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The Political Economy of Information Production in the Social Web: Towards a „Partner State Approach”

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Declaration: Hereby I declare that this doctoral thesis, my original investigation and achievement, submitted for the doctoral degree at Tallinn University of Technology has not been submitted for any other degree or examination.

/Vasileios Kostakis/

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CONTENTS

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III Kostakis, Vasileios. 2011. "The Advent of Open Source Democracy and Wikipolitics: Challenges, Threats and Opportunities for Democratic Discourse." *Human Technology: An Interdisciplinary Journal of Humans in ICT Environments* 7 (1), 9-29.

IV Kostakis, Vasileios. 2011. "Commons-Based Peer Production and the Neo-Weberian State: Synergies and Interdependencies." *Halduskultuur – Administrative Culture*, xxx - xxx (forthcoming).

APPENDIX

V Papanikolaou, George and **Vasileios Kostakis**. 2011. "An Essay on P2P Energy Policy." In R. Smite, A. Medosch, K. Mey and R. Smits (eds). *Acoustic Space No. 8: ENERGY*. Riga: RIXC; Liepaja: LiepU MPLab, 26-30.

PREFACE

This thesis distills, in a scholarly framework, my academic, professional and even activist work on the political economy of information production during the last few years. Beginning with the University of Amsterdam and the MSc in Business Studies in 2007, via Tallinn University of Technology and the MA in Technology Governance in 2008, via my voluntary work for the P2P Foundation to the involvement, in the role of external consultant for e-governance issues, with the office of the Greek Prime Minister George Papandreou, the dissertation both develops and summarises the most important and, I hope, most relevant aspects of all these activities. Two of the essays are, therefore, based on the previous master's theses, but they were written and published after the degrees had been awarded and thus could be part of the present accumulation.

The word *preface* is an alteration of the Latin *praefotio(n-)*, i.e. words spoken beforehand. In the case of the current thesis, this is not easy, as the author's desire is to express his gratitude to those who have contributed to the realisation of this project, and to shed some light on the circumstances under which the dissertation was completed. It is really hard to find the appropriate words that successfully describe the greatness of the support I have been receiving during the last few years. I was blessed to stand on the shoulders of giants.

First of all, my supervisor, Professor Dr. Wolfgang Drechsler, has been and remains a true *Doktorvater* in the full sense of the word. His critical feedback and demand for high standards as well as his unwavering support have greatly influenced my academic and personal development. Professor Drechsler's criticism on the New Public Management "which mistakes the most basic requirements, particularly those of a democracy" (Drechsler 2001, 15), and his idea that "the interaction of the state, the economy and the third sector is what needs to be discussed in order to get anywhere" (20) have to some extent given birth to the current work. I am especially grateful that, after many discussions, he let stand both my approach and my method as well as many judgments and expressions even where he disagreed with them or would have preferred things to be phrased differently. I am also deeply indebted to my mentors from the P2P Foundation, Michel Bauwens and Dr. George Papanikolaou. My first tentative pursuits of a Commons-oriented civilisation started in the P2P Foundation, back in 2007, when I had the chance to take part in many intriguing discussions about the emerging modes of information production and to witness its potential and drawbacks not only from a theoretical perspective, but also from the subjective standpoint of an activist. In addition, my memorable professors Carlota Perez and Rainer Kattel from Tallinn University of Technology have offered invaluable help at my life's crossroads. Professor Perez's concept of Techno-Economic Paradigm Shifts and her famous theory of great surges, as well as her pieces of advice in private discussions we had, have enormously benefited my

work's worldview. Professor Dr. Kattel has played a key role in the course of the MA in Technology Governance as a great advisor.

Further, several parts of this thesis have considerably benefited from fruitful cooperation with Dr. Axel Bruns, Ilias Katsouras, George Dafermos, Dr. Tarmo Kalvet, Dr. Veiko Lember, Egert Juuse, Ingbert Edenhofer and the unknown reviewers from the journals where parts of this dissertation were published. I am grateful to Theodoros Karounos, Thanasis Priftis and Dr. Pavlos Hatzopoulos from the office of the Greek Prime Minister and the board of the think tank Republic that primarly investigates the political economy of the Web, who gave me the chance to become an insider in the Greek political scene. Greece, a state in deep crisis, which desperately needs new approaches to deal with the challenges facing her now and in the immediate future, served as a good chance to see, through real life application, the potential and the drawbacks of certain concepts which this thesis deals with. This, along with my own Greek background, is the reason for the prominent role of Greek case studies throughout many of the essays herein, but for the purpose of this dissertation, they are examples, not the main reason for the investigation as such, which aims at a more general perspective.

Last but certainly not least, I would like to thank my parents Nikos Kostakis and Panagiota Papaioannou as well as my brother Chary Kostakis for understanding my aspirations and encouraging my effort since its very beginning. It is to them that this thesis is dedicated.

INTRODUCTION

Scope and aim

According to Horkheimer (1895-1973), one of the central figures of *the Institut für Sozialforschung* (Institute for Social Research) and the Frankfurt School (see only Wiggershaus 1995; Scheuermann 2007; Bottomore 2002) and one with his own, specific important social philosophy (see briefly Wiggershaus 1998; Benhabib et al. 1993; Schmidt and Altwicker 1986; Drechsler, Hilligen, and Neumann 2003 for a largely Horkheimerian perspective on contemporary society and state), knowledge can and should change society, and thus a theory can be considered critical to the extent that it seeks human emancipation. (Horkheimer 2002) Hence, in a broader sense, this dissertation contributes to the development of a Critical Theory not oriented towards the preservation of contemporary society, but to "its transformation into the right kind of society." (2002, 218) Its goal is to contribute to the narrative about the transformation of modern capitalism into a consensual form of social life in a society shaped by reasonableness, peace, and happiness, and to increase freedom in circumstances of domination and oppression. (2002) As Horkheimer maintains, any truly critical theory of society "has as its object human beings as producers of their own historical form of life." (1993, 21) This dissertation is consciously guided by the philosophical and methodological views developed in Horkheimer's work as a specific mode of the Frankfurt School, especially his seminal inaugural address as director of the Institution of Social Research (1993) and his famous essay on "Traditional and Critical Theory" (2002), which coined the latter concept to begin with. (See only Dubiel 2001; generally, see also Horkheimer's and Adorno's *Dialectic of Inquiry*, 2002) These views offer an alternative to the currently dominant views of social inquiry, such as "technocratic" (Habermas 1971; 1988) naturalism – priority given to the third-person or explanatory framework with the social scientist as a detached observer – or anti-reductionism of interpretative social science – priority given to the first-person perspective. In the Horkheimerian vein (Held 1980, 188):

> The limitations and one-sidedness of the individual, empirical sciences are to be superseded not by rejecting out of hand experiences won through methodical research, but by reconstructing and reinterpreting their works in the total context to which their concepts and judgements refer.

Naturalistic and Hermeneutic approaches may compel the scholar to follow either the third-person or first-person perspective, while in critical social science, taking a complex perspective and the combination of different points of view should be required, with the aim to go beyond the presentation of the concrete historical situation and to stimulate change. (Horkheimer 1993; 2002) The worldview which "formalistic" scientific approaches offer considers radical change a visionary speculation of an unrealistic nature – "The mythical

scientific respect of peoples for the given reality, which they themselves constantly create, finally becomes itself a positive fact, a fortress before which even the revolutionary imagination feels shamed as utopianism." (Horkheimer and Adorno 2002, 33) For Horkheimer, as Held (1980, 178-179) comments, "society is a totality which is continuously restructuring itself" while "progress is not guaranteed in history", as it depends "on the productive and reproductive practices of historically acting subjects." The political task that, amongst others, this thesis has taken up is to provide theories for liberating "the individual from the conditions of individualism" (Horkheimer in Held 1980, 194), i.e. from the idea "that the individual, pursuing his own interests at the same time automatically serves the common interest of the whole." (Frankfurt Institute for Social Research 1973, 51) In 2011, it may be worth mentioning that while Horkheimer's approach is surely not the only sensible approach to social inquiry, it certainly ("still") is a legitimate and well-established one, and one that has been consciously chosen for this thesis because it fits both the topic and the author's outlook.

