The FLOK Society Project

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FLOK stands for *Free/Libre Open Knowledge*. The name is a generalized abstraction, towards the knowledge society understood as a whole, made upon the acronym of *Free/Libre Open Source Software*; a movement that has inspired (and made possible, through the development of digital infrastructures and legal devices) a myriad of other expanding movements, from Free Culture to Open Science, from Open Educational Resources to Free Hardware, from Open Source Seeds in agriculture to Open Source Design. The FLOK society is here already. But it is not as a unified nation, territory or state ruled as an economically and politically closed totality. We inhabit the FLOK society in a somewhat fragmented manner, as a precarious but resilient network of projects, infrastructures, communities and resources that conflicts (sometimes politically, often economically, always symbolic-

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ally) with the inherited view of how economy and society should be organized. Under the name *Buen Conocer / FLOK Society*[5] a collaborative research and participatory social and political design project started almost two years ago in Ecuador (triggered by an open document, originally written by Xabier E. Barandiaran and Daniel Vázquez, who then became the director of the project, bringing together goals, aspirations and commitments of Ecuatorian and international social movements advocating for free/libre open knowledge). Its goal was to bring together this FLOK network to expand and coordinate its vision to contribute to the bootstrapping of a new political economy in Ecuador (immersed in the project to transform its productive matrix). The Chilean edition of *Le Monde Diplomatique* captured, under the following phrase, the scope of the project and the historical opportunity it prefigures: “Neoliberalism has come to impose the shock doctrine for decades (taking advantage of catastrophes so as to intensify the capitalist system). From now on, the world has readily available an Ecuadorian receipt for a change of productive matrix to overcome the economic crisis: the FLOK doctrine”[6].

The term “doctrine”, despite the contemporary religious or even fundamentalist connotations it distils, did not originally appeal to a set of articles of faith or ideas to be enforce. The word “doctrine” (of which “decent” and “doctor” are family member), comes from classical Latin’s *docere*:

> ‘to show, teach, cause to know,’ originally ‘make to appear right,’ causative of *decere* ‘be seemly, fitting’ [7]

5 http://flocksociety.org

6 http://www.lemondediplomatique.cl/Ecuador-quiere-convertirse-en-un.html

7 http://www.etymonline.com/index.php?term=doctor

It is this “making to appear right”, that the FLOK doctrine brings forth, in opposition to the abusive propaganda that tries to turn “sharing” into “pirating”, “improving programs” into “ ‘terrorist’ hacking” or “community driven software development” into “hobbyist amateur attempts to write code” (to mention but a few of the widespread stigma faced by models of collaborative and distributed economy). It is also to the value of the *Buen Conocer / FLOK Society* project to make explicit the “fitting” of the new modes of production to the context of Latin American economies and political projects, but, more broadly, to the scenario of despair, and yet social potential, that the last (and lasting) crisis of global capitalism has opened for traditional community centred modes of production and the potential for collaboration and sharing that new communication technologies make nowadays possible.

The *Buen Conocer / FLOK Society* project, has been a collaborative research and participatory design process, that directly involved up to 1500 people to promote and create proposals for a social economy of open knowledge commons, focusing on Ecuador but open to the region and the world. The project has made possible to articulate and define a detailed model of a collaborative society whose productive matrix is based on cognitive commons, shared knowledge and traditional community practices. The culmination of nearly two years of participatory research and design are 25 public policy documents. These documents have both scaffold the collective intelligence and have finally embodied the results of the project. They discuss forms of exploitation and accumulation of cognitive capitalism at different layers of the knowledge society (hardware, agriculture, education, science, software, etc.) and they also propose viable alternatives to finally extract general principles of public policy making based on a selection of successful and sustainable

case studies. Different versions of these documents, at different stages of development (both in Spanish and English), could (and still can) be accessed online, commented, discussed, and reused with free licenses[8]. Most of them are now coming together under a book, and separate downloadable chapters, format, to be printed in Spanish [http://book.floksociety.org].

It is of value, however, to put the book and the overall production within the wider perspective of the set of multi-scale transformations that were envisioned along the *Buen Conocer / FLOK Society* project, its research plan, and the *Cumbre del Buen Conocer*[9] (Good Knowing Summit) that took place in Quito (Ecuador) on May 2014. One of the earliest tasks of the project was to define the public policy landscape and the scope of the research. A journey that flowed into the summit and made possible to share the experience of experts and local explorers into this landscape, to draw a cartography of open challenges and to design a collective and institutional route: How should a "FLOK doctrine" be structured? Which are the layers that compose the knowledge society and hold potential to contribute to new forms of popular and distributed economic development?

