected to the establishment of a plurinational polity.

The notion of collective rights is inseparable from the idea of the commons and of the common good. Collective rights are those individual rights that belong to the individual as a member of a community. The individual has the enjoyment of these rights as protected by law – but only as a member of the community. It is the community as a whole that embodies these rights and exercises them through the agency of each individual member. The collective

enjoyment of these rights is linked to the notion of use, and in particular to the concept of civic use as opposed to merely free use or public use. It is the concept of “civic use” that is most amenable to the regulation of common goods as “things instrumental to the realization of the development of the person”, a central concept of *Buen Vivir*. More specifically, common goods refer to those things that may be used by anyone belonging to the community that has use rights over a commons.

Enclosure and commodification of the commons undermine the material basis for collective forms of living and of the social relationships that in turn, reproduce those forms. They are an irreplaceable resource for re-generating a society’s store of social capital, for validating and manifesting the idea of social solidarity, and for anchoring both the values and the operations of civil society. As such, the protection and expansion of the commons must be a basic aim both of civil society and of any government that wishes to promote the social aims envisaged in the idea of *Buen Vivir*.

Common versus Public

The commons however, should be distinguished from public goods or public property. ²⁹ While both contain the ideas of non-exclusion and social value, public goods are not controlled or managed by their users – public goods and public institutions are controlled by the state. For this reason they may also be privatized by the state, commodified, and sold for profit. Today, the enclosure and commodification of public goods by governments and capital constitute the greatest encroachments against social wealth in the world.

The evolution of the relationship between states and capital, between public and private property, has led to a condition in which privatization and statism now endanger the very survival of the commons as an indispensable resource for the satisfaction of basic human needs. In this we include such essential life supports as access to water, the sharing of seeds for agricultural production, and clean air. But it is now clear that conventional models of democratic governance, conceived as government acting *on behalf* of citizens, are no longer capable of protecting and preserving the public interest

and what remains of the commons along with it. What is required is a wholly new relationship in which formal political authority legitimizes its operations in a given territory through the direct involvement of local communities in governance.

The protection of the commons requires a framework which formalizes the *civil* and *communitarian* attributes of commons and which tie them inalienably to their users and to the territory as a shared collective resource. This means the enactment of legal protections for their preservation and the pursuit of public policies for their expansion. Above all, it means the recognition by the state of a distinct and inalienable space of *commons wealth* that can neither be appropriated nor purchased. It is a uniquely civil space that is protected by legislation which recognizes this distinctive civil – as opposed to political – quality of the commons. One of its primary features is the recognition of users’ control rights over its management.

A current example of this kind of legislation – focused on urban commons – is to be found in the city of Bologna, which has become the first Commons City in Europe.

Legislation for the Commons

The salient characteristic of this new relationship between the City and its citizens is collaborative governance on the principle of horizontal subsidiarity. Horizontal subsidiarity requires all levels of governments to find ways to share their powers and co-operate with single or associated citizens willing to exercise their constitutional right to carry out activities of general interest. And, as opposed to conventional subsidiarity, which is vertical and hierarchical, horizontal subsidiarity stresses choices that are made collaboratively by social actors and government at the level at which an action is to be carried out. The management of commons is central in this respect. In this model, public administrations shall no longer govern only *on behalf* of citizens, but also *together with* citizens, acknowledging that citizens represent a “powerful and reliable ally capable of unleashing a great source of energy, talents, resources, capabilities and ideas that may be mobilized to improve the quality of life of a community or help contribute to its survival.” [30](#)

The Cities as Commons project started in June 2012 in Bologna thanks to the support of Fondazione del Monte di Bologna and Ravenna and the technical support provided by the Laboratory for Subsidiarity – Labsus – in Rome. ³¹ Over the last ten years, Labsus has collected and analyzed cases of collaborative governance with the aim of demonstrating how a new model of government could be used to realize these aims. The project applied an empirical approach and, after a training program with City officials and local civic leaders, facilitated the birth of partnerships between the City and local residents with regards to the management of three urban commons – a public square, a section of the city’s famous “portici”, and a public building.

The draft of the regulation that was adopted was then subjected to public consultation and reviewed by some of the most prominent Italian scholars of administrative law. A Spanish translation of the regulation is included in Appendix 3.

Key Features of the Regulation

The Regulation on Co-operation Between Citizens and Government on the Care and Regeneration of Urban Commons is a framework for the joint care and management of urban commons. As stated in the Document,

“This Regulation, in harmony with the provisions of the Constitution and the Statute of the municipal governing the forms of co-operation between citizens and the administration for the treatment and regeneration of urban public goods, in particular giving effect to art. 118, 114, and paragraphs 2, 6 and 117 of the Constitution.

The underlying principles of the regulation include the following:

1. Recognition of commons as essential to the generation of individual and collective well-being;
2. Mutual Trust between the municipality and the civil groups engaged in commons work;
3. Autonomy of citizens to engage and organize in the pursuit of commons aims;
4. Flexibility and informality of arrangements and agreements for

- the co-management of commons;
5. Identification and allocation of public assets as resources for collective life and enjoyment;
 6. Openness, Accountability, and Transparency in the co-management of commons;
 7. Promotion of social economy organizations as a priority for the production and preservation of commons goods and services.

The regulation refers to the care and stewardship of a broad range of public assets and services that fall under its jurisdiction. These are described as including,

Assets of urban municipalities and tangible, intangible and digital property that the citizens and the Administration recognize as instrumental for realizing individual and collective wellbeing and ... to share with the administration the responsibility of their care or regeneration in order to improve the collective enjoyment.” [32](#)

The regulation also promotes the creation of a range of social economy organizations for implementing this work.

The municipality pursues the objectives referred to in this article encouraging the creation of co-operatives, social enterprises, start-ups in social vocation and the development of economic, cultural and social activities and projects. [33](#)

A key provision of this regulation is the requirement for local authorities to designate municipally-owned assets as resources to be used for the realization of these aims.

Spaces and buildings referred to in this regulation constitute a resource functional to the achievement of the purposes referred to in this article. The City reserves a portion of these assets to projects that foster social innovation or the production of collaborative services. [34](#)

All citizens, whether acting as individuals or as members of associations, have the right to participate and contribute to this work of caring for the commons. [35](#) The regulation describes the procedures and standards required for the implementation of a joint

citizen/government initiative. These are intended to be enabling as opposed to prescriptive. Importantly, the regulation promotes informality in the arrangements between participating stakeholders and requires formal, legal agreements only when required by law.

“... the Administration requires that the relationship with citizens is subject to specific formalities only when that provided by the law. In the remaining cases ensures flexibility and simplicity in the report, as long as it is possible to ensure compliance with public ethics, as well as declined the code of conduct for civil servants and the principles of fairness, good performance, transparency and certainty.” [36](#)

One additional point may be noted with respect to the regulation. The notion of the commons is extended to the management of immaterial common goods and the promotion of digital innovation as a component of commons co-management.

This is an important feature that links the co-management of the commons to the concepts of open technology, the promotion of open government, and to the broader aims of a social knowledge economy.

The Municipality encourages innovation through digital interventions participation in the conception, design and implementation of services and applications for the civic network by the community, with particular attention to the use of open data and infrastructures, in perspective of digital commons. [37](#)

In aid of this objective, the City of Bologna has also provided material support for the creation of Iperbole – a Civic Network that promotes telemedia as an “instrument of electronic democracy and socio-economic development of the territory” [38](#) and the mobilization and engagement of citizens for the care, restoration, and expansion of the commons.

To this end, the City agrees with the parties that participate in civic life and the evolution of the network and provide the collaborative environment and civic skills for the co-design and realization of innovative services, data, spaces, infrastructure and digital platforms, such as the medium of the Civic

Finally, the implementation of these collaborative projects entails the enactment of a co-operative covenant or pact between government and citizens. The co-operative pact describes the work to be done, the procedures to be followed, the monitoring and evaluation of the results, and the resources, guarantees, and responsibilities involved. And it is interesting to note that both the idea of the co-operative pact and its form have been strongly influenced by the civic agreements signed by local authorities with social co-ops for the provision of health, education, and social services commissioned by the municipalities.

The regulation adopted by Bologna provides a concrete and comprehensive framework for implementing a project for the co-management of public and common goods by a municipality and its citizens. Its aims and principles reflect many of the elements that are characteristic of how a Partner State might approach the protection and co-management of the commons in an urban context. But whereas the Bologna initiative has broken new ground with respect to the regeneration and care of urban commons, the principles involved may be adapted to the requirements of other forms of commons and at larger scales.

Combined with the idea of horizontal subsidiarity and of the constitutional rights of nature and of indigenous communities, a regulatory framework could be developed for the identification of such commons as waterways, forests, and natural resources for joint management with the peoples of the territories where these commons exist. A Partner State approach through a form of co-operative pact with the communities of these territories would give concrete effect to the decentralization of decision-making mandated by the Constitution and the National Plan. This approach would also secure the material basis for the expression of those social values of reciprocity, mutuality and the common good that are the basis for collective life in these territories.

But while the Bologna initiative has developed the regulatory framework for the co-management of urban commons, these municipal assets are still owned by the state and as such are public...

not entirely common in the sense we have described. For this to be the case, the management of the common resource needs to be paired with legal protections that secure its use as a commons in perpetuity. Such a commons, while legally protected and constituted for this use, may not be appropriated by the state as government or public property, nor be sold. For this to have effect, a form of collective and civil ownership must be devised.