This interdisciplinary study therefore attempts to illuminate problematic aspects of the current social reality, to identify actors who might change it and to provide standards for criticism and realistic practical ways for social transformation, to the extent that all of this is possible. In a globalised world, where a considerable amount of nations – which have passed through manufacturing-based economies – move on towards information-based structures of society, the Internet's impact extends beyond a restricted technocratic sphere. Hence, in this research project, the interrelations of Internet, Society and Democracy are discussed, under a dialectical spectrum. That is to say, their relation is not one-dimensional, but it is characterised by ambivalent elements in a field of fundamentally contradicting tendencies that simultaneously pose potential opportunities and actual risks. (Fuchs 2007) The ambivalent nature of the aforementioned relations can be observed in the contradiction between co-operation and competition; accumulation and sharing; isolation and communication; censorship and freedom of expression; cultural collapse and collective cultural creativity; capitalist production and the Commons-based one. On the one hand, in mass-media, public and academic discourse arguments are developed regarding information monopolies, digital divide, electronic surveillance, networked individualism, individualised e-learning, commodified virtual communities, online manipulation, human isolation, e-criminality, moral decline, child pornography, cyber-bullying, language decay, information overflow, cultural amateurism, plagiarism, etc. On the other hand, the Internet is portrayed as a facilitator of democracy and freedom; a communication and co-operation enabler and booster; an effective educator (co-operative e-learning); a powerful knowledge base (see for example the free encyclopaedia Wikipedia[1], the LibriVox[2] project, which is a digital

[1] http://www.wikipedia.org/. All the URLs in the footnotes were retrieved on 5 March 2011.

library of free public-domain audio books read and recorded by volunteers, or the open-access, open-data and open-publishing movements) and culture distributor (for instance, artistic creations given away under different Creative Commons[3] licences; not to mention the file-sharing systems); a platform for innovation in software design (representative examples are the myriad applications of FOSS[4], i.e. Free/Open Source Software, or the Apache[5] Web server that provides a foundation for the development of those collaborative software projects); a multitude mobiliser (from petition-signing to the online organisation of massive protests and demonstrations); a field for independent, transparent journalism (from the global participatory networks of journalists in the alternative media hub of Indymedia[6] to the whistle-blower site of Wikileaks[7]), etc.

As stated above, the world has been shifting towards information-based structures with information production in the limelight. Even since the late 1960s, some referred to a new type of economy based on knowledge production. (Drucker 1969) In his 1976 book *The Coming of Post-Industrial Society: A Venture in Social Forecasting*, the sociologist Daniel Bell was amongst the first to outline a new kind of society: The "post-industrial" society, which is service-oriented and information-led (emphasis on financial services, marketing, software, science, culture). In a nutshell, over the last few decades, two parallel shifts have taken place: Not only did the most economically advanced societies move towards an information-based economy, but the declining costs of ICT (Information and Communication Technologies) also made them available to a much wider fraction of the world population. (Benkler 2006; Castells 2000, 2003, 2009; Bell 1976) According to Benkler (2006), this led to the creation of a new communicational, interconnected, virtual environment in which a new social productive and exchange model is emerging, which is radically different from the industrial one. This new paradigm is described as Commons-based peer production, which reduces the value of proprietary strategies, making public, shared information more important, and allows for large-scale, co-operative information production efforts. (Benkler 2006) Bruns (2008) calls this "produsage", where produsers (producers + users) simultaneously innovate, produce, distribute and consume, impregnated with an ethos of participation, sharing, communication and collaboration.

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2 http://www.librivox.org/

3 http://www.creativecommons.org/

4 There are myriad of FOSS projects. Some prominent ones can be found at http://www.linux.org/, http://www.gnu.org/, http://www.ubuntu.com/, http://www.mozilla.org/

5 http://www.apache.org/

6 http://www.indymedia.org/

7 http://www.wikileaks.org/

Therefore, peer production, in this context, is a third mode of production that has been enabled through Internet-based co-ordination, where decisions arise from the free engagement and co-operation of the people who coalesce to create common value. It is a mode arguably more productive concerning the creation, production, and distribution of information value, in which the creative energy of multitudes is co-ordinated into meaningful projects without the traditional hierarchical organisation. (Bauwens 2005a; Benkler 2006) In addition, it has frequently been argued (Bauwens 2005a; Benkler 2006; Lessig 2004) that at the same time, culture is becoming more participatory and self-reflective, "where many more of us participate actively in making cultural moves and finding meaning in the world around us." (Benkler 2006, 15) Millions of blogs, the open-access and open-content movements and the free dissemination of music, photography and literature via Commons-oriented licences provide an account of the "free culture movement".

On the other hand, Keen (2007) asserts that this "free culture movement" is actually a threat to our culture, and thus to humanity, being full of seductive utopian delusions and fostering low-quality creativity, while Bauerlein (2008) argues that the Internet stupefies young people and jeopardises our future. Furthermore, Lanier (2010) compares the collaborative communities of peer-production projects to Fascist, Stalinist or Maoist-style collectivism to reach the conclusion, in almost the same vein as Keen (2007), that the Internet users are marching towards a dystopia under the guidance of an authoritarian collective voice.

Moreover, lately it has been common to consider the Internet to be an unprecedented tool for political progress, as it arguably celebrates and fosters some crucial democratic values, such as transparency, openness, autonomy and freedom. However, "history", as Diamond (2010, 71) writes, "cautions against such hubris. In the fifteenth century, the printing press revolutionized the accumulation and dissemination of information, enabling the Renaissance, the Protestant Reformation, and the scientific revolution. On these foundations, modern democracy emerged." But also the printing press enabled the emergence of the centralised state and facilitated censorship. (de Sola Pool 1983; Diamond 2010) Today, not only authoritarian states such as China and Malaysia are trying to control the Internet, but countries of the Western world as well. However, in China, for instance, although various quasi-Orwellian control practices of the Internet are exercised, "there is too much communication and networking … for the state to monitor and censor it all … Chinese netizens – particularly the young who are growing up immersed in this technology – are inventive, determined, and cynical about official orthodoxy … they quickly share what they learn." (Diamond 2010, 74) It is obvious that there is a battle amongst governments, which are trying to turn the Internet into a tightly controlled information medium by the advanced filtering technologies that companies from the Western world are developing (and quite often are sold to authoritarian

regimes), and multitudes who are "quickly sharing what they learn" and are trying to keep the medium independent. Some of them also take part in this new social productive mode of Commons-based production, whose import has been grasped and interpreted in different manners. For instance, Virno (2001), reading Marx's Grundrisse (1993) and building on the concept of the "general intellect", wonders whether the public character of the Commons-based peer production can form the actual basis for a new, radical form of democracy and of a more autonomous society free of capitalist relations. Whereas capitalists of information production (say for example Google[8], Yahoo[9], Facebook[10] or Apple[11] with its new application-based economy) see the creative multitudes as a chance to achieve economies of aggregated attention, labour valorisation, appropriation of social innovation and thus profit maximisation.

In the midst of all these conflicting views, processes, changes and twists, this thesis first comes to sketch the political economies of the information production that is taking place with the aid of the Internet, and mostly through the so-called Social Web, giving rise to the notion of the information Commons. Next, it is attempted to examine whether the information Commons enhance democracy, and to shed light on the transitional concept of the Partner State Approach, which, similar to the post-World War II welfare-state experience, can constitute a pragmatic historical compromise among the civil society – which directly produces use value – and the private sector – where the creative entrepreneurial spirit flourishes and creates several positive and negative externalities – and a step closer to the realisation of the utopia of a society without injustice, where the human being, to put it in the Horkheimerian style, produces its own historical form of life. After all, utopias, to quote Drechsler, "are both crucial in human development and necessary for the formulation of any kind of policy at all." (2001, 10) This study looks, within an ambivalent context that does not ignore the problems and threats, for the possibilities for human progress, with the aim to contribute to the understanding of the phenomena under investigation (with a focus on chances and positive results), based on the outlined general outlook. The formulation of the Partner State theory is in line with the demand for creative post-capitalist rhetoric and is the distillate of the discussion that went before. Last but not least, it is important to note that the reviewed literature and cases do not try to be exhaustive or all-inclusive; they just represent one specific path of inquiry and analysis, but, as stated, the one that to me is the most appropriate and most interesting. In the end, I adopt the approach of the Frankfurt school, especially Horkheimer's thought, to "point to the possibility … of an alternative path to social development." (Held 1980, 14)

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8 http://www.google.com/

9 http://www.yahoo.com/

10 http://www.facebook.com/

11 http://www.apple.com/

1. The Political Economy of Information Production in the Social Web

First, this chapter deals with the essential concepts of "information production" and "Social Web", showing how they are understood and used here. It is assumed that information production on the Web is mainly taking place within either proprietary-based or Commons-based platforms. The productive processes of those two distinct "workplaces" of information production not only share certain characteristics, but also have several crucial differences. So next, these two modes of production are discussed in independent sections investigating how production is organised in each case. Last, the chapter focuses on the dynamics of information Commons and reaches some conclusions that advance the discussion for the following chapters.