The first public presentation of the project (the 2nd September 2013) opened these questions to common scrutiny and answers were elaborated in two working groups, both composed of researchers, activists, public servants and community members. A list of common topics came out of that meeting, and was later systematized by the research team leader Michel Bauwens, reformulated again with all the research team in January 2014, and has undergone a final reshaping before the publication of the book. This systematiz-

8 https://floksociety.co-ment.com

9 http://cumbredelbuenconocer.ec. Scientific direction by David Vila-Viñas.

ation of research and policy papers, far from a mere academic or administrative exercise, provides a general overview of the revolutionary landscape that lies ahead. This landscape appears shaped by four major streams that pave the way towards a the flourishing of the FLOK Society. We briefly picture this general landscape along the lines of the discussions, contributions and the collective systematization that was done before and during the summit.

The first stream, Human Capabilities, covers the empowerment of collective intelligence, which constitutes the real productive engine of a social economy of open and common's knowledge. First, it is critical to maximize the access to **education** as a common good through the development of so-called *open educational resources*. These make possible the empowering dynamics of educational innovation, they guarantee access to educational material and open the possibility for resource adaptation to different educational contexts and needs, ages and rhythms thus favouring autonomous self-directed and community-driven learning. A critical mass of open educational resources is already available in different online platforms, such as OpenStax[10] with more than 20.000 free and open source learning modules available. Secondly, we find **Science** as one of the the most significant human institutions of the commons, a network of communities that (despite its historical commitment to knowledge sharing, universal access and public scrutiny) is now increasingly suffering the penetration of cognitive capitalism: privatization of results, corporate management of universities and research centres, increasing dependency on publishing corporations, etc. While the scientific publishing industry benefits from free peer-review and scientific production, whose estimated cost in 2008 was around 198bn

10 http://cnx.org/

USD[11], it increased the cost of access to academic publication in over 260% between 1986 and 2003 (well above the inflation rate of 68% for that period) giving rise to what is known as “the serials crisis” by which public research and academic institutions find themselves incapable to pay for access to scientific literature, even if they are the main producers[12]. This is but one example of how intellectual property driven corporations commodify knowledge and exploit the knowledge commons. However, under the labels of *Open Science*, *e-Science* or *Science 2.0* alternatives to capitalist managerial and product enclosure tendencies are rapidly increasing; providing computing and communication infrastructures, publication platforms and forms of productive social organization that make possible to consolidate open and collaborative research, with strong citizen participation on scientific data-gathering, hypothesis development and the management of laboratories themselves. Free software solutions exists for almost any type of scientific computing needs, while the registry of Open Access repositories[13] has catalogued more than 3792 repositories with more than 12 million documents that can be accessed without legal, technological or economic barriers. Third, **culture** faces the challenge of the emerging cultural industries that spread homogenizing values and symbols, creating semiotic enclosures, strongly locked down through copyright enforcement, that preclude re-appropriation, adaptation and re-signification by users and communities. Under the fast development of sustainable free culture alternatives (mostly framed under the Creative Commons set of licences) strategies to make

11 CEPA. (2008). A*ctivities, costs and funding flows in the scholarly communications system in the UK*. Research Information Network. Retrieved from www.rin.ac.uk/system/files/attachments/Activites-costs-flows-report.pdf

12 Panitch, J. M., & Machalak, S. (2005). *The serials crisis. A White Paper for the UNC-Chalep Hill Scholarly Communications Convocation*. Janury. Retrieved from http://www.unc.edu/scholcomdig/whitepapers/panitch-michalak.doc

13 http://roar.eprints.org/

open culture and community culture the source of social life and new modes of economy are becoming available. According to the last Creative Commons report[14], there are already more than a billion free cultural works that provide an unprecedented substrate for an ever increasing free an open cultural ecosystem. New models of production and distribution of culture, from music to literature, from art to cinema are growing worldwide. The FLOK model emphasizes the increasing role that free and open cultural commons can play in those economies (like that of Ecuador) that still have production of cultural goods and services as a field in expansion, open for participation and for distributed benefit.

The second stream focuses on Commons' Oriented Productive Capacities, it covers the potential that free/libre and open knowledge affords for primary and secondary sectors: natural resources, agriculture and manufacturing. Despite the sufficiency of global resources, agricultural production and feeding are becoming increasing challenges of the global economy, mostly due to the set of constraints and inequalities in which the current capitalist model is based. The FLOK model for an **agrifood system** considers the possibility and consequences of defining feeding as a commons, in contrast to a model of agrobussiness that makes the small producers dependent on privative knowledge, like patents on seeds, fertilizers, pesticides, and other inputs. Community struggles against big biotechnological corporations have recovered and re-opened the commons of agricultural knowledge and resources with increasing potential to reorganize food production, distribution and consume. Parallel to agricultural production, **biodiversity** plays a central role on public policy making regarding the intersection between knowledge and biological commons. The biological diversity