Examples of these forms of commons ownership and governance, as well as the rules for their operation, have been well documented by Elinor Ostrom. ⁴⁰ Successful examples of their use range from the co-operative management of Japan's fishery – the world's largest – to the co-operative management of waterways and irrigation systems by the indigenous farmers of Bali. ⁴¹

In its constitution and national aims, Ecuador has already travelled a great distance in the direction of empowering its citizens to take an active role in the development of the territories in which they live. It has enshrined the principles of decentralization and local decision-making; it has mandated all levels of government to promote the development of goods and services through procurement policies that give priority to groups in the social/solidarity economy; and it has advocated the pursuit of social knowledge and the commons as a foundation for the transformation of the country's productive matrix. Clearly, all these measures have direct relevance as models for the advancement of citizen engagement and the promotion of the social economy far beyond Ecuador's borders.

However, the development of a true Partner State would require the formulation of a legislative and regulatory national framework that would entrench the commons, in all their forms, as a true national patrimony beyond the reach of those interests that would seek to enclose them for private or political gain.

To this end, we propose the following policy recommendations:

1. That a comprehensive mapping of existing natural resource commons be carried out;
2. That comprehensive legislation be introduced to secure and protect the commons as a national patrimony and tied to the

territories where commons are utilized;

3. That specific policy frameworks be established for the co-management of urban commons by local municipalities and the citizenry;
4. That social economy organizations be recognized as the most appropriate form for citizen management of commons and that the Organic Law for the Popular and Solidarity Economy (LOEPS) be revised to allow for the creation of both community service co-operatives (social/solidarity co-ops) and multi-stakeholder co-operatives as social instruments for the management of commons. [42](#)

The inclusion of natural resources as national commons to be gradually co-managed by the state and local communities constitutes an entirely new approach to resource development and would powerfully transform the country's productive matrix in the direction of *Buen Vivir*. The commonification of resources, like the democratization of public services and the broader economy, are powerful catalysts for the evolution of a civic culture that has the collective values, the social capital, and the enabling institutions that would allow civil society to play the role envisaged for it by the framers of the country's Constitution and the Citizen's Revolution that was its source and inspiration.

Cultural Factors

It is important to note that a transition to this type of development is contingent on existing patterns of production and the cultural attitudes that drive economic behaviour. The most important of these is the presence or absence of high levels of social capital and a predisposition among people to work together to realize mutual aims. Where these social values and attitudes are strong, and where co-operative institutions already exist, the collaborative approach to economic development has a far higher chance of changing the productive matrix through the use of social knowledge as a resource for economic and social development. Where social capital is weak, a key strategy for promoting such a development model is the creation of production systems that foster habits of economic collaboration and that are oriented toward common benefit.

Unlike conventional capitalist models, which serve to undermine and deplete social capital, co-operative and peer-to-peer models depend upon social capital as a necessary condition of their operations. Co-operation reinforces and cultivates further co-operation. Co-operative systems replenish social capital and the attitudes and skills that promote sharing. A successful social knowledge economy is thus very much a co-operative economy.

This point needs to be emphasized as it is central to creating the social and cultural conditions that can sustain an economic model based on sharing and commons-based values that are the foundation of a social knowledge economy. These questions of cultural attitudes and the means of transforming them are insufficiently treated in proposals for economic development, yet they are central to the process of social and economic transformation.

It is for this reason that the adoption and promotion of particular modes of production, of ownership, of relationships among economic agents, and of institutional links between government and the stakeholders of both the private and social economies are so important.

The other issue that needs to be highlighted is the question of how popular expectations and perceptions of the state help or hinder citizen participation. This issue is well articulated in Ecuador's National Plan and is of tremendous relevance to the implementation of realistic policies aimed at transition to a Partner State model.

Enormous progress has been made in citizen participation. However, the challenge lies in changing the attitudes of citizens, which are still persistently passive. This culture of a citizenry passively dependent on State guardianship must be limited.

This qualitative leap forward, from citizens wishing for rights to citizens exercising their rights, is a break away from the power of the market, as well as the domination and accumulation incrustated into social structures. Constructing an active, committed, and thoughtful citizenry demands a more profound institutional reform of the State, so citizen participation can influence public governance. It also requires creating the conditions and capacities necessary to promote, sustain and assure citizen-led processes to

promote Good Living, and to institutionalize a constructive dialogue that generates egalitarian, solidary, free, dignified, and responsible actions, in harmony with Nature and respectful of the world-views that comprise our pluri-national State. ⁴³

The kinds of organizational forms that are cultivated by governments are important in determining how citizens come to acquire the skills and attitudes that enable them to play the roles demanded of them by the Partner State. This means a very particular outlook on the part of political leaders and decision makers in government. As in the case of Emilia Romagna, the conscious choice of the regional government to facilitate the emergence of co-operative systems, whether in the commercial or the social economy, added real impetus to the expansion of these values and to the skills, knowledge, and capacities of the citizenry to exercise them. The social co-operatives in Italy, which transformed the social welfare system, were initiated from within the social economy. But their growth and success would not have been possible without the role played by the state. The same is true of the solidarity co-ops and a great number of social enterprises in Quebec.

The form of an organization will determine both its manner of operation and the behavioural habits, attitudes, and expectations of those who work in it. Just as private forms of capitalist enterprise will reinforce the habits and values of self-interest and capital accumulation for private ends, so do co-operative and peer-to-peer forms of enterprise promote collective values and the ability to view economics as a means to advance individual interests through co-operation with others – whether they are individuals or other enterprises. The conscious promotion of all forms of co-operation among citizens and businesses – whether they are privately or co-operatively owned – is thus central to the operations of a Partner State.

One means of promoting this type of co-operation among groups is by ensuring that funds for development are available only to groups of enterprises that are working together, as opposed to individual firms. This is true also for the promotion of co-operation within the social/solidarity economy and among social economy organizations.

Also indispensable for the transformation of cultural attitudes in this direction, both inside government and in the broader social/solidarity economy, is the development of the human and organizational capacities among citizens that are essential for the development and operation of these types of organizations.

Institutional Obstacles

Chief among the potential obstacles to the successful implementation of these policies are the existing bureaucratic structures of the state.

The transformation of these structures into partnering and enabling institutions with meaningful inclusion of civil groups is an essential undertaking for transition to a Partner State model. This entails a comprehensive training and human development strategy that provides decision makers and civil service workers with the concepts, skills, experiences, and attitudes that are fundamental for implementing an entirely new conception of inclusive governance and socio-economic development.

On a practical level, as the social economy has expanded over the past thirty years and the limitations of state structures operating in isolation have become evident, there have been a range of experiments to create a more harmonious interface between state and social economy. They include:

1. In-out teams, working in the state and comprising those from the social/solidarity economy and the state;
2. Placements across the boundaries, of civil economy activists within the state, and state officials in the social economy;
3. Social innovation labs, either within the state, or in collaboration with people from both economies;
4. Common formation (for example through social innovation courses/degrees);
5. Generative rather than transactional contracts between the state and social economy organizations for civil economic ventures undertaking public services;
6. Distributed procurement practices linked to civil consortia, and the development of a procurement culture centered around

social innovation and the development of quality services by the civil ventures (Cleveland's Evergreen program is an outstanding example); ⁴⁴

7. The development of service metrics for the public/civil ventures, that can also be used as data for public accountability;
8. Open books for civil ventures undertaking public services;
9. The joint mobilization of knowledge from within the state and the civil ventures around particular projects;
10. Actions to co-operatize the state itself, with a shift to more lateral, team-based organization, and the involvement of front line workers (along with civil consumers) in the co-design and co-production of public services (the case of IT innovation in Newcastle (UK) is a striking case in point which developed as an alternative to privatization).
11. Actions to democratize the wider economy through the development and promotion of collective and co-operative ownership models of production.

These actions reflect particular ways in which the two cultures might find common cause by combining the unique strengths of each in re-framing the production of public goods in a way that recognizes and reinforces the central role of citizens and their communities as the primary actors in making real the aims and aspirations of *Buen Vivir*.

The second issue that critically needs to be addressed for the transition process described above is the formation of those values, attitudes, and skills that can translate ideals into effective and transformative practice in the real world.

The Co-operative University

One of our primary recommendations for transitioning to a Partner State is the creation of a Co-operative University to serve as the nation's primary research, education, and training facility for generating the attitudes, knowledge, and professional skills needed for implementing the policies and realizing the aims of a Partner State.

As a vital research and training institution, the university would

serve as the nation's premier training ground for advancing the capacities of the citizenry – whether in government, the social/solidarity economy, or the private sector – to understand the principles and practices of open government; of social entrepreneurship; of distributed and co-operative economic and social development; of the protection, expansion, and management of the commons; and of de-centralized co-operative democracy as a template for the co-creation and co-management of government policy.

The organizational and operational structure of the university would embody the principles of co-operative governance outlined in this paper and would serve as a model for the transmission of the co-operative and commons concepts and skills articulate above.

There has recently emerged a body of research associated with the relation of co-operative values and structures to the many critical challenges facing the role and functioning of contemporary universities in the context of advanced neo-liberalism. Ranging from the rise of over 700 co-operative schools in the UK, to studies on the performance of existing co-operative universities such as the Mondragon University in Spain, ⁴⁵ a range of commentators have explored the potential of the co-operative model to radically reform pedagogical practice, both at primary school levels and in higher education. ⁴⁶

A constant theme throughout these studies is how to construct an organizational model and learning culture that re-orient the university from the production of skills and knowledge for private – that is to say corporate – ends, to one which regards the university as a form of social commons in which knowledge is produced primarily for the advancement of social aims.

Just as the modern university is the primary matrix within which the values, skills, and attitudes that are essential for the operation of contemporary capitalism are inculcated and replicated, so too, does an economy based on the ideas and principles of the social/solidarity economy and the Partner State require an analogous academy capable of developing the attitudes and skills that are essential for generating a culture of co-operation and the commons that both

reflects and advances the social and economic principles that sustain such an economy.