1.1. Why "information production"?

In the present context, the term "political economy of information production" connotes the study of the structural relationships of information production ("information" stands for culture, knowledge and data and is often identical, especially in the Web literature, to the word "content") and how they can affect political institutions and outcomes. In other words, the processes of production, distribution, and consumption of information and their relation with law, custom and public policy are all put under examination. Particularly, the focus is on the production that is happening with the aid of the so-called social Web, Read/Write Web or Social Web, which facilitates the ground for user-generated content. (Benkler 2006)

It is important to highlight that although the concept of "information production" does not explicitly refer to the processes of consumption and distribution, here the aforementioned term is related to all of them. This is so for numerous reasons. Following – although this is wildly unfashionable now (but certainly in line with the Frankfurt School approach used here) – Marx's work (centrally *Das Kapital* I, 1992; and its basis, the *Grundrisse*, 1993), we become familiar with the significant impact of the relations of production to the formation of the socio-economic reality, which at least as a heuristic insight about causes and consequences of the social living-together has not lost its interpretative utility today. Moreover, in *Grundrisse* (1993, 89) Marx argues that the typical value chain, which includes the processes of production ("the generality"), distribution ("the particularity") and consumption ("the singularity"), is "admittedly a coherence, but a shallow one": Things are much more complex than they seem, especially in immaterial production.

Information is circular, in the sense that it is both input and output (in order to write a paper, other papers are required) to its own production (Benkler 2006), therefore it becomes very difficult to distinguish production, distribution and

consumption of information. Actually these processes are completely interwoven: The "value chain is transformed to the point of being entirely unrecognizable." (Bruns 2008, 21) For instance, in the ecology of information Commons, there is a "seemingly endless string of users" who act incrementally as content producers and gradually extend and improve the information present in it. (Bruns 2008, 21) As Bruns (2008, 21) writes, "whether in this chain participants act more as users … or more as producers varies over time and across tasks; overall they take on a hybrid user/producer role which inextricably interweaves both forms of participation." Hence, the traditional understanding of production becomes rather a particular branch of production, with information production as a social body that is active "in a greater or a sparser totality of branches of production." (Marx 1993, 86)

1.2. The Social Web and participatory platforms

"Social Web", "Read/Write Web" or "Web 2.0" are terms that refer to a relatively new set of Internet applications that facilitate user-generated content and use certain media producing technologies, such as HTML5, CSS 2.0, Ajax, Java and Flash, which make web services lighter and faster. These technologies contribute to a new design of the Web, and thus of the Internet, transforming it into a smooth navigation and production platform. (article **I**) In this thesis, I prefer the term "Social Web", as it addresses better the social character of the participatory architecture that those technologies offer. According to O'Reilly (2006), the Social Web induces social creativity, collaboration and information-sharing among users, who can own data on a site and exercise control over it. It gave rise to several business ventures such as Facebook, Flickr[12], MySpace[13] and YouTube[14], which generate huge profits. (article **I**) For instance, in October 2007, Microsoft bought 1.6 % of Facebook for $246 million, and a year later, Google Inc. had reached a deal to acquire YouTube for $1.65 billion. (article **I**) These proprietary-based, but participatory, platforms create sharing/aggregation economies that are not Commons-oriented. Users share or contribute information, which can be either a product of their own or just someone else's creation, most of the times with non-monetary motives such as enjoyment, recognition, reputation and knowledge. (article **I**) However, they do not directly or consciously participate in order to create common value: They are not part of a certain project that follows certain rules and has set goals to produce relatively clearly-defined results in an ecology of common ownership, as happens in Wikipedia or FOSS projects. Platform owners make money from the aggregated attention function, mainly through advertising (for example MySpace) or based on the Freemium model (for example Flickr), as explained by Anderson (2009), or in other cases, they exploit the collective intelligence for their interests. The latter is well-summarised in Howe's (2006) words "it's not outsourcing; it's

[12] http://www.flickr.com/
[13] http://www.myspace.com/
[14] http://www.youtube.com/

crowdsourcing", in a *Wired* article that brings to the fore cases from the network TV market to companies such as Procter & Gamble or Boeing. A combination of the aforementioned practices or other innovative (for example, think of Ebay[15], which is actually an intermediary that creates markets by enabling and exploiting users' interactions, or of Amazon, which is an e-shop with integrated participatory technologies) or traditional models (for instance a typical e-seller) are also possible. On the other hand, the Social Web technologies and the Internet in general have given rise to the sphere of information Commons; think of FOSS (Ubuntu, Mozilla Firefox, etc.) or Wikipedia. Those projects are developed around communities of users on Commons-based platforms, which are quite autonomous, and their results belong to the Commons pool. Nevertheless, under certain conditions, those communities appreciate the involvement of for-profit entities as they can offer support and thus strengthen the Commons sphere. (Bauwens 2005a; 2005b; 2007a) In the next two sections, the processes of information production within both proprietary-based and Commons-based platforms are described in more detail.

1.3. Proprietary-based platforms

Graham (in Kleiner and Wyrick 2007) states that there are mainly three roles one can assume in the Web: The professional user, who is an advanced participant in Web production with monetary incentives, amongst others; the amateur user, who plays a significant role especially in proprietary-based platforms' production and is discussed in this paragraph in detail; and the final user, who is not eager in taking part directly in the Web production and just distributes and/or consumes information. A fourth category can be added, that of the hacker, who carries some characteristics of the professional (i.e. profound and specialised knowledge) and some of the amateur (i.e. participation on a non-profit basis, mostly induced by motives such as knowledge, communication, romanticism or reputation; it can be either some or all of them). (article **I**) In the years of the early Web, amateur users, i.e. those who were willing to participate in the production but lack the necessary knowledge to handle the convoluted means of production, were incapable of producing because of the stuffy and intricate nature of the early architecture of the Web. (article **I**)

Following the argument developed in the essay "The Amateur Class, or, The Reserve Army of the Web" (article **I**, 457-458), the formation of the amateur class as a class comes with the advent of the Social Web, when the amateur starts to have control over the means of production. In the labyrinth of the early Web, there was a surplus population eager to participate in production. (article **I**) Building heuristically on the class theory developed in Marx's work, through which we can really gain some insight into the structural reality of the Social

[15] http://www.ebay.com/

Web, it could be argued that the reserve army of the early Web was composed of loose amateurs who had not yet formed the amateur class, as happened later in the Social Web. In the same vein, the reserve army of the Social Web still consists of some amateurs who are not advanced enough to participate in immaterial production. This is the latent part of the working population, which consists of those that are not yet fully integrated into Social Web production. The producing amateurs, no matter their age, are regimented in platforms, either proprietary- or Commons-based, and organised in networks, while platforms are being smoothed in order to enable participation for the surplus population. With the advent of the Social Web, the exploitation of collective intelligence and creativity has been reborn, regardless of whether it is profit- or Commons-oriented.

Amateurs, who are at the core of proprietary-based platforms' production, remain dependent on the owners of the platforms in the same way that the owners are dependent on amateurs, who add value to the business ventures. (article **I**) This does not imply that a hacker or a professional does not use platforms, such as Facebook or Flickr, adding value to them; however, it is the amateurs who came to the fore in the Social Web, when they started having control over the means of production. (article **I**) The owners of the platforms can be considered as the Social Web capitalists, who renounce their dependence on the current regime of information accumulation through intellectual property and become enablers of social participation. (Bauwens 2005a; 2005b; 2007a) They combine open and closed elements in the architecture of their platforms to ensure a measure of profit and control. (Bauwens 2005a; 2005b; 2007a) The production of proprietary-based platforms leads, amongst others, to two types of economies: The sharing/aggregation economy and the crowdsourcing one.

In sharing/aggregation economies, for instance Youtube or Myspace, users share creative content while the owners of the platform sell their aggregated attention to advertisers. (article **I**) Moreover, platforms like Flickr not only make money from advertising, but also from the so-called Freemium model: Users, who share their creations through a platform of aggregated attention, want to gain benefits from more services and pay subscription fees for getting a pro account. (Anderson 2009) But still, aggregated attention is normally a precondition for a Freemium model to work (for example, it could be assumed that subscribed users have joined the Flickr platform that includes thousands of people interested in photography, and thus the former can share and exhibit their work to a large community). Even the search engine of Google gains its competitive advantage from its capability to exploit the vast content created by users, as the ranking algorithm depends on the shared links towards, say, a web-page. (Brin and Page 1998) And like Flickr, Google makes money from both advertising and Freemium (sells special services to companies). Also, with the advent of the Social Web, a torrent of user-driven porn sites, like Youporn[16] or Redtube[17], has

[16] http://www.youporn.com/

been unleashed, where users share porn videos and photographs arising ethical issues such as that of privacy (for example, one can upload a sex video with one's ex-girlfriend with a revenge motive) or of child pornography. These proprietary-based platforms generate profits from combining the advertising and the Freemium models.