14 https://stateof.creativecommons.org/report/

of Ecuador (and many other countries) is being explored and exploited by big corporations to extend patenting into natural resources, to be later used by the pharmacom industry (and other forms of industrial commodification of biological knowledge) that imposes huge royalties to consumers and creates obstacles for further research. Governmental restrictions to access biological samples is shown to be of little value to avoid this kind of exploitation, where sampling is practically impossible to control and bio-knowledge flows already in a global scale as information (and not in the form of material samples). Regulatory models of open research access and community-based collaborative management of resources and research procedures can be promoted instead to foster research acceleration together with community benefitting. Open design and distributed **manufacturing** is quickly spreading as an alternative to an industrial model of cognitive capitalism that boosts private benefit of large corporations via accumulation of immense patent stocks at the cost of reducing effective innovation, and social benefit. The quick spread of 3D printing manufacturing and open collaborative design is offering sustainable alternatives. Finally, and despite the considerable lowering of energy costs associated with digitalization in the knowledge societies, none of the above transformations would be possible without a sustainable model for **energy** gathering and distribution. The currently dominant model is open to big vulnerabilities, centralized power struggles, global geopolitical dominance and ecological exploitation. Indeed, it is an indispensable and often unnoticed part of the productive transition. Alternative energetic matrices balance demand through increased presence of knowledge and citizen management, together with the proliferation of local energetic productive solutions based on free knowledge and distributed networks.

The third stream covers Institutions, Communities and Society, and focuses on the new models of institutionalization, governance, community management, legal architectures for social and solidarity economy and the demands of traditional indigenous communities for the preservation and development of their wisdom. The institutional structure of **social and solidarity economy** demands an exhaustive analysis to foster the possibilities of this sector, to unlock the potential of social economy in the emerging knowledge economy, to trigger the potential for innovation in the delivery of social services and to define the role of a *partner state* capable to promote and protect these forms of economy. **Originary, traditional and popular knowledge** deserves special attention. It is at the basis of any social knowledge economy in emerging countries but faces the challenges and threats of the coloniality of knowledge more generally, and risks the reproduction of subalternization in this new social, open and common-based knowledge economy. Opposing this situation, FLOK model presents a number of opportunities to protect and empower these type of knowledge (and their associated economies and community lives) and to reverse their situation. In this sense, unlike software communities (for example), traditional knowledge displays a degree of social and ecological integration and embodiment that puts protection and community management of the natural environment at the centre of the associated knowledge economies. Furthermore, originary communities demand a self-steered autonomy on their management of the dialogues and exchanges with the global knowledge economy that deserves careful attention if we are not to reproduce previous forms of domination that can restrain and impoverish and homogenize the knowledge commons. Finally, the knowledge society (particularly its capitalist form) finds its productive centres, its new factories, embedded within

urban hubs of creativity, cultural productivity and consume, technological innovation and trend adoption, together with metropolitan symbolic capital accumulation and the new orderings of social life. It is therefore a critical task for the FLOK doctrine to provide a decent alternative to the increasing threads of the *smart city* as a new (and potentially totalitarian) enclosure of social life, and to some capitalist forms of collaborative economy that span to almost all dimension of metropolitan life (from transport to town-hall governance, from the internet of things to social communication). Parallel to the increasing penetration of corporate power and commodification into metropolitan life, the FLOK alternatives are providing forms of effective community building and collective management of urban resources (from co-working spaces to political participation, from the design and use of public space, like parks and squares, to the co-housing and car sharing). How organized society and public institutions can balance and preclude the commodification and centralization of metropolitan human collaboration is still an open issue, but local governance makes possible the success and expansion of forms of direct democracy and collective management that are harder to implement at the global scale.

The fourth and last stream, Open Technical Infrastructures, covers all the free and open technical solutions that are nowadays available to sustain and articulate the transition to a social economy of open knowledge commons, covering both civil rights, such as free speech or privacy, and economic and social rights. **Connectivity** stands out as a critical infrastructural right for the commons of knowledge and its social economy. The problems of telecommunication oligopolies, the centralization of information flows (particularly of telecommunications in vast parts of Latin America, that, pass through USA even for local connections), the widespread mechanisms of mass surveillance and the huge so-