Concluding Remarks

The idea and the practice of the Partner State is both challenging and, in our opinion, utterly necessary. For many, the current impasse in political governance is threatening the material basis of human civilization. It is equally clear that the forms of representative democracy practiced today are manifestly incapable of defending the broad public interest with which governments have been entrusted.

The reasons for this are also clear: the capture of national governments by capital interests; the continuing protection of these interests in the formulation of economic and social policy; the imposition of policies that weaken existing labour and social protections; the gradual criminalization of dissent; and the growing disaffection and distrust of government and the prevailing economic paradigm that is a direct consequence of this impasse. And whereas the achievements of the Welfare State model in the post war era contributed to the amelioration of social and economic inequities, the dismantling of this model under the aegis of neo-liberal policies has now returned vast numbers of the world's population to the precariousness of previous eras.

Unless the economies of nations are re-oriented toward the pursuit of the common good and toward a more equitable, humane, and sustainable form of economics, the forward movement of our present condition will only deepen the current crisis. This carries with it the certain prospect of accelerating social and economic upheaval as populations become more alienated from their governments and from the dysfunctional capital-dominated economies they sustain. For this to change, there needs to be a fundamental shift in how governments operate and how they relate to their citizenry.

The fundamental premise of democracy is that governments are accountable to their citizens and that government policies serve and protect the common interest. An irreplaceable aspect of this

common interest are the commons themselves that underlie the operations, attitudes, and skills that make possible the collective forms of living and acting that define the social and solidary character of a healthy civil society. It follows that unless the collective values of civil society and the common good can determine how economies operate, the present model of political economy will do no more than tinker with a system that is in dire need of radical reform. The Partner State is one way of ushering in this reform.

In the analysis advanced in this paper, the proposals for implementing a Partner State approach in Ecuador are an extension of the precepts and aims of the national constitution and the National Plan for Good Living. In these documents inhere those principles of respect for nature, of the opportunity for people to pursue their individual and collective well being, of the promotion of social and economic activities that promote the public welfare, and of the constitutional right of communities, whether territorial or cultural, to participate meaningfully in the affairs of state that affect them.

But beyond the specific context of Ecuador, these are also the ethical foundations for a new form of governance that places the civil power in a relationship of equality with government for the exercise of economic and social policies that will operate at national, regional, and local levels. In the Partner State, government becomes a partner and enabler of civic solutions to collective problems. And while the operations of the capitalist market continue, as do those of the public sector, these are counterbalanced by the collective and civic aims of the state, co-constructed with the institutions of civil society. We propose that the realization of the concept of *Buen Vivir* is not achievable without a systemic shift of the state in this direction.

The concept of the Partner State is an opportunity to salvage what is good and necessary in the apparatus of government while opening it to those civic values that alone can restore legitimacy to it. In its aspirations toward *Buen Vivir*, Ecuador has opened a door to pioneer such a model. If it does so it will offer an example of how government can indeed change course toward a more humane and sustainable future through the engagement and empowerment of its

citizenry in the affairs of state.

But regardless of whether Ecuador pursues such a path, an admittedly difficult one even in the best of circumstances, the principles and aims envisaged in its constitution and embodied in its National Plan offered a unique opportunity to reflect on how such ideals might be made real. The FLOK project was a vital catalyst in this task. The ideas that were generated in Ecuador might now find receptive soil for their fruition in places far beyond the borders of this small, complex, and rapidly evolving country.

1)

I say, “proclaimed” because of the many contradictions, both in policy and practice that the Correa government has exhibited in recent years. This is not to belittle the worthy aims of either the National Plan or the concept of *Buen Vivir* as presented in official rhetoric, or indeed, in the country’s institutions. It is important however, to note the discrepancy between rhetoric and reality. [↵](#)

2)

For an introduction this concept, see Restakis, “Social and Economic Implications of a Social Knowledge Economy”, 2014 [↵](#)

3)

[↵](#)

4)

[↵](#)

5)

Kennedy and Lietaer, 2004 [↵](#)

6)

Mayumi Hayashi, Japan's Fureai Kippu Time Banking in Elderly Care: Origins, Development, Challenges and Impact, International Journal of Community Currency Research, V. 16, 2012 [↵](#)

7)

In the case of schemes such as social impact bonds, which are now all the rage, there is now a distressing body of evidence to show how easily private capital can exploit social investment models to generate profits at the expense of the services they are meant to support (see Margie Mendell, 2012). [↵](#)

8)

Indivisible reserves have a long history in co-operatives and remain a key means by which co-ops capitalize their operations. The reserve is accumulated over time from the co-op's surpluses and may not be distributed to members – it is a collective asset for use as a social benefit and is therefore not taxed.

[↵](#)

9)

Mayumi Hayashi, Japan's Fureai Kippu Time Banking in Elderly Care: Origins, Development, Challenges and Impact, International Journal of Community Currency Research, V. 16, 2012 [↵](#)

10)

Margie Mendell, private communication to J. Restakis, June 19, 2014 [↵](#)

11)

It is also important to note that the small firm economy includes those social economy organizations such as co-operatives and other social enterprises that trade in the market. [↵](#)

12)

National Plan for Good Living, 2013–2017, 3.3 Active Citizenry, pg.

28 [↵](#)

13)

A. Margalit, *The Decent Society*, Harvard University Press, 1996 [↵](#)

14)

The notion of the Partner State was first elaborated by Cosma Orsi in his paper, *The Political Economy of Reciprocity and the Partner State*. [↵](#)

15)

This section and the structural schematic that it contains are derived from Robin Murray's very valuable critical remarks on this paper. [↵](#)

16)

We are describing here the *formal* structure of the State apparatus and we of course recognize that there are other *informal* circuits of power and influence that lie outside the structure, as for example between various interest groups and government ministers and officials. Not being mediated through the system of representative accountability that legitimizes the actions of the State, these power relations – although very real and in many cases decisive – remain outside the scope of the formal institutional relations between State and civil power we are exploring here. [↵](#)

17)

Personal notes to the author, June 2014 [↵](#)

18)

See also Restakis, *Humanizing the Economy – Co-operatives in the Age of Capital*, New Society Publishers, 2010. [↵](#)

19)

The serving government has instituted a policy of neighborhood councils throughout Ecuador. However, insofar as these councils are

directly associated with the political movement of the Correa administration, and not the broader civil society, a new apparatus with direct accountability to the broader public would be required.

[↵](#)

20)

J. Restakis, *Humanizing the Economy – Co-operatives in the Age of Capital*, Ch. 6, 2010 [↵](#)

21)

See J. Walker and A. Espinoza, *The Viable Systems Model*, Laurel Bank Associates, 2011; *A Complexity Approach to Sustainability: Theory and Application*, Imperial College Press, 2011 [↵](#)

22)

This is a key issue. Should the Correa administration sign the proposed European Free Trade Agreement (EFTA), government procurement policies which are a central policy tool for transition to a Partner State model, would be impossible to implement. [↵](#)

23)

Ryan Nehring, *Social Protection in Ecuador: A New Vision for Inclusive Growth*, Research Brief, August 2012, No. 28, International Policy Centre for Inclusive Growth [↵](#)

24)

ibid [↵](#)

25)

Estrategia para el Cambio de la Matriz Productiva, SENPLADES, 2013 [↵](#)

26)

Agendas para la Transformación Productiva Territorial: Provincia de Bolívar, 2013 [↵](#)

27)

J. Restakis, Chapter Four, Humanizing the Economy – Co-operatives in the Age of Capital, 2010 [↵](#)

28)

A. Bardi and S. Bertini, Dinamiche territoriali e nuova industria Dai distretti alle filiere, 2005 [↵](#)

29)

A further distinction between commons and public goods is that while both entail uses that are non-excludable, common goods are rival while public goods are non-rival. In the first case, the use of the commons by one individual has an effect on the use of that commons by others, as in the case of a common fishery. In the case of public, non-rival goods such as a public park, the enjoyment of the park by one person does not impede equal enjoyment of the park by another. [↵](#)

30)

<http://www.labsus.org> [↵](#)

31)

<http://www.labsus.org> [↵](#)

32)

Regulation on Co-operation between Citizens and Administration for the Care and Regeneration of Urban Commons, Art. 2, (a) [↵](#)

33)

ibid, Art. 6, (3) [↵](#)

34)

ibid, Art. 6, (4) [↵](#)

35)

Note: there are also provisions concerning the exclusion of individuals that act in contravention to the common good or to the public or private ownership of an asset, Art. 12 (3) [↵](#)

36)

ibid, Art. 2, (h) [↵](#)

37)

ibid. Art. 9, (1) [↵](#)

38)

<http://www.eurosur.org/epitelio/cuenca/encuentros/leda.htm> [↵](#)

39)

ibid, Art. 9, (2) [↵](#)

40)

E. Ostrom, *Governing the Commons, The Evolution of Institutions for Collective Action*, 1990 [↵](#)

41)

B. Arifin, *Indigenous Knowledge and Sustainable Commons: The case of an Indonesian Subak*, 2005 [↵](#)

42)

See Appendix 1 [↵](#)

43)

National Plan for Good Living, p. 29 [↵](#)

44)

www.evergreencooperatives.com[↵](#)

45)

Report on a Field Visit to Mondragon (Wright *et al* 2011) [↵](#)

46)

Cook, Dan (2013) Realising the Co-operative University. A consultancy report for The Co-operative College. Retrieved on 13th June 2014 from http://dbms.ilrt.bris.ac.uk/media/user/162789/Realising_the_co-operative_university_FOR_DISEMMINATION.pdf [↵](#)

Building a social knowledge economy through the open design commons and distributed manufacturing¹

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non-country specific version: 8 Dec 2014

This proposal is based on the policy document prepared by the author (Dafermos 2014) on behalf of the FLOK Society research project, with the aim of developing a set of public policy proposals for the transformation of the productive matrix in Ecuador towards a social knowledge economy. However, while the official FLOK version focuses on a specific country, the aim of the present version is to address the need – which is urgently felt in many countries around the world – to develop a radical alternative to the domination of cognitive capitalism. As such, this chapter could be considered a ‘non-country specific’ version of the original FLOK document.