So, in sharing/aggregation economies, although the shared content has use value for users, it is basically the aggregation function and/or the Freemium model that generates profits for platforms owners. Crowdsourcing economies are not very different to the sharing ones because there, users still "share", in a way, content, which is information. However, in crowdsourcing, the main recipient of users' input is normally the company itself. It is the shared content that contributes directly to firms' main functions and thus to profit generation. Compared to the sharing/aggregation economies, the profit motive for users here is a bit stronger, mainly in the form of a prize. Howe (2008) in *Crowdsourcing: Why the Power of the Crowd is Driving the Future of Business* offers case histories such as iStockphoto[18], a community-driven source for stock photography, and InnoCentive[19], where firms offer cash prizes for solving some of their thorniest development problems. Other crowdsourcing platforms are the 99designs[20] or the DesignCrowd[21], which both deal with design (from logo design to T-shirt design). In the Web literature, one can find a myriad of different understandings and interpretations of timely concepts and buzzwords, such as sharing economy or crowdsourcing. In this dissertation, the first simple distinction is made on the basis of the "workplace" of information production (proprietary- and Commons-based platforms) and then of the business model that is followed in each case (sharing/aggregation economy and crowdsourcing, which are quite relevant concepts). In a nutshell, platform owners, who are crucially dependent on the trust of user communities, exploit in different ways the aggregated attention and the input of the networks as they enable it. (Bauwens 2007a) As Bauwens (in article **I**) points out, platforms like Youtube, Flickr or Myspace are dangerous as trustees of the common value that is created due to their speculative nature. The former stands for sharing/aggregation economies, because in crowdsourcing, most of the times, the rules and the processes are quite clear: Users produce value for firms, and they get certain prizes or rewards in exchange (sometimes they may get nothing more than the pleasure of contribution). According to Rushkoff (2007a), crowdsourcing can be understood "as kind of industrial age, corporatist framing of a cultural phenomenon." A company sees this phenomenon positively as "this new affinity group population to be exploited as a resource." (Rushkoff 2007a) No common

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17 http://www.redtube.com/

18 http://www.istockphoto.com/

19 http://www2.innocentive.com/

20 http://www.99designs.com/

21 http://www.designcrowd.com/

value is created, in contrast to many cases of the sharing/aggregation economy, where users' input results in the creation of vast common-use value.

The Social Web exhibits both emancipatory and exploitative aspects, and the role of the users, whether they be amateurs, professionals or hackers, is to foster one over the other. (article **I**) It may seem that users give up some rights to the owners of the platforms to receive the chance to create, interact and satisfy their higher needs. (article **I**) On the other hand, the owners aim at maximising the aggregated attention in order to generate profit. Is this really a win-win situation, or can user communities do more as key agents of social change? This remains to be answered within the next sections, where the sphere of the information Commons will be discussed. Already, Diaspora[22], according to its website "the privacy aware, personally controlled, do-it-all open source network", seems to be an alternative to the proprietary-based platform of Facebook. It is still unclear whether Diaspora, which is under construction, represents one of the new ways of thinking that, according to Bauwens (2007a), are needed for the continued strengthening of sharing and Commons communities. Sharing its code, Diaspora allows users to create their own compatible networks. Diaspora seems to follow the first steps of a typical FOSS project, i.e. at least in the beginning, it can be assumed that it directs its attention to "geeks". Thus, if this is the case, it is unsure whether "geeks" would embrace such a call. I would speculate that Diaspora will not be an instant success as, say, Facebook has been and would need time, like other FOSS projects such as Android, to catch the attention of amateurs.

1.4. Commons-based platforms

The modern history of information (or digital) Commons, i.e. socially created value that belongs to the public domain, begins with FOSS in the mid-1980s. Later, forced by the rapid development of the Internet, it is Wikipedia, Peer-to-Peer (P2P) file-sharing systems and platforms driven by voluntary communities like LibriVox. The Social Web is emerging, unleashing torrents of information to the public domain under Commons licences (think of the Creative Commons Licenses or the General Public Licenses): From the blogosphere to alternative media hubs such as Indymedia or even the controversial Wikileaks, and from the Internet Archive[23] platform to several openly accessible, peer-reviewed journals. A huge number of the aforementioned projects, such as FOSS or Wikipedia, are developed through the collaboration of dispersed communities of volunteers organised in Commons-based platforms, i.e., platforms that are not owned by a private entity geared towards profit maximisation, but that are owned by non-profit entities (take for example the Wikimedia Foundation that supports the Wikipedia project or the GNU[24] project initiated by the Free

[22] http://www.joindiaspora.com/
[23] http://www.archive.org/
[24] http://www.gnu.org/

Software Foundation). Although it is discussed in a following section, it is important to emphasise here already that there is a difference between profit maximisation, which may have several negative externalities to society, and profit generation, which can contribute to the sustainability of a collaborative project.

The term "information Commons" conceptualises the deep affinities amongst all these forms of online collaboration and helps validate their distinctive social dynamics and generalise them as significant forces in economic and cultural production. (Bollier in Laisne et al. 2010) In this study, Commons-based platforms are considered to be those "workplaces" of information production where users consciously participate in meaningful projects, producing use value for the public domain. The incentives are mainly non-monetary (Chakravarty, Haruvy and Wu 2007; Lakhani and Wolf 2005; Ghosh 2005), similar to those of the sharing/aggregation economies (i.e., reputation-building; the pleasure of communication; knowledge and experience gaining; fun, etc.) with one main difference: Volunteers share the crucial principles of a common vision and consciously participate in certain production processes. In addition, they normally belong to communities with stronger ties than those, if any, of the communities of proprietary platforms. (Bauwens 2007a) The processes of information production in Commons-based platforms have some certain characteristics which are embraced by the term "peer production".

According to Benkler (2006), peer production is a more productive system for immaterial value than the market-based or the bureaucratic-state ones. It produces more social happiness as it is based on intrinsic positive motivation and synergetic co-operation. (Bauwens 2005a; Benkler 2006) Benkler, in his book *Wealth of Networks* (2006), makes, amongst others, two intriguing economic observations which challenge the mainstream understanding of Standard Textbook Economics (STE). Commons-based projects serve as examples where the STE's assumption that in the economic production the human being solely seeks profit maximisation is turned almost upside-down: volunteers contribute to information production projects, gaining knowledge, experience, reputation and communicating with each other, i.e. motivated by intrinsic positive incentives. (references in articles **I**, **II**, **IV**) This does not mean that the monetary motive is totally absent; however, it is relegated to being a peripheral concept only. (article **I**) Many aspects of human expression, according to Benkler (2006, 461), "are replete with voluntarism and actions oriented primarily toward social-psychological motivations rather than market appropriation."

The second challenge comes against the conventional wisdom that, in Benkler's words (2006, 463), "we have only two basic free transactional forms – property-based markets and hierarchically organized firms." Commons-based peer production can be considered the third one, and it should not be treated as an

exception but rather as a widespread phenomenon, which, however, for the moment, is not counted in the economic census. (Benkler 2006) "Worse", as Benkler highlights (2006, 463), "we do not count them [social production processes] in our institutional design." In STE terms, what is happening in Commons-based projects can be considered, as Bauwens (2005a) maintains, "only in the sense that individuals are free to contribute, or take what they need, following their individual inclinations, with a [sic] invisible hand bringing it all together, but without any monetary mechanism." Hence, in contrast to markets, i.e. the holy grail of STE, in peer production the allocation of resources is not done through a market-pricing mechanism, but hybrid modes of governance are exercised, and what is generated is not profit, but use value, i.e. a Commons. (Bauwens 2005a; 2005b) In a nutshell, bottom-up innovation; collaboration; participation; sharing; community accountability; and intrinsic positive motivation, are key aspects of peer production. (articles **I**, **II**, **III**, **IV**)