cio-geographic inequalities in access to the Internet are some of the most urgent obstacles to be solved. Successful alternative models, like Guifi.net free wireless network in Catalonia (with more than 27.000 nodes) or inter-institutional fibre optic consortia are but some examples of how to guarantee connectivity without centralized control. The increasing potential of open **hardware** is providing new production models based on shared knowledge and social collaboration. The extension and potential of open hardware solutions are still limited, in comparison with the big hardware corporations (whose industrial complexes are difficult to substitute), but boost social innovation, DIY and do-it-together solutions that satisfy many of the needs for local and distributed economies, providing great flexibility and maximal freedom together with the distributed design intelligence and developing support of online communities. But it is at the layer of **software** where Free/Libre Open Source infrastructures provide nowadays the highest potential to almost completely substitute proprietary and capitalist modes of production and management. Both as an economic sector in itself and, most importantly, as an infrastructural provider, FLOSS is the flagship of the FLOK society model. It has shown the potential for free and open knowledge production and distribution together with community governance. Part of its potential lies on the recursive nature of software production: the creation of tools to make tools to make tools. When this recursive power is free and open, it is almost inevitable that prosumer communities emerge around projects and make use of this tools to communicate and organize themselves. Moreover, all these tools and the social know-how of collaborative production and governance, hold the potential to spread to all the layers of the FLOK society we just outlined above. Despite the lobbying and economic and social pressure made by big software corporations, the suc-

cess of FLOSS is global, undeniable and almost irreversible. A few bytes of raw data can provide enough insight about the contemporary strength of the free software revolution: (a) the total production cost of the 419,776,604 lines of code that compose the Debian distribution of GNU/Linux amounts to 19 billion USD[15], (b) 98% of the supercomputers and 81% of the web servers in the world use free software[16], and (c) the estimated savings of using free software infrastructure in the EU's economy amounts to 114 billion Euros per year[17]. All this is possible without the mediation of intellectual property as a form of commodification of knowledge and is possible without centralized control of knowledge resources or distribution and it is often made possible precisely thanks to radically democratic communities, like Debian[18].

The picture that emerges from the streams and topics we just covered is the landscape of a powerful **social economy of open and common's knowledge**, based on the principles of reciprocity, mutuality and common good, which are also the foundations of a civil society, of an autonomization of labour from capital and the foundations of social and solidarity economy, adding the potential of knowledge as a resource that is virtually inexhaustible and whose marginal (reproductive) cost tends to zero. However, the full flourishing of the FLOK landscape demands the removal of severely guarded fences and obstacles that are both natural, or rather naturalized, and artificial. As we saw, the emerging alternative ecosystem demands the liberation of open and

15 http://blog.james.rcpt.to/2012/02/13/debian-wheezy-us19-billion-your-price-free/

16 http://www.top500.org/statistics/list/ and http://w3techs.com/technologies/overview/web_server/all

17 Daffara, C., Velardo, M., Ramsamy, P., & Domínguez, M. (2013). *Impacto de la reutilización del software de fuentes abiertas en la Economía (Dossier)*. CENATIC.

18 https://www.debian.org/intro/about

commons' knowledge from multiple forms of enclosure and privatization (from biotechnology patents of nature to proprietary software present on computers around us).

The paths ahead also prefigure important struggles in the domain of **social and political organization**. Deep transformations of institutional forms of government in combination with new models of governance and collective management are already straining for hegemony against neoliberal and corporate powers. The adoption of new social, economic, political, technological, democratic and decentralized models face the concentration of power into market-state complexes within capitalist knowledge economies and their combined resistance to change. It is only through the deepening into more democratic societies that the flourishing of the FLOK society can take place. This requires, in turn, the deployment of open, free and collectively managed infrastructures together with legal and socio-cultural frameworks geared towards the promotion and protection of the rights of access to knowledge. The struggles for corporate and governmental transparency and accountability, the demands for a deeper and genuine citizen participation and the urge for cultural and technological sovereignty are also ongoing struggles that remain critical to the success of the FLOK society.

In this context, it is worth noting that the value of the *Buen Conocer / FLOK Society* project, and its doctrine, lies not only in its research or policy content but also, and importantly, on the form of its development, on the dynamics of the underlying collaborative research, on the institutional innovations that made it possible and the massive participatory involvement that nurtured it. Not without difficulties and despite the wide margin for improvement on the challenges faced by a project of this scale and scope, an estimate of

1500 people (from more than 15 countries) have taken part throughout the development of the project, 500 of which have made tangible direct contributions to the generated knowledge. Citizen participation workshops were conducted in each of the Ecuadorian provinces, international mail lists have joined researchers of multiple fields and working groups and dozens of research meetings brought together stakeholders, community leaders, citizens, public servants and academics alike into a networked conversation. The main goal of the *Buen Conocer / FLOK Society* project has been the articulation of a process that made possible the contributions of vast sectors of the population that have too long being excluded by the dynamic of cognitive capitalism from the knowledge economy and from the political life altogether. New regimes of knowledge production and distribution can be the key, not just for a necessary economic transition, but also for a radically democratic one. From the Ecuadorian context, the FLOK doctrine has sought to learn and contribute to the virtuous circle of knowledge↔governance↔wealth that lies at the heart of our next democratic revolutions.