Document Structure

This policy document examines the application of social knowledge economy principles to the secondary sector of the economy, with an emphasis on manufacturing. The *Introduction* dissects the concept of the knowledge economy, highlighting the role of access to knowledge as the fundamental criterion for determining its character: in contrast to capitalist knowledge economies which block access to knowledge through the use of patents and restrictive IP rights, *social* knowledge economies use inclusive IP rights to provide free access to knowledge. In the next section, *A Critique of Cognitive Capitalism*, we look at how the use of restrictive IP rights has been theoretically justified: in short, IP rights are supposed to promote innovation and productivity. However, the available empirical evidence on the effect of IP rights on innovation and productivity

furnishes no such proof. On the contrary, looking at the way in which capitalist firms actually use IP rights reinforces the conclusion that they do not promote innovation but are in fact hindering it.

The next section, *Alternatives to Capitalist Models*, introduces the FLOK (Free, Libre and Open Knowledge) model, which has emerged in the course of the last two decades as a powerful alternative to cognitive capitalism and describes briefly its main features: (a) the practice of free sharing of knowledge undergirding it, (b) the pervasive involvement of the surrounding community and (c) the use of the Internet as a platform for distributed collaboration.

In the follow-up section, *Knowledge commons in the secondary sector of the economy*, we illustrate the FLOK model and its features through two case studies based on the RepRap 3D printer and the Wikispeed car project respectively, which are paradigmatic of how the secondary sector could be transformed in the direction of a post-fossil fuel economy through the development of distributed manufacturing structures enabled by the open design commons.

In the next section, *General principles for policy making*, we sum up the conclusions drawn from the case studies in the form of general policy principles, which, as the follow-up section demonstrates, are aligned with the international policy framework, as reflected in the universally endorsed policy objective of developing a knowledge-based economy. The concluding section develops these policy principles into a set of policy recommendations for the development of a collaborative knowledge economy founded on the knowledge commons of science and technology.

Introduction: the concept and forms of the knowledge economy

This policy paper examines the application of principles of social knowledge economy to the secondary (manufacturing) sector of the economy. But before we proceed to an in-depth exploration of those principles, we need to clarify the concept of the knowledge economy, drawing a distinction between social knowledge

economies and capitalist knowledge economies.

In contrast to traditional conceptions of the economy which centre on land, labour and capital as the three factors of production, the concept of the 'knowledge economy' emphasises the role of knowledge as the key driver of economic activity (Bell 1974; Drucker 1969; for a critical analysis of the concept, see Webster 2006). This implies, of course, that the decisive means of production in a knowledge economy is *access to knowledge*. From this standpoint, it is precisely the question of how access to knowledge is being managed that determines the character of an economic system. Capitalist knowledge economies use the institution of intellectual property to create conditions of scarcity in knowledge: in this way knowledge is privatised and locked up in property structures which limit its diffusion across the social field. A social knowledge economy, by contrast, is characterised by *open access to knowledge* (Ramirez 2014) and so reconfigures the application of intellectual property rights to prevent the monopolization and private expropriation of knowledge: 'knowledge must not be seen as a means of unlimited individual accumulation, nor a treasury generating differentiation and social exclusion' but as 'a collective heritage [which] is...a catalyst of economic and productive transformation' and 'a mechanism for emancipation and creativity' (National Secretariat of Planning and Development 2013, English version, pp. 61, 41). In a nutshell, a social knowledge economy is an economy which thrives on the 'open commons of knowledge' (National Secretariat of Planning and Development 2013, Spanish version, p. 67); based, that is, on knowledge as a productive resource accessible to all members of society.²

A critique of cognitive capitalism

Intellectual property rights and their supposed role in cognitive capitalism

Capitalist knowledge economies use intellectual property (IP) rights as means of enclosing knowledge and as mechanisms by which to realise the extraction of monopoly rents from knowledge that has

been thus privatised. That is ideologically justified as follows: exclusive IP rights provide incentives for individuals and companies to engage in research and develop new products and services. That is, they promote innovation: the expectation of profitable exploitation of the exclusive right supposedly encourages economic agents to turn their activities to innovative projects, which society will later benefit from (e.g. Arrow 1962). But is that actually an accurate description of the function of IP rights in capitalist knowledge economies? Do they *really* spur innovation?

A synopsis of empirical evidence on the effect of restrictive intellectual property regimes on innovation and productivity

To answer this question, it is instructive to look at the available empirical data on the effect of restrictive IP rights on technological innovation and productivity. The case of the United States is indicative of a capitalist knowledge economy in which the flow of patents has quadrupled over the last thirty years: in 1983 the US Patent Office granted 59.715 patents, which increased to 189.597 in 2003 and 244.341 in 2010 (US Patent Office 2013). Looking at these numbers begs the question: how has the dramatic increase in the number of patents issued by the US Patent Office over time impacted technological innovation and productivity in the US? Well, according to the US Bureau of Labor Statistics, the annual growth in total factor productivity in the decade 1970–1979 was about 1,2%, while in the next two decades it fell below 1%. In the same period, R&D expenditure hovered around 2,5% of GDP. In short, we see that the dramatic increase in patents has *not* been paralleled by an increase in productivity or technological innovation. No matter which indicator of productivity or innovation we use in the analysis, we are invariably led to the conclusion that ‘there is no empirical evidence that they [patents] serve to increase innovation and productivity, unless productivity [or innovation] is identified with the number of patents awarded’ (Boldrin and Levine 2013, p. 3; also, see Dosi et al. 2006).

Another argument often voiced by proponents of exclusive IP rights in defense of patents is that they promote the communication of ideas and *that*, in turn, spurs innovation. They claim that if patents

did not exist, inventors would try to keep their inventions secret so that competitors would not copy them (e.g. Belfanti 2004). From this standpoint, the solution to the problem is a trade between the inventor and society: the inventor reveals his innovation and society gives him the right to exploit it exclusively for the next twenty or so years. Presumably then, to the extent that they replace socially harmful trade secrets, patents promote the diffusion of ideas and innovations (Moser 2013, pp. 31–33). In *reality* though, patents have exactly the opposite effect, encouraging ignorance and obstructing the diffusion of ideas. In what has become a standard practice, ‘companies typically instruct their engineers developing products to avoid studying existing patents so as to be spared subsequent claims of willful infringement, which raises the possibility of having to pay triple damages’ (Boldrin & Levine 2013, p.9; Brec 2008). Even if that were not always the case, the way in which patent documents are written actually renders them incomprehensible to anyone except lawyers (Brec 2008; Mann & Plummer 1991, pp. 52–53; Moser 2013, p. 39).

The real function of intellectual property rights in cognitive capitalism: how do capitalist firms actually use them?

What, however, more than anything else disproves the claimed positive effect of patents on technological innovation and creativity is the way in which patents are actually used by capitalist firms. In a capitalist knowledge economy, patents are used primarily as (a) means to signal the value of the company to potential investors, (b) as means to prevent market-entry by other companies (so they have *strategic* value independently of whether they are incorporated in profitable products) and (c) as weapons in an ‘arms-race’, meaning they are used defensively to prevent or blunt legal attacks from other companies (Boldrin & Levine 2013; Cohen et al. 2000; Hall & Ziedonis 2007; Levin et al. 1987; Pearce 2012). It would take a heroic leap of logic for any of these applications of patents to be seen as productive. On the other hand, there is a plethora of cases in which the effect of patents on innovation and productivity has been undoubtedly detrimental. Indicatively, consider how Microsoft is currently using a patent (*no. 6370566*) related to the scheduling of

meetings in order to impose a licensing fee on Android mobile phones (Boldrin & Levine 2013; Brodtkin 2011; Mueller 2012a, 2012b; Protalinski 2010; Wingfield 2010). In this case, patents become a mechanism for sharing the profits without any participation in the actual process of innovation. As such, they discourage innovation and constitute a pure waste for society. Interestingly, not that long ago, Bill Gates (1991), Microsoft founder, argued that ‘if people had understood how patents would be granted when most of today’s ideas were invented, and had taken out patents, the industry would be at a complete standstill today...A future startup with no patents of its own will be forced to pay whatever price the giants choose to impose’. It is ironic, of course, that Microsoft, not being able to penetrate the mobile telephony market, is now using the threat of patent litigations to raise a claim over part of Google’s profits.

In conclusion, the manner in which patents are used in capitalist knowledge economies makes it blatantly obvious that ‘in the long run...patents reduce the incentives for current innovation because current innovators are subject to constant legal action and licensing demands from earlier patent holders’ (Boldrin & Levine 2013, p.7). This becomes readily understood, considering that technological innovation is essentially a *cumulative process* (Gilfillan 1935, 1970; Scotchmer 1991): Cumulative technologies are those in which every innovation builds on preceding ones: for example, the steam engine (Boldrin et al. 2008; Nuvolari 2004), but also personal computers (Levy 1984), the world wide web (Berners-Lee 1999), hybrid cars, YouTube and Facebook.