Commons-based projects typically flourish in states of abundance, which is arguably a natural, inherent element of information in contrast to the conventional understanding of immaterial production. The latter, through the introduction of intellectual property (IP) in the form of strict patent and copyright law, constantly tries to artificially create scarcities in order to generate profit. IP supporters claim that it offers the necessary motives, i.e. the profit/revenue motive, for information production and innovation to occur. However, there is a vast amount of literature critical of the concept of IP (see for instance Lessig 2004; Boldrin and Levine 2007; Patry 2009; Bessen and Meuer 2009; McLeod 2007; Burrell and Coleman 2005), which maintains that IP is actually a government grant that leads to private monopolies, and can be extremely dangerous for social innovation, culture and society, and calls for change in institutions and laws. For example, Boldrin and Levine (2007) try to show through theory and cases that IP is unnecessary for innovation, and it damages growth, prosperity and liberty. In addition, McLeod (2007) offers an account of examples where IP laws stifle creativity, privatising all forms of expression (from human genes and public space to guitar riffs and Donald Trump's phrase "you're fired"), arguing that the blind embracing of enclosure is against the human right of free speech and common resources. Echoing Lessig (2004), Benkler (2006) makes the point that if this IP amok continues, then the works, say, of Disney Inc. and Elvis Presley will never enter the public domain in the same way as Mozart or Shakespeare. Further, Patry (2009), based on economic data and socio-economic theories, contributes to modern copyright debates, shedding light on the "violence" this monopoly control exerts on discourse, arts and innovation, arguing for a copyright-law reformation that will promote innovation. Information is a non-rival good with zero marginal cost of reproduction, and as Benkler (2006) notices, the public use of information increases its value.

The social production occurring in Commons-based platforms is facilitated by free, unconstrained and creative co-operation of communities, which lowers the legal restrictive barriers to such an exchange, inventing new institutionalised ways of sharing, such as the Creative Commons or the General Public Licenses. (article **II**) This new property forms (described by the term "peer property" coined by Bauwens 2005a; 2005b) allow for the social reproduction of peer projects[25], as they are viewed to be inherently more distributive than both state property and private exclusionary property. (Bauwens 2005a; 2005b; Lessig 2004) In terms of property, the Commons is an idea radically different from the state one (known also as "public property"), where the state manages a certain resource on behalf of the people, and from the private property, where a private entity excludes the common use of it. (article **I**)

The state of abundance in which the Commons-based projects flourish gives rise to new modes of governance as a result of the new productive forces of production, i.e. the combination of means of labour (ICT) and human labour power (person's ability to work; in our case mostly brain-power), while new relations of productions are developed. Hence, if peer production describes the processes of information production within online, collaborative, voluntary communities which produce common value using mechanisms of self-governance, then peer governance is the way that peer production is organised. It is a bottom-up mode of participative decision-making, where decisions arise from the free engagement and co-operation of producers. (Bauwens 2005a; 2005b) Coffin (2006) mentions some obvious characteristics of successful open source/peer communities. First, membership is open and widespread, premised on participation. The free collaboration among the members is geographically dispersed, asynchronous and organised in networks. (article **II**) Moreover, projects are transparent, and dialogues among participants are normally recorded, with the materials of projects like Wikipedia subject to open review (often, there are mechanisms for institutional history). (article **II**) So, at first glance, openness, networking, participation and transparency appear as the main characteristics of governance in peer projects. (article **II**) More closely, these projects do not operate in strict hierarchies of command and control, but rather in heterarchies. (article **II**) They operate "in a much looser [environment] which … allows for the existence of multiple teams of participants working simultaneously in a variety of possibly opposing directions." (Bruns 2008, 26) Heterachies, following Stephenson (2009), bring together elements of networks and hierarchies and are the most relevant organisational structure, as they provide horizontal links, which allow for various elements of an organisation to collaborate, while optimising individually several success criteria. According to Bruns (2008), they are not simply adhocracies, but ad-hoc meritocracies which, however, are at risk of transforming themselves into more inflexible, strict hierarchies. In addition, following Bauwens (2005a; 2005b), peer projects are

[25] The terms "peer" and "Commons-based" are used interchangeably, as they are almost identical.

based on the organising principle of equipotentiality, i.e. everyone can potentially cooperate in a project – no authority can pre-judge the ability to cooperate. In peer projects, equipotential participants self-select themselves to the section to which they want to contribute. (Bauwens 2005b)

Further, Stadler (2008) submits that leadership in most Commons-based projects is not egalitarian, but meritocratic: "Everyone is free, indeed, to propose a contribution, but the people who run the project are equally free to reject the contribution outright … The core task of managing a Commons is to ensure not just the production of resources, but also to prevent its degradation from the addition of low quality material." Further, benevolent dictatorships are common. (Malcolm 2008) For instance, these can be found in the Linux project, where Linus Torvalds is the benevolent dictator (Malcolm 2008), or in Wikipedia, where Jimmy Wales holds that role. Coffin (2006) highlights the necessity of a benevolent dictator (who typically is one of the founders of the project), adding that the foundation developers and the early adopters set the project ethos as well. The founder, along with the first members, upholds the right to fork. Bruns defines benevolent dictators "as ones of several heterarchical leaders of the community, who have risen to their positions through consistent constructive contribution and stand and fall with the quality of their further performance." (Interview in article **II**)

It is obvious that through such leadership roles, these benevolent dictators may need to push through unpopular decisions. As he notes, "if they abuse that power, theirs becomes a malicious leadership", and what we should expect at this point is "a substantial exodus of community members." (Interview in article **II**) Therefore, following Bruns' narrative, "the continued existence of the project at that moment would depend very much on whether the number of exiting members can be made up for in both quality and quantity by incoming new participants." An oft-cited depiction of the governance processes followed in peer projects, especially in FOSS, is offered by the so-called onion model. (Nakakoji et al. 2002; Ye and Kishida 2003) At the heart of the onion is sometimes a single person, the project leader, most of the times the initiator of the project. Also at the centre, supporting the project leader, there are the core members who have more authority than other project developers, having been involved for a long time with serious contribution work (that is why meritocracy is a substantial characteristic of peer governance). Beyond this, there are other roles for contributors varying on the degree of their involvement (say active developers, peripheral developers and bug fixers).

In article **II**, I studied the governance mechanisms of Wikipedia, in order to get a better understanding of the structural relationships of Commons-based information production. It is true that some of Wikipedia's governance processes differ from those of FOSS projects, Internet Archive, LibriVox and other content Commons. However, examining the shared affinities amongst

such projects, the Wikipedia case served as a good chance to shed light on the basic aspects of governance and management in peer projects. The main conclusions drawn were that peer governance is actually an unfinished artefact that follows the constant reform and refinement of social forms within the community. It is a suitable mode to govern large sources, working more effectively in abundance; whereas in the scarcity realm, democratic – in the form of representation – or market-based modes tend to prevail. However, echoing O'Neil (2009), especially in large-scales projects, open participation with an increasing number of participants makes the governance of the project much more complex. Examining the internal battle between inclusionists and deletionists[26], it was understood that Wikipedia's lack of a clearly defined constitution bred a danger for local jurisdictions where small numbers of participants create rules in conflict with others. (O'Neil 2009) These challenge the sustainability of the peer project. During conflicts, persistent, well-organised minorities can adroitly handle and dominate their opponents. The values of communal evaluation and equipotentiality are subverted by such practices. As Hilbert (2007) remarked, group polarisation is a significant danger that open, online communities face: "Discourse among like-minded people can very quickly lead to group polarization … which causes opinions to diverge rather than converge … [so], it is very probable that the strongest groups will dominate the common life." In these cases, transparency and holoptism are in danger. Decisions are being made in secret, and power is being accumulated. Authority, corruption, hidden hierarchies and secrecy subvert the foundations of peer governance, which are openness, heterarchy, transparency, equipotentiality and holoptism. Moreover, Freeman (1970) argues that in seemingly structure-less groups, hidden structures may impose different things on the rest; this is described as "the tyranny of the structurelessness".

Especially when abundance is replaced by scarcity (as happened in Wikipedia when deletionists demanded a strict content control), power structures emerge as peer-governance mechanisms cannot function well. (article **II**) Hoeschele

[26] The inclusionists argue for a wide coverage of human knowledge, as Wikipedia should feature as many articles as users can produce. The maintenance of a certain relevance and quality for Wikipedia's entries lies at the heart of deletionists' arguments. Deletionists claim that Wikipedia should be more cautious and selective regarding its content. They point to, for example, entries for almost 500 fictional Pokemon characters, indicating that they are harmful to the credibility and public image of the encyclopedia. Many inclusionists maintain that such disparities will disappear on their own, under the condition that Wikipedia is less retrictive editorially, so that anyone can add content about anything. They argue that Wikipedia does not have space constraints like a printed encyclopedia. They point to the fact that a majority of visitors reach specific entries in Wikipedia via search engines, thus never seeing trivial entries. On the other hand, deletionists assert that a certain quality threshold for articles will make Wikipedia more successful. They claim that so many entries for trivial subjects will lead to Wikipedia not being taken very seriously. (see in article **III**)

(2010, 19-20) suggests that there are three ways that scarcity, i.e. "the condition when available goods do not meet demands", can be generated:

> First, the total amount of a good or service can be reduced. For example, the expansion of market activities may reduce the amount of goods provided by nature (such as clean air) … Second, barriers can be placed between people and a good. Of potentially many ways to obtain that good, only one or a few may be left available, leading to the creation of a bottleneck … Third, new wants or needs can be created, or existing ones modified, so that demand for a commodity exceeds supply … All three basic mechanisms not only increase scarcity, but also curtail freedom by forcing increased expenditures on people and reducing available options of how to satisfy their needs.

"Throughout history", Hoeschele maintains, "we can conceive of social power as having been based in part on the construction of scarcity." That is why abundance is a key to Commons-based projects' sustainability. (article **IV**) Peer production reintroduces, and is based on, the importance of abundance, making evident that social imagination and creativity become unpredictable, since an abundant intellect (i.e. the surplus creativity of people) can have access to resources (information), tools (ICT) and goods (information as final product). (article **IV**)

Furthermore, the reintroduction of certain elements of traditional organisation (hierarchy or market) contributes to their sustainability as well (Loubser and den Basten 2008; Benkler 2006), whenever there is a need to manage scarcity. (articles **II**, **IV**) A benevolent dictatorship can be the result of spontaneous hierarchy, in which the leader of the project, whose sole role is to serve the community, has authority which comes from responsibility and not from the power to coerce. (Weber 2004) These elements are, after all, part of what is understood as peer governance – an heterarchical, hybrid mode of organisation which combines traditional modes of organisation with networked-based ones (articles **II**, **IV**); or, to quote Weber, "an imperfect mix of leadership, informal coordination mechanisms, implicit and explicit norms, along with some formal governance structures that are evolving and doing so at a rate that has been sufficient to hold suprisingly complex systems together." (2004, 189)

1.5. Information Commons as bedrock for a consensual form of social life?

So far, light has been shed on the structural relationships of information production with a focus on certain essential concepts for political economy, i.e. labour, property and governance. In proprietary-based platforms, it might seem that we have a win-win model with profit generation for the owners and satisfaction of users' higher needs such as communication, reputation-building and knowledge gain.(articles **I**, **IV**) The owners of the platforms renounce their dependence on the regime of artificial scarcity, celebrating an age of

information abundance while enabling social participation. However, the architecture of proprietary platforms combines open and closed elements to ensure a measure of profit and control. This makes proprietary platforms dangerous as trustees of the common use value. Moreover, issues and problems such as privacy and electronic surveillance; commodified virtual communities and exploitation; and online manipulation and control, come to the fore due to owners' speculative nature. On the other hand, the information Commons economy includes new modes of production, property and governance that seem capable of contributing to the transformation of modern capitalism into a consensual form of socio-economic life. This Commons-based paradigm suggests ways of allocating resources without the guidance of either state planning or markets. The latter can be complementary to it towards a pluralistic, sustainable economy: Beyond ineffective anti-capitalist rhetoric to post-capitalist construction. (Bauwens 2007b)

It is true that the techno-futurist literature is full of optimism, and the peril here is to jump at false promises of hope. The present study, in line with Söderberg (2007), is a search for hope in a time permeated by cynicism and opportunism towards the possibility of social change. As mentioned above, the Internet and its Social Web platforms exhibit both emancipatory and exploitative aspects, and the political struggle of online communities and users is to foster the one over the other. In the next chapters, it is attempted to provide answers to the question posed in the title of this paragraph: Can information Commons constitute the bedrock for a consensual form of social life? Or to put it in another way: In spite of the fact that new forms of control, censorship, exploitation, and thus oppression are emerging, can the new Commons-based modes of labour, production, property and governance nevertheless redefine modern democracies?

2. Information Commons and Democracy: The Partner State Approach

As the preceding sections hopefully have made clear, the sphere of information Commons extends from the world of software, science and education to music, photography, literature, video and even the introduction of legal forms for immaterial value. The information Commons, which can be now considered to be a distinct sector of economic production and social experience, both complement and compete with markets, being an arena of social association, self-governance and collective provisioning. (Bollier 2009) As Bollier puts it, "in a sense, the commons sector is a recapitulation of civil society, as described by Alexis de Tocqueville, but with different capacities." (2009, 295) This chapter addresses those capacities with their deficiencies, arguing that the Commons-based modes of labour, production, property and governance can permeate and impregnate states and markets, giving rise to the concept of the Partner State and getting closer to the realisation of a democratic utopia, which,

according to Horkheimer (1993), can emancipate the human being and make her the producer of her own historical form of life.

2.1. What is the Partner State Approach[27]

The Partner State Approach (PSA) is a cluster of policies and ideas whose fundamental mission is to enable and empower direct social-value creation by user communities, and to focus on the protection of the Commons sphere (both physical and information) as well as on the promotion of sustainable models of entrepreneurship and participatory politics. While people continue to enrich and expand the information Commons, building an alternative political economy within the capitalist one, by adopting a PSA, the state becomes an arbiter, retreating from the binary state/privatisation dilemma to the triarchical choice of an optimal mix amongst government regulation, private-market freedom and autonomous civil-society projects. (Bauwens 2010) Thus, the role of the state evolves from the post-World War II welfare-state model, which could arguably be considered a historical compromise between the social movements for human emancipation and capitalist interests, to the Partner State one, which embraces win-win sustainable models for both civil society and market. This chapter attempts, by not neglecting the ambivalent context within information Commons flourish, to systematise the recently developed concept of PSA around two crucial spheres of human social life: economy and politics.

2.2. Economy: Commons as a development agent

In the modern era, it can be argued that the key players of global and local economies are governments, firms and non-profit organisations, each with its own special, complementary or inconsistent interests and ecologies. In an extremely complex environment, a PSA seeks to create synergies and maximise their positive results towards win-win, sustainable scenarios. The oldest peer production project is FOSS, around which foundations, industries and business models have already been developed (Maxwell 2006; Ghosh 2006; Riehle 2007) creating a more complicated but mature (compared to other Commons-based projects) ecosystem. Based on that, it can be more safely argued why and how the aforementioned organisations, and thus society, can benefit from Commons-based practices and outcomes related to FOSS.

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[27] The core idea of the concept of the Partner State has been developed by Michel Bauwens and George Papanikolaou in several posts in the P2P Foundation's blog (at http://blog.p2pfoundation.net/) and other online sites as well as in private conversations. Bauwens is the founder of the P2P Foundation and a prominent Peer-to-Peer theorist, who has written numerous texts in popular e-magazines and peer-reviewed journals on the Commons and post-capitalist world. Papanikolaou is a Greek activist, researcher and manager of the Greek sites of the P2P Foundation, who has shared with me many hours of discussion on Partner State theory.

To begin with, cost-saving is one of the main reasons for FOSS adoption concerning all players. Moreover, through the adoption of open standards, on which FOSS is premised, governments can achieve interoperability so that bureaucratic mechanisms become more effective and efficient. In addition, the shift from proprietary software is a boost for domestic software industries, either developed by non-profit organisations (such as universities or FOSS communities) or by open-source businesses. In that way, national economies become more independent and promote economic development. Especially for small countries rich in brain-power but poor in industrial hands, the former constitutes a good chance for innovation and empowerment of the real economy. By supporting, utilising and producing open-source technologies, firms do not only save money, but also have the chance to differentiate their services/products and build a positive reputation aligned with the open and collaborative culture. Thus, the adoption of FOSS is fundamental for a functional PSA.

In addition, the *FLOSS 2020 Roadmap* (Laisne et al. 2010, 10-13) addresses five points important for a PSA in relation to FOSS: First, the safeguarding of network neutrality to ensure equitable treatment of decentralised Web services, "by prohibiting and sanctioning discrimination against protocols, applications, sources and contents"; second, the investment in the creation of "decentralized, user-controlled, free software-based Web services for all essential social/collaborative applications"; as well as the development of "new venues for research, public dialogue and publication that can bring together on-the-ground practitioners and theorists, and develop deeper cross-disciplinary understandings of commons-based governance and resource-management"; fourth, the necessity of economic development policies that recognise and promote the growth of intellectual capital of society; and fifth, the right for citizens to freely read, modify and share information that they, as a society, pay for.