But if patents have at best no impact and at worst a negative impact on technological innovation and productivity (Dosi et al. 2006), then how is it possible to explain – especially from the legislator’s side – the historical increase in patents and the ever more restrictive IP regimes that developed in the last thirty years? Many analysts have pondered this question. The conclusion to which they have been led is rather unsettling: the actual reason behind the proliferation of patents and the expansion of IP laws consists in the *political influence of large, cash-rich companies* which are unable to keep up with new and creative competitors and use patents to entrench their monopoly power (Boldrin & Levine 2013; Drahos & Braithwaite 2002).

Alternatives to capitalist models

The real enablers of innovation

Since, as we have seen, restrictive IP rights do not promote innovation, then *what* does? In our capacity as authors of this policy document, we are siding with a multitude of researchers and practitioners from around the world in whose view what promotes innovation is exactly the opposite of restrictive IP rights (e.g. Bessen & Meurer 2008; Boldrin et al. 2008; Drahos & Braithwaite 2002; Ghosh 2005; Von Hippel 2005; Moser 2013; Pearce 2012a; Weber 2005). To elucidate this point, we will discuss two case-studies in the following section which demonstrate that innovation thrives on openness and free sharing of knowledge as well as that IP rights can be used in a way that is diametrically opposed to their application in capitalist knowledge economies so as to *include* – rather than *exclude* – the broader community in the innovation process. In other words, the case-studies can be seen as working examples of an *alternative model* of economic and technological development enabled by (inclusive IP regimes founded on) the open knowledge commons. But before we proceed to the case-studies, let us briefly examine the general outlines and organising principles of this model.

The FLOK model

The FLOK model is an alternative to models of economic and technological development articulated on the basis of the logic of cognitive capitalism. It has three main features: (a) it is characterised by the practice of free sharing of knowledge, which is sustained and reinforced by an innovative and, arguably, subversive use of IP rights; (b) it is community-driven and (c) it leverages the Internet for distributed collaboration.

Knowledge Commons

The cornerstone of the FLOK model is the practice of free sharing of knowledge underlying it. Its founding credo is that technology is most efficiently developed in conditions of openness and collaboration, rather than secrecy and knowledge hoarding. To set

up such open and collaborative structures for the development of technology, the FLOK model has evolved legal mechanisms (known as open source licenses [Wikipedia 2014b] or simply as open licenses) which ensure that anyone is free to use, modify and redistribute technologies produced through the FLOK model. By democratising access to technology and knowledge through open licensing, the FLOK model effectively empowers the global community to participate in the productive process. There is only one limitation: improvements and modifications should be made available under the same conditions. Thus, technologies and knowledge released under open licenses form an open, yet *protected*, knowledge commons that anyone can use but none can expropriate. In this way, open licensing serves as a protection against the danger of private expropriation and commercial co-optation (Kloppenburg 2010; Moglen 2004; O'Mahony 2003).

Community-driven development

The FLOK model challenges the dominant view that the institutional environment most conducive to the development of knowledge and innovation is that provided by large, hierarchically-organised corporations. Instead it suggests that open, community models trump corporate ones in accommodating creativity and delivering innovation. In practical terms, this means that anyone can participate in the development process of a FLOK project but none can exercise heavy-handed control over the project or the other participants (Benkler 2006, p. 105; von Krogh & von Hippel 2006). Tasks are self-selected by participants, while decision-making is collective and consensus-oriented. Consequently, the direction of development of FLOK projects derives from the cumulative synthesis of individual community contributions, rather than from a central planner (Dafermos 2012; Wenden de Joode 2005).

Internet-enabled collaboration

The FLOK model leverages the Internet for massively distributed collaboration. For example, as we shall see below, the development of the RepRap 3D printer is distributed across hundreds of hardware hackers and hobbyists from all over the world, who share improvements and coordinate changes over the Internet. Same goes

for the energy-efficient car developed by the Wikispeed project, which we will also discuss in the next section.

Knowledge commons in the secondary sector of the economy

Case-study 1: RepRap

RepRap³ is an open source⁴ printer which can be used to manufacture three-dimensional objects. The project which spearheaded its development was launched in 2005 by Dr. Adrian Bowyer at Bath University in the UK, with the aim of developing an open source 3D printer that can replicate itself by re-producing its own components, ultimately creating a small-sized, affordable, 'homebrewed' manufacturing device that can be used to produce most of the objects people use in daily life.

Open licensing and distributed development

From the very beginning, the project leveraged the Internet for distributed collaboration: it open-sourced the design and all technical specifications of the RepRap technology so that others could experiment with it and improve it. Based out of various hackerspaces and makerlabs around the world, a loosely-coupled network of hardware hackers and hobbyists sharing ideas and modifications soon formed, resulting in rapid and significant improvements. The first version of RepRap, codenamed 'Darwin', was released in May 2007; version 2 (called 'Mendel') followed in 2009 and version 3 ('Huxley') a year later (see Fig. 1 below). By 2010, the project had evolved in a global community of about 5000 members and community size is doubling every six months (de Bruijn 2010).



Fig. 1: Rep Rap v. 3 ('Huxley'), May 2007

(Source: <http://reprap.org/wiki/Huxley>)

Effect of IP rights on development of 3D printing

What accounts for this remarkable community growth? First of all, to put the development of RepRap into perspective, one must look at the effect of IP rights on the historical development of 3D printing technology. 3D printing has been used in the manufacturing industry for about forty years but the fact that it was a patented technology effectively excluded the broader community from participating in its development. Then in the mid-2000s the expiration of a set of patents on 3D printing galvanised the emergence of the open source 3D printing movement, which coalesced around the RepRap project. Hackerspaces played a crucial role in this process of community involvement by providing hardware hackers and hobbyists around the world with access to a sort of communal workshop or shareable toolshed, which they could use for community projects. Thus, by helping hackers more effectively organise themselves, such user-managed spaces formed a key component of the distributed technological infrastructure underlying the development of RepRap.⁵ As a result of this influx of contributors from the open hardware community, the project soon managed to improve RepRap's design and performance and slash the production cost of 3D printers down to about \$500 (Banwatt 2013a, 2013b, 2013c). In parallel, several start-ups sprung out of the bosom of the RepRap community and began to make low-cost 3D printers based on the RepRap design for the consumer market.

How can a company compete against a community of thousands?



Stratasy (50 employees)
low-end 3D printer \$25-40K



Rep-rap kit \$875
(Makerbot)

Fig. 2: Stratasy is a 3D printing company co-founded by Scott Crump, who was granted in 1992 a key patent for 3D printing. The patent expired in 2009. MakerBot Industries was founded in the same year (Source: von Hippel 2011, p.59)

Implications

The involvement of the open source 3D printing community in the development of RepRap is not confined to experimentation with its design parameters but also extends into the range of objects that RepRap printers can manufacture. To date, RepRap 3D printers have been used to make clothes (Materialise 2013), wind turbines (Kostakis et al. 2013), prosthetic body parts (Molitch-Hou 2013), wearable technologies (e.g. wearable mobile phones [Cera 2012]) and even guns (Greenberg 2013). In fact, the spectrum of objects that 3D printers could manufacture is potentially infinite: for example, a group of architects called 'KamerMaker' is currently using a 3D printer to build a canal house in Amsterdam, the Netherlands (KamerMaker; Holloway 2013), while the European Space Agency is planning to build lunar space stations using 3D-printed bricks made from moon dust (Carter 2013; European Space Agency 2013a, 2013b). As US President, Barack Obama, says, '3D printing has the potential to revolutionize the way we make almost everything' (quoted in Gross 2013).

The implications of such a paradigm shift in manufacturing for environmental sustainability are enormous. 'Because they only use the exact material required, 3D printers could eliminate waste from traditional manufacturing – in which up to 90% of raw material is discarded' (Webster 2013). In addition to realising economies in the use of raw materials, the type of distributed manufacturing undergirded by RepRap-like 3D printing implies a massive reduction in global transportation costs attendant upon the localisation of production (Rifkin 2011). Clearly, large-scale industrial infrastructures and the mass production model itself are no longer needed if people are able to micro-manufacture whatever they need in the comfort of their homes. And that is good for the environment: unlike large-scale industrial manufacturing, which is based on the cheap availability of fossil fuels, 'home 3D printing' is illustrative of an on-demand manufacturing model which emphasises application that is small-scale, decentralised, energy-efficient and locally controlled. Thus, the diffusion of small-sized, affordable 3D printers promotes a model of environmentally sustainable technological and economic development.

To sum up, the RepRap 3D printer is paradigmatic of a case in which the open design commons enabled a global community to engage in distributed, participative development which, in turn, resulted in significant technical improvements and production cost reductions, paving the way for the rise of a new market in low-cost 3D printers. In parallel, the RepRap project illustrates the workings of a distributed manufacturing model that is germane to a post-fossil fuel economy.

Case-study 2: Wikispeed

Wikispeed is a project focused on the development of an energy-efficient car (see Fig. 3 below).⁶ What is especially interesting about the Wikispeed car is that it is developed by a global network of volunteers, who, by using methods drawn from the realm of open source software development, have managed to reduce development time and cost down to a fraction of that which conventional car manufacturing requires.



Fig. 3: The Wikisppeed car (Source: Wikisppeed Project 2013)

The birth of Wikisppeed can be traced back to the 2008 Progressive Insurance Automotive X-Prize competition for the development of energy-efficient cars, which captured the attention of Joe Justice, a Seattle-based software consultant. What set Justice apart from the other participants in the competition was his strategy and his resolve to apply open source software development methods to car manufacturing. In the beginning, he was alone. But as he announced his plan on the Internet, volunteers came to help and in three months he had a team of forty-four volunteers and a functioning prototype (Denning 2012; Halverson 2011). Now the project is jointly developed by more than 150 volunteers distributed around the world, who aim to deliver Wikisppeed as a complete car for \$17,995 USD and as a kit for \$10,000 USD (Wikisppeed 2012).