The last two were the main objectives of the 2008 campaign, of which I was a core member, in Greece for the free release of the ERT archive. ERT is the national television and radio broadcaster of Greece, for the moment part of the public sector and sustained by a form of obligatory taxation (included in the electricity bill). In late 2007, the initiation of a project regarding the digitisation of the old archives of ERT was announced (the project was completed a few months ago). Although this move had been considered a significant first step towards the public availability of a unique cultural wealth, the decision to stream the material over a proprietary, commercial product incited Commons-oriented communities to protest. According to them, there is an "innocent fraud" behind this initiative: The digital archives remain the exclusive property of ERT. The story goes on as patented formats were selected to support the digitisation of the archive, which is actually a Commons that Greek residents have been supporting both economically and creatively. In addition, supposing that ERT

turns into a private company, then a Commons may fall into private hands: The digitised archive would remain in the proprietary hands of ERT. However, in an era where new regimes of Commons-based property have been developed, the aforementioned enclosure sounds problematic. The citizen has limited access to the archive. Although it is possible to see it, he/she is not allowed to use it freely, even for non-commercial purposes, without the written permission of the company. This constitutes a typical case that reveals the essence of state/public property. The property is exclusive and the state manages it, while citizens have no authority in it. In the name of the so-called public property, the object is detached from its natural subjects. Often, as numerous cases have shown in the recent past, the state/public property becomes prey to some specific dominated interests.

The Commons-based property forms are against the private appropriation of the socially created value, trying to create the widest possible usage while keeping the sovereignty with the individual. (Bauwens 2005a; 2005b) These new forms inaugurate the concept of peer property; very different from the private property which is exclusionary (following the token: "What is mine is not yours"), and from state property, which, although a collective property, is also exclusionary ("it is ours, but the sovereignty is regulated by a bureaucracy or representative democracy"). (Bauwens 2005a) The nature of the digital archive of ERT allows its reproduction and distribution with a marginal cost. The decision not to distribute the archive under Commons-oriented licences imposes an artificial scarcity in a cultural wealth, which could be freely distributed to everybody and constitute a positive externality. Individuals would have the chance to use parts of the archive and creatively mix it and redistribute it, under the same legal forms, to the Commons sphere. The ERT archive was considered the "Elgin marbles of modern Greek culture" (Papanikolaou 2007), and the Commons-oriented communities in Greece tried to promote the discussions about an open source approach to public policy through this. They asked for a generalised Commons licensing of all public data and information which is produced with public money; warned of the danger of the archives' privatisation; called for the adoption of FOSS applications in the public sector; and denounced the then recent deal between the Greek state and Microsoft for covering the ICT needs of the public sector[28]. After posting texts in several Greek and foreign blogs and e-journals and sending emails to many relevant email lists, the Greek activists tried to create a web platform at setitfree.gr, which, however, never officially went online, because when it was completed, people and mainstream media had already forgotten the ERT case. So, it was decided to quit such an initiative. In spite of the fact that this activist movement was ultimately unsuccessful, the message that it carried is arguably of a special interest to the Partner State theory, as it proposes what the role of the state should be in the management of public information.

[28] See http://www.ffii.gr/ms-gov-agreement for a full cover (in Greek) of the deal between Microsoft and the Greek state.

The adoption of FOSS in the processes of all levels of the education system is another necessary measure of a PSA. It is obvious that the dependence upon proprietary software creates dangerous monopolies for the benefit of monopolistic producers, who own and manage the source code. In a world where there is no alternative to these, the adoption of proprietary software is, although problematic, inevitable. Nowadays, however, with the myriad of FOSS applications available, the adoption of FOSS in education is not only a cost-saving step, but it is an investment in society, as FOSS is a good produced for and by the Commons sphere. Hence, when students are nurtured in a FOSS environment, the problems encountered while trying to shift from proprietary software to FOSS disappear (for instance, many face serious problems when trying to move from Microsoft Windows to, say, Ubuntu, and as a result, they remain trapped in a proprietary operating system; most of them do not even try such a change). Also, the student, from an early age, becomes responsible for the maintenance, development and enhancement of his/her own FOSS equipped computer. Arguably, the aforementioned is a long-term boost for knowledge economies and simultaneously elevates and enriches self-expression, creativity and independence in a highly inter-connected world. It becomes evident that the ability (and the right if seen from a more normative perspective) for the student to modify, collaboratively or individually, his/her software is a social-capital investment, which fosters the ground for future social innovation.

Of special interest to a PSA may be the case of the One Laptop Per Child (OLPC) movement in Greece, of which I have been a close observer, as an external consultant to the socialist party PASOK that supported the deployment of this initiative. The OLPC project is based on the educational theory of constructionist learning pioneered by Papert, and later by Kay. This theory views learning as the reconstruction rather than as the transmission of knowledge and maintains that learning is most effective when the student experiences part of an educational activity as a meaningful product construction. (Papert and Harel 1991; Papert 1990a; 1990b) In constructionist learning, students draw their own conclusions through creative experimentation, and the role of the teacher is that of the mediator, who assists them to understand the problems, and that of the learning catalyst, who guides them provoking individual and collective creativity. (Papert and Harel 1991; Papert 1990a; 1990b) In the industrial production of the 20th century, the dominant educational model was ingrained with similar “industrial” principles: leader (teacher)-centric, strict hierarchies with alienated workers-objects (students). According to Hardt and Negri (2001), society, and thus the educational system as well, reproduced the figure of the factory which was the representative agent of the dominant mode of production, i.e. massive industrial production. In the era of information production, where immaterial value is of a great importance and is produced (if not solely) through Commons-based modes of production, new educational paradigms emerge. Their application now seems more possible than ever. It can be said that the 19th-20th century’s typical classroom followed

an industrial organisational mode, with most of the children feeling unease when going to school (like the industrial worker who dislikes his/her work) and enjoying a small degree of autonomy and co-operation (alienating from each other, many times, in the competitive strive for grade chasing). Today, what OLPC and other similar projects could lead to, is an Commons-oriented educational paradigm which enables the co-existence and experimentation with different learning practices – say, learning from the teacher, learning by doing and collaborative learning (learning from the fellows students) – while it is built on Weber's (2004) idea that just as important as the knowledge (code, source) itself and probably more fundamental is the process by which the knowledge is built (in all, fostering critical thinking and individual and collaborative learning).

It is worth mentioning the words of Yiannis Kaskamanidis, the IT teacher of the school of Florina city, which is one the experimental schools where the adoption of OLPC is investigated by the think tank of *Re-public*[29], during our interview (2009) when discussing FOSS and OLPC in education: "OLPC and FOSS illuminate the essence of the common/voluntary labour. Students realise that amongst the firms and the individuals who strive for financial gains, there are also communities consisting of volunteers that create superb educational software. This [he means the FOSS and the OLPC projects] serves as an ideal opportunity to spread the ideas of solidarity, reciprocity and voluntarism … [and] to show [the children] that although happiness is experienced on an individual basis, it is a social issue." The main vein of Kaskamanidis' articulation comes in accordance with several scholars (see for instance Benkler 2006; Bauwens 2005a; Lessig 2004) who maintain that the case of FOSS and Commons-based peer production should be seen in the broader spectrum of a new social, economic and political paradigm.

Beyond FOSS, at the core of a PSA is also the creation of interlocking, independent Commons-oriented institutions that will facilitate, support and investigate social production. Through institutionalisation, the state assigns rights, refreshing the so-far tilted social playing field, and maintains a level of interaction between the private/market-based sector (businesses) and civil society (Commons and related institutions). The priority is the accommodation, protection and strengthening of both information and physical Commons. Regarding the latter, which is not in this thesis' very scope, interesting perspectives can emerge from the realisation of the scarcity of natural resources. Trusts that would manage physical Commons charging rents and paying dividends can be part of an inclusive policy against the environmental as well as the financial abjection that humanity faces today. An example of environmental protection (regarding the reduction of carbon dioxide emissions) and, at the same time, of fund-raising for the universal income is the cap and dividend

[29] The website of the *Re-public* think tank can be found at http://www.re-public.gr/en/

system, developed by the OntheCommons Network[30] and in Barnes' book *Climate Solutions: A Citizen's Guide*. (2008)

Further, many peer-production projects are now developing around organisations with a legal personality, i.e. non-profit foundations such as Apache Software Foundation, Mozilla Foundation, Perl Foundation, Wikimedia Foundation, Internet Archive or the Free BSD Foundation. Following O'Mahony (2005), these foundations, in a nutshell, own the project's assets (offices, hardware, etc.) and raise funds; offer protection to contributors from liability; decide project's marketing strategy; play a significant role in project's governance and problem resolution processes; and facilitate horizontal communication amongst the community's associated projects. In addition to the cost-saving and positive reputation aspects, firms can establish relationships with Commons-based foundations and even sometimes guide the project by making monetary, hardware or even software donations (open-sourcing the code); hire individual contributors related to the project; or hold an advisory role influencing future developments of the project. (O'Mahony 2005) Although these relationships can contribute to the sustainability of information Commons, the existence of Commons trusts/institutions is also important to guarantee the viability and independence (not isolation) of the socially created value in terms of monetary, promotion, distribution as well as legal support.