To speed up the development process and reduce its cost, the Wikisppeed team, inspired by the *lean manufacturing* and *open source* philosophy, evolved an approach that contrasts sharply with conventional manufacturing. First, the entire manufacturing process is designed with a view to minimising the expenditure of resources that do not add any value to the end-product from an end-user's point of view. For example, while an average manufacturer uses 'a \$100M CNC milling machine...WikiSpeed uses a \$2,000 machine found in the average FabLab...While modern cars embed various costly, non-interoperable, proprietary computers to manage various features ranging from airbags, to gas levels, to air conditioning, WikiSpeed uses a single \$20 Arduino circuit board' (Tincq 2012).

Second, *modularity* is the core design principle: Wikispeed is made up of eight components that can easily be removed and re-assembled (see Fig. 4 below). Such a product architecture makes it easy to modify and customise the car, for individual components can be modified without necessitating changes in the rest of the car. As a result, ‘the whole car can transform from a race car, to a commuter car, to a pickup truck, by changing only the necessary parts’ (Tincq 2012).

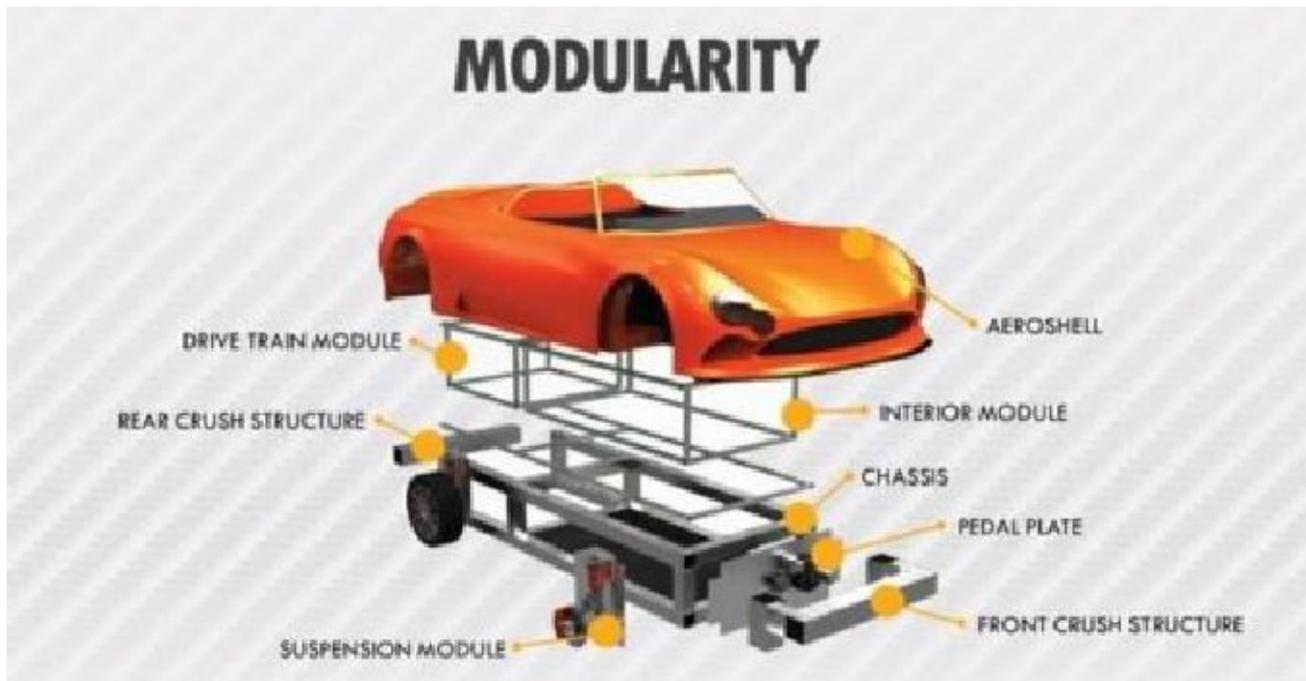


Fig. 4: The Wikispeed modular design (Source: Tincq 2012)

Third, *scale* is not important to Wikispeed: ‘cars are produced on-demand, when a client offers to pay for it. This implies almost no capital investment upfront to produce a Wikispeed car’ (Tincq 2012). Through the use of on-demand manufacturing and lean production methods, Wikispeed has achieved significant development cost reductions. But the production of Wikispeed is not only ‘lean’ and ‘on-demand’, it is also *distributed*: Wikispeed is being developed by a distributed network of largely self-managing teams – each working at its own garage – who coordinate their work through the Internet. This kind of computer-mediated collaboration is enabled by the modular structure of the Wikispeed car, as product components can be developed autonomously and independently of each other by different individuals or teams with little, if any, need of central coordination (Dafermos 2012). The resulting distributed

organisational structure, according to the Wikispeed team, is key to realising significant *economies of scope* and *flexibility*: so, to reinforce distributed manufacturing, 'WikiSpeed members are currently practicing to build cars within a rectangular space marked on the ground. By achieving this, micro factories could be encapsulated within containers, and shipped to where there is demand for local production. Once the work is done, a micro factory could be moved to a surrounding area to meet new demand' (Tincq 2012). The sustainability implications of such a paradigm shift in manufacturing are obvious: just like RepRap-like 3D printing, Wikispeed is proposing a model of distributed manufacturing which leverages the global open design commons for local production. Unlike large-scale industrial manufacturing, which depends on the cheap availability of fossil fuels, Wikispeed's on-demand manufacturing model emphasises application that is small-scale, decentralised, energy-efficient and locally controlled. In that sense, it promotes a model of sustainable development that recognises the limits to growth posed by finite resources and so organises material activities accordingly (Bauwens 2012b).

Fourth, the development of the Wikispeed car is built around the defining hallmark of open source software production: all *technical specifications are shared freely* with the community so that anyone can contribute to its development. In this way, by opening up the product development process, the Wikispeed project can tap into the contributions of a global community of volunteers. But for the Wikispeed team, freely sharing design information is not only a means of engaging the global community in the collective development of the Wikispeed car, but also the basis of a model of *distributed entrepreneurship* which allows hobbyists and enthusiasts from all over the world to download the blueprints of Wikispeed and use them as a springboard for developing their own cars at their garage.⁷

To date, the Wikispeed project has financed its operation mainly through crowdfunding campaigns and small donations from sympathisers (the so-called 'micro-investors'). For its long-term sustainability, however, it aims to sell the cars it makes. The price for a Wikispeed prototype is 25,000 USD and the project is currently working on the development of a commuter car which will be

launched as a complete car for \$17,995 USD and as a kit for \$10,000 USD. In recognition of its community character, the Wikispeed project has announced that the proceeds from sales will be redistributed back to the community of contributors.⁸

To sum up, the case of Wikispeed, like that of RepRap, demonstrates how a technology project can leverage the open design commons and the Internet to engage the global community in its development. Most important, Wikispeed proposes a model of distributed manufacturing that is well-suited to a post-fossil fuel economy: a model which is small-scale ('on-demand'), decentralised, energy-efficient and locally controlled.

General Principles for Policy Making

Through the above case-studies, we have come to identify a set of enabling conditions, from which we can draw several general principles to guide policy making efforts aimed at reinforcing the development of a social knowledge economy.

The Commons as a key enabler. It is obvious that the emergence of the community-driven development model characteristic of both Wikispeed and RepRap would have been impossible in the absence of the open design commons. Taking this into consideration, it is obvious that policy making should be geared towards supporting and enriching the commons as a shareable infrastructure for the social knowledge economy.

The importance of distributed technological infrastructures. The development of the FLOK model is unthinkable without a distributed technological infrastructure (Bauwens 2005; Benkler 2006). At the most basic level, the scaling up of the FLOK model requires *distributed access* (a) to the *Internet*, which members of FLOK projects use to exchange information and coordinate their activities, and (b) to *fixed capital*, by which we mean a spectrum of hardware technologies such as personal computers and 3D printers, which constitute the essential means of production in this setting. The role of such a distributed technological infrastructure is often performed by hackespaces (as well as hackerlabs, makerspaces and so on), which are commonly used by individuals and groups with

limited financial resources as a local, physical platform for the mutualisation of resources and the provision of shared access to those means of production that are not yet as distributed and generally available as personal computers and Internet connectivity. As such, they form a territorial infrastructure for the development of commons-oriented, open hardware projects such as RepRap and Wikispeed.

The need for investment in knowledge. The development of such distributed technological infrastructures by itself is unlikely to generate positive results, unless people, too, know how to use them. The task, therefore, of building these infrastructures should be complemented with and reinforced by appropriate processes and structures of learning designed to harness the diffusion of ‘mass intellectuality’ (Bauwens 2005; Virno 2001; also see Rushkoff 2004) that is required for the expansion of the FLOK model.

The importance of access to credit and investment resources and the role of public policy. As we saw, in order to raise money to finance its operations, the Wikispeed project has turned to its base of supporters, on whose contributions it relies, and to crowdfunding campaigns as a vehicle to reach out to the Internet community. This choice to mobilise the community was largely dictated by the fact that the project has been so far unable to attract investment capital from the private sector. That is not accidental. On the contrary, it is the general case with technologies like Wikispeed which are not ‘protected’ by restrictive IP rights, given the private sector’s aversion to invest in technologies and projects that do not have the potential to generate patentable results. For example, that is why capitalist investments in agricultural science and technology have long favoured the development of products such as seeds that cannot be reproduced in the farming process, rather than agroecological methods which are rendered practically un-patentable by virtue of their inherently collective and communal character (Vanloqueren & Baret 2009, p. 977). From an investment standpoint, the ‘problem’ with artefacts and methods that are not patented lies in the fact that they are not locked up in property rights which can be leveraged to capture rents. There is nothing strange, therefore, about the absence of capitalist investment in commons-oriented, open source technology projects like Wikispeed or RepRap, which would not have

survived without the support of civil society. The fact, however, that the business sector cannot be relied upon to develop the products and technologies that fuel a social knowledge economy suggests the importance of setting up appropriate public policies to reinforce the development of the commons of science and technology.

Before we proceed to develop these principles into policy recommendations for the creation of a social knowledge economy, it is important to take into consideration the international institutional and policy context in which they have to be grounded.

The Policy Setting

There is hardly a country anywhere around the world which does not endorse the policy objective of developing a ‘knowledge economy’ as a vehicle of modernising and strengthening the economy.

Indicatively, the policy of the European Commission for the economy of the European Union has been focused on the development of a knowledge-based economy as its primary target. The so-called *Lisbon Strategy* (also known as Lisbon Agenda or Lisbon Process), which was devised at a meeting of the European Council in Lisbon in 2000, articulated a ten-year development plan for the EU economy in which the concept of the knowledge economy figures prominently. More specifically, according to that plan, the ‘strategic goal’ of the EU is ‘to become the most competitive and dynamic knowledge-based economy in the world’ (European Union Parliament 2000). In 2010, the European Commission (2010) formulated an updated strategy for the next ten years, known as *Europe 2020*, which, in the essential features of its economic policy, reinforces the importance conferred by the Lisbon Strategy upon the development of a thriving knowledge economy in the EU. Thus, the goal of developing an economy driven by the productive forces of knowledge and innovation is right at the top of the list with the ‘three mutually reinforcing priorities’ of the Union’s current economic agenda.⁹

Crucially enough, in some countries the existing framework for public policy making evinces a strong orientation towards the commons, laying emphasis upon the need to invest the goal of

building a knowledge economy with a social character. For example, the national development plan of Ecuador, known as National Plan for Good Living (National Secretariat of Planning and Development 2013), is paradigmatic of such a policy framework: given that ‘individual and societal freedom require emancipation of our thought’ (p. 61) and that ‘knowledge, more than a means of knowing, is an instrument for individual freedom [and] for social emancipation’ (p. 67), the National Plan for Good Living warns that ‘knowledge must not be seen as a means of unlimited individual accumulation, nor a treasury generating differentiation and social exclusion’ (p. 61). On the contrary, in the context of developing a knowledge economy with a social character, knowledge should be approached as ‘a collective heritage [which] is, in addition, a catalyst of economic and productive transformation’ (p. 61). Aside from furnishing a characteristic example of a policy context in which the goal of building a knowledge economy is embedded in a broader socialist program of economic and productive transformation, the case of Ecuador is important because of the role attributed to the knowledge commons as an agent of that transformation.

The next section situates the principles that enable the emergence of the FLOK mode of production in the aforementioned policy context and puts forward several policy recommendations that are designed to support and reinforce the goal of building a social knowledge economy.

Policy Recommendations

We have seen how patents in specific and restrictive IP rights in general run counter to the aims and needs of a social knowledge economy. In contradistinction, as our case-studies demonstrate, the pool of the open, yet protected, knowledge commons established by free/open licenses is indispensable to the development and operation of a social knowledge economy. Consequently, to **support the development of the knowledge commons of science and technology and protect it against the danger of private enclosure**, we propose:

- The adoption of free/open licenses, such as the GNU GPL,¹⁰ for the licensing of scientific and technological artefacts.
- The *de facto* abolition of the patent system. This can be done through the use of royalty-free and copyleft-style patent licenses, that is, by means of ‘licensing patents for royalty-free use, on the condition that adopters license related improvements they develop under the same terms’ (Wikipedia 2014d).

Moreover, to **support the development of commons-oriented projects and organisations**, we propose:

- The provision of special economic incentives for commons-oriented projects and organisations. This can be implemented in a variety of ways: for example, through tax benefits and (state-supported) micro-credit systems.
- The development of a legal framework that provides co-ops and collectivist organisations operating in the secondary sector with the organisational autonomy as well as institutional support which is required for their operation.¹¹

We remarked how the use of hackerspaces, makerspaces, fablabs and co-working spaces for the mutualisation of resources and the provision of shared services to members constitutes a crucial infrastructure for both co-located and distributed cognitive work. Thus, to **support the development of shareable, territorial infrastructures for cognitive work**, we propose:

- That supportive policies be developed for the setting up of hackerspaces, hackerlabs, makerspaces and co-working spaces as a territorial infrastructure for cognitive work, skill sharing and technology transfer.

Concomitantly, to **democratise access to credit and investment resources**, we propose:

- The creation of a community-managed *Community Investment Fund* for commons-oriented projects and organisations, such as that operated by co-op federations in Northern Italy (i.e. the so-called 3% Fund)¹² and proposed by Kleiner (2010, pp. 23-25) for

the support of worker-owned organisations.

Considering that public procurement can be used as a very effective instrument to promote open and free technologies, we propose that **the use of free and open technologies be encouraged in public procurement programs**. For that purpose, we propose that public procurement legislation be amended to prioritise the use of free technologies.

Equally important, our analysis has highlighted *the importance of the diffusion of knowledge* in empowering people to participate in projects of a technical character. That is why it is imperative to **popularise free knowledge and make it an integral part of the education system**. With this aim in mind, we propose:

- The introduction of training in the use and development of free technologies into the basic school curriculum and across university programs.
- The re-orientation of science and technology towards models of *open science* (Wikipedia 2014c) with the aim of making the fruits of scientific and technological research accessible to all the members of society. To achieve this, we propose that publicly funded research and development in science and technology be released under free/open licenses (e.g. GNU GPL).¹³
- The setting up of spaces for informal training (continuous education) as an enabling infrastructure for the development of a free culture.

Last, it goes without saying that policies aimed at the transformation of the productive matrix in the direction of distributed production structures based on the open design commons should be responsive to the exigencies of the local context. To this end, we propose:

- That a National Observatory for Free Technologies be set up with the objective to assess the economic viability and fitness of free technologies to meet existing needs and to provide expert support for the task of design, implementation, monitoring and evaluation of the above public policies.

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1)

This chapter is based on the policy document prepared by the author (Dafermos 2014) on behalf of the FLOK Society research project, with the aim of developing a set of public policy proposals for the transformation of the productive matrix in Ecuador towards a social knowledge economy. However, while the official FLOK version focuses on a specific country, the aim of the present version is to address the need – which is urgently felt in many countries around the world – to develop a radical alternative to the domination of cognitive capitalism. As such, this chapter could be considered a 'non-country specific' version of the original FLOK document. ↩

2)

It is noteworthy that the concept of the *social knowledge economy* has been remarkably under-theorised in the existing literature (available in both english and spanish). In fact, in the few cases where it appears, the concept is used to refer to the role of the so-called 'social economy' – seen as that sector of the economy which

is separate from the public and private sector – in the broader (knowledge) economy of which it is but a component part (e.g., see MacLeod et al. 1997). The only exception that we are aware of is Ramirez (2014) and the FLOK Society Project policy papers, which employ the concept in a radically different sense, defining it as an economy characterised by freedom of access to knowledge. [↵](#)

3)

URL: <<http://reprap.org>> [↵](#)

4)

The RepRap design information is licensed under the GNU GPL. [↵](#)

5)

It is no coincidence that the majority of RepRap 3D printers have been prototyped, tested and operated at such user-managed spaces. Indicatively, the first RepRap 3D printer in the city of Heraklion, Greece (which is the author's hometown) was developed at the tolabaki hackerspace (<http://tolabaki.gr>). [↵](#)

6)

URL: <<http://wikispeed.org>> [↵](#)

7)

Wikispeed considers itself to be such a *distributive enterprise*: ‘a transparent enterprise that promotes—at the core of its operational strategy—the capacity for others to replicate the enterprise without restrictions...[a kind of] an open franchise system that focuses on being replicated by others’ (Open Source Ecology 2012; Thomson & Jakubowski 2012: 62). [↵](#)

8)

Wikispeed has devised an interesting method of remunerating community contributions to the project. According to the project website: ‘If I give money, time, cookies, or supplies to WIKISPEED and WIKISPEED is profitable, WIKISPEED will pay me back the value

of what I put in plus interest commensurate with their level of success' (<<http://wikispeed.org/join-the-team/our-ethics/>>). ↵

9)

The other two priorities of the Europe 2020 strategy consist in the promotion 'of a more resource efficient, greener and more competitive economy' and of 'a high-employment economy delivering social and territorial cohesion' (European Commission 2010). ↵

10)

URL: <<http://www.gnu.org/copyleft/gpl.html>> ↵

11)

For an elaborate discussion of what that task entails and how it can be achieved, see the FLOK policy documents by Restakis (2014a, 2014b). ↵

12)

The 3% Fund is operated by co-op federations in Italy whereby member co-ops contribute 3% of their annual profits to a collective Fund that is used for investment purposes (Logue 2006; Mancino & Thomas 2005). ↵

13)

For a discussion of the proposal to release publicly funded R&D under the GNU GPL, see Boldrin and Levine's (2013, p.19) as well as Pearson's (2012a) recent contribution in the *Journal of Economic Perspectives* and *Nature* respectively. ↵

From Buen Vivir to Commons Transition: An Interview with Janice Figueiredo



To finish the book, we present this exclusive interview with Janice Figueiredo, research coordinator for the Commons' Infrastructure for Collective Life investigation in the [FLOKSociety](#) project. Janice spoke to us about her own experience collaborating with and learning from the indigenous people in Ecuador.

The interview centers on some of the more practical aspects of the FLOK project, her interaction as a researcher with local civic groups, and the future of Commons Transition.

What is your background, and how did you get involved in the project in Ecuador?

I am a Brazilian citizen who has lived abroad for about 20 years, both in the United States and in Europe (Paris, France). I worked at the Inter-American Development Bank (IADB) as IT project manager until 2009, when I decided to radically change my life and started placing my actions, work and studies in areas that, in my understanding, have the potential to genuinely transform the world

into a more inclusive and fairer place. I directed my interests to researching the fields of collective intelligence, collaborative movements, P2P dynamics, the commons, the open and sharing society, social business, complementary currencies, sustainable development and poverty reduction, having a particular interest in exploring alternative models to the conventional economic paradigms based in centralization and scarcity.

I spent most of 2012 in Brazil, and got actively involved with several P2P-related projects in Rio de Janeiro, where I currently live. I joined academic research groups on the Collaborative Economy and Peer Production in Brazil, carried out collaborative projects in Rio's favelas, took part in civil society and social movement initiatives that proposed commons-oriented alternatives for the planet (such as the People's Summit), and got involved with different projects related to the sharing economy in Brazil.

I have a B. Sc. in Computer Science, a M. Sc. in Strategy and Marketing, and have completed post-graduate courses in the area of Sustainable Development.

In September 2013, Michel Bauwens – who I first met in Brazil in July 2012, on the occasion of the Rio+20 UN meeting – invited me to be part of the research team that would be producing public policy recommendations for a transition to a Social Knowledge Economy in Ecuador. I immediately accepted the invitation!

You visited a lot of urban commons communities in Quito. What is your summary of their experiences and concerns ?

My research area, “Open infra-structures for collective life”, explored how citizens and communities could benefit from as well as take an active part in the building of a Social Knowledge Economy. On the one hand, we investigated how communities could, in an autonomous way, create and maintain mutualized infrastructures needed for their lives, such as housing and food systems. On the other hand, we explored how knowledge systems could be created and governed by communities.

The principles of solidarity and cooperation are deeply rooted in the

Ecuadorian culture. Several community needs are achieved through autonomous practices whose origins come from the traditions of the indigenous quechuas. The most well-known of these initiatives are *mingas*. These are community works towards common goals that have been extensively used in both urban and rural areas to supply the needs of the communities, such as improvement of roads or communal areas, and energy provision, and also as a means to cooperate among families, such as in the case of the building of a house. *La minga de la quiteñidad*, a yearly community-led event held in some Quito neighbourhoods, chose to promote recycling in one area (December 2014). Through *mingas* the main values of the Andean indigenous culture are expressed: union and solidarity among communities. *Mingas* are seen as a huge celebrations where work, food, collaboration and accomplishments are shared. *Ranti-ranti* is another solidarity practice intrinsic to the Ecuadorian culture. It represents the concept of reciprocity and abundance: “I give to you because Nature has given to me”. *Trueque* is a practice of exchange used at open food markets, where sellers exchange what hasn't been sold among themselves. *Randimpa* are open spaces self-organized by communities, where discussions and decisions about the community take place.

We visited several initiatives that follow the principles of self-governance that develop and nurture cooperation within their communities. I will mention two of them: the first, “*Comuna Tola Chica*” represents a group of 400 people that live and work in a communal manner. The community tries to preserve its cultural roots through the development of local projects, such as the School of Traditional Knowledge, and to stimulate ecological and sustainable local projects like the building of a local communal house made with super-adobe construction. All decisions concerning the *Comuna* are taken in a collective, participatory way, through assemblies open to all residents. Land ownership is communal and all *comuñeros* have the same rights over the lands.

A second project that illustrates cooperation is “*Alianza Solidaria*”. This project was launched to tackle the lack of access to quality and affordable housing, and was expanded to the building of an autonomous, cooperative community capable of solving their own problems in a cooperative way.

One of the main concerns I've noticed among communities is that these principles of solidarity and cooperation are being lost; there are far fewer mingas now than in the 1970's.

Several individuals suggested that people have become more individualistic and competitive as a result of being influenced by the values promoted by capitalism; people engage less and less with traditional solidarity practices. Another concern observed is that newer indigenous generations no longer want to learn quechua, dress using their traditional customs or preserve their culture, as the media propagates the idea that what comes from the Western world (Europe and the United States) is better and represents the values of a more developed people.

You also worked with indigenous communities and coordinated a policy paper that was written by indigenous activist scholars themselves. What were the results, and how was the paper received?

At FLOK meetings conducted during the process, the subject of "Ancestral Knowledge" was the one that raised the greatest interest and the most questions from the communities and academia.

Among the 17 policy papers, the "Ancestral, Traditional and Popular Knowledge" paper was the only one written by a group composed exclusively of local, Ecuadorian people. That paper discusses and proposes policies on how to preserve, manage and implement traditional and ancestral knowledge and practices, respecting the diversity of cultures and nationalities of Ecuador.

Ecuador has a total of 14 nationalities and 18 pueblos, and it was quite a challenge to embrace such a diversity of visions and traditions in a single paper. Initially, we engaged 5 indigenous scholars and activists from different ethnicities, each one deeply involved with the subject within their communities, to collectively write a first version of the paper. Later on, we realized the paper should also contemplate non-indigenous visions, such as those of the Afro-Ecuadorian community.

The current version of the paper is the product of a collective work

developed by indigenous, Afro-Ecuadorian, mestizo and white Ecuadorian scholars and activists. This composition of multiple visions, all from local actors, gives a unique strength to the paper and its policy recommendations.

The policy paper presents proposals for the management of ancestral, traditional and popular knowledge in five main domains: 1) ancestral, traditional and popular knowledge must be declared heritage of the communities and peoples; 2) intercultural, bilingual education must be promoted and strengthened; 3) promotion of proper management of knowledge about biodiversity and traditional and ancestral agricultural practices; 4) strengthening of the relationship between the territories and knowledge and 5) strengthening of traditional and ancestral practices of governance.

What is your overall view of the FLOK process and what are your expectations for the future?

FLOK is a pioneer project, as this is the first time in history that a series of policy documents was produced in a collaborative way to propose, at a national level, a transition to a new economic and societal model based on open and shared knowledge, on the commons, on traditional and ancestral practices and on peer-to-peer production. Producing these documents in such a short time (8 months) was a big challenge. The work represents an integrated view, framed within the Ecuadorian legal system, and resulted from an intense collaborative process that involved meetings with Ecuadorian experts from civil society, academia, government and constant exchange with international experts in each area.

I see this first FLOK experience both as a seed that has been planted, as well as a threshold that has been crossed: a first attempt to provide an alternative model to the capitalist system has been proposed, and this work - not only the document, but the entire process that allowed the production of the documents - can be a source of inspiration to any person, city, civil society collective, region, and can be replicated, modified and adapted according to different contexts and needs. A threshold has been crossed in the sense that an integral proposition has been done for an entire society.

Needless to say, it was a very rewarding experience to be part of the project.

For the future, I expect the commons-transition movement to grow and to strengthen. And that different initiatives, with different flavors, will start to sprout. In the past year, many people showed a lot of interest in the FLOK process - not only during the time we were in Ecuador, but afterwards as well. The world needs profound changes; this is no longer an option, but a necessity. The human being is intrinsically generous and solidary - every culture has solidarity practices that became more and more lost with the individualistic and competitive behavior modeled by capitalism. A commons-transition movement is a real possibility to rescue human cooperation and solidarity and a path to reach harmony with Nature.

Index

Commons Transition: Policy Proposals for an Open Knowledge Commons Society	2
Preface to the First Edition	5
Introduction to the Commons Transition Plan	7
A Commons Transition Plan	13
Background to the Commons Transition Project	14
The Framing of the Proposal	17
The Three Value Models and the transition to a Social Knowledge Economy	17
Four Technology Regimes	26
Cognitive/Netarchical Capitalism vs. an Open-Commons based Knowledge Society	30
The potential role of commons-based reciprocity licenses to protect traditional knowledge	48
Introducing the new configuration between State, Civil Society and the Market	51
A description of the new triarchy of the Partner State, the Ethical Economy and a Commons-based Civil Society	57
Beyond the market, beyond planning?	69
The historical and present importance of mutualization in times of increasing resource scarcity	76
A historical opportunity: The Convergence of Material/Technical P2P Infrastructures, Digital/Immaterial Commons, and Commons-Oriented Governance and Ownership Models	80
Elements of Idealized and Integrative Full Transition Plan to a mature Social Knowledge Economy	83
Political reconstruction of social movements in a conjuncture of post-industrial transformation	89
References	92
Remarks	94
Acknowledgements	96

Public Policy for a Social Economy	97
The Case of Ecuador	98
Toward a New Paradigm – Beyond the Welfare State	101
The Social Economy and the Social Market	103
A New Approach	105
Taxation, Capital Formation, and Social Benefit	106
Case Study – Fureai Kippu, Japan	108
The Social Market Exchange	112
Public Policy for a Partner State	118
The Partner State 14	119
Social Economy and the State	121
1. Democratization and Co-construction of Public Goods and Services	125
2. Guarantee of Minimum Economic Independence	129
3. Democratization of the Economy and Restructuring the Productive Matrix	132
4. Securing the Commons	140
Concluding Remarks	155
Building a social knowledge economy through the open design commons and distributed manufacturing¹	164
Introduction: the concept and forms of the knowledge economy	165
A critique of cognitive capitalism	166
Alternatives to capitalist models	170
Knowledge commons in the secondary sector of the economy	172
General Principles for Policy Making	179
The Policy Setting	181
Policy Recommendations	182
References	185
From Buen Vivir to Commons Transition: An Interview with Janice Figueiredo	196