Using Bauwens' thought (2009) as a point of departure, I try to outline the context of their operation by articulating some vital responsibilities and functions that such institutions should have:

- The diffusion of knowledge about the legal means for the creation and protection of information Commons, say, from lucrative exploitation. An often cited example of the latter is Disney Co. Not only has the company exploited resources from the public domain, say Hercules from Greek mythology or many fairy tales such as Pinocchio's story, without returning back, but also if somebody uses Pinocchio's figure, even for non-profit purposes without paying a certain rent, he/she will have serious problems with the law. And if the latter makes sense, what about the former? This is one reason why the creation of an institution that would control for-profit usage of Commons is imperative. A proposition would be that in case, say, Disney Co. intends to use a Commons for for-profit reasons, then it should pay a certain rent to the institution. This amount of money would be used to support Commons-based projects. But if Disney Co. uses the Commons for non-profit reasons and distributes it as a Commons, then this can be freely done by adopting a certain Commons-oriented licence. Legal regimes, such as the Creative Commons or the General Public Licenses that define the distribution of resources and tools within Commons-based production, can

[30] http://www.onthecommons.org/

offer interesting insights while modernising laws, especially regarding immaterial goods. (article **IV**)

- The creation of supportive collaborative infrastructures that would facilitate the development of Commons-based initiatives by those who face access problems, either because of scrappy knowledge or no access to ICT.
- The realisation of the importance of abundance through opening (non-confidential) public information and thus freely offering a significant means of production can have positive externalities and induce the creation of novel projects. (article **IV**) For instance, the digital archive of a public television broadcaster could serve as a great repository for further cultural creation. (article **IV**) Or the free distribution of public raw data, say, concerning burnt forests could lead to the creation of a digital record with reforestation regions, as the Tilaphos project has done Greece; which, however, was not supported by the state but citizens, using their GPS machines, recorded the burnt forests near them, and this created a large database of the burnt areas categorised per regional department. (article **IV**)
- The reform of educational systems adopting collaborative modes of production premised on the virtues of inclusion and autonomy.
- The establishment and maintenance of relationships and collaboration amongst all the key players of the economic field. For instance, the support of market-value creation in co-operation with the Commons institutions, in compatible ways that do not deplete social value creation. Open source software firms or open textbook publishers are some examples that such an institution would support.
- The enforcement of open science, data-sharing and open-access initiatives, such as the Human Genome Project or dozens of Commons-oriented journals, to promote interdisciplinary scientific research by establishing a science Commons base.
- Experimentation on the expansion of Commons-based peer production to the physical world (see the Open Source Car Project[31] or the Fab Lab Program[32]). Like the design of FOSS source code or Wikipedia's articles conduction, social production design projects, emancipated from IP rents, could be considerably cost-saving for material production and thus responsible for the production of cheaper material goods. Also, think of the Open Source Washing Machine Project[33], where voluntary communities try to solve the global problem of washing clothes by exploring alternatives for washing machines for the developing world, based on different, innovative designs, methods and materials, each adapted to the special context of each place.
- The study and proposition of policies for the overall stimulation of social production. The energy, financial (micro-financing, as exemplified by

[31] http://www.theoscarproject.org/

[32] http://fab.cba.mit.edu/

[33] http://www.oswash.org/

Grameen Bank[34], or Peer-to-Peer lending, for instance Zopa[35], are interesting practices of social entrepreneurship) or manufacturing economy are fields for further research on alternative development paths.

Thus, the institutionalisation of the Commons sphere is another essential part of a PSA and can be considered the main goal of a new, revitalised political struggle.

Concerning the introduction of peer-production processes in the field of energy production and distribution, Papanikolaou and Kostakis (article **V**) claim that the nature of the current technological infrastructure, which makes the production and distribution of energy possible, makes the application of peer production in a similar way as happens in information production difficult. (article **V**) Technological restrictions, such as the relatively high costs for the acquisition of energy producing equipment, and the presence of a hierarchical distribution network of one-way energy flows from big producers to smaller consumers, create considerable barriers. Although it can be supported that the horizon for the transgression of these barriers is becoming visible, it certainly is not imminent: According to article **V**, nowadays, it is necessary to plan and effectuate transitional and applicable solutions. Therefore, distributed P2P energy production can be described as the organisation of distributed production systems that are interconnected with a network which allows for energy flows from many to many. (article **V**) It can be based on the voluntary participation of individual producers, who use renewable sources, thus safeguarding long-term sustainability as well as environmental balance. (article **V**) This mode of energy production has several advantages: it ensures security (the destruction or malfunction of centralised infrastructures paralyses economic activity), and it is also more effective in facing the climate change. It creates a geographically distributed backbone of production activity that deters the depopulation of the countryside, and it is friendlier to the environment. (article **V**) The distributed architecture creates multiple and geographically dispersed positions of dependent work and self-employment in comparison with the centralised one. (article **V**) In peer production, the main bulk of energy flows is achieved in the interior of local networks, by saving the energy that is lost during transmission and by reducing the needs for investments on upgrading the networks' capacity. (article **V**) The interconnection of the electrical network with the Internet promotes the creation of smart local networks, where energy demands can be adapted to production, minimising the needs for storing that reduce energy performance. (article **V**) The supporters of the current architecture raise techno-economic allegations such as the high (today) performance of the concentrative system of electricity production. In these estimates, the real cost is obscured, as the negative impacts on society, on the environment and on future generations are not counted in and remain "external" to the capital performance. A PSA

[34] http://www.grameen-info.org/

[35] http://uk.zopa.com/ZopaWeb/

should create and embrace new indexes that will incorporate the real costs for the society and the environment. For the future, it can be claimed that the production of energy will remain an important field of economic activity in the context of the market, so that cost issues will continue to have an incumbent influence on the transition strategies.

By no means does this thesis intend to formulate a specific economic plan or a clearly defined transitional policy to a Partner State. It is important to remember Bouckaert and Mikeladze's (2008, 7) advice that "a more sophisticated diagnosis, as a function of culture, context, and systems features" allows for "selective transfers, for inspiration by other good practices, for adjustments of solutions, for facilitated learning by doing, for trajectories which are fit for purpose." Hence, a fundamental belief, on which this thesis is premised, is the fact that there are no universal how-to manuals, because not only does every nation have its own special characteristics, but also rapid social change based on grandiose systemic substitutions, as history shows, usually has disastrous results; many times contradictory to what ambitious but benevolent revolutionaries may struggle for. Therefore, this section attempted to introduce suggestions and ideas for a post-industrial society and draw attention to the promising, creative rhetoric of PSA for Commons-oriented development. Of course, there is much research to be done and discussion to take place around this newly developed concept and its foundations.

A tentative discussion on the dynamics of the political economy of the Commons-based peer production, and thus (although not explicitly stated) on the PSA, in relation to the concept of the Neo-Weberian State (NWS) takes place in article **IV**. After the demise of the New Public Management (NPM) (see only article **IV**; Drechsler 2005a; Drechsler and Kattel 2008; Bouckaert and Mikeladze 2008; Dunleavy et al. 2006; Greve and Jesperson 1999; Batley 1996; Clarke and Newman 1997; van Mierlo 1998), a neo-Weberian understanding of the post-NPM Public-Administration (PA) paradigm in Europe and beyond has entered the field of debate concerning the future of PA. (article **IV**) This viable alternative to NPM is the concept of the Neo-Weberian State that was first introduced by Pollitt and Bouckaert in their book *Public Management Reform: A Comparative Analysis* (2004) and later advanced by Drechsler (2005a and 2005b), Drechsler and Kattel (2008), Pollitt (2008), Potůček (2008), Randma-Liiv (2008) and others. (article **IV**) According to Pollitt and Bouckaert (2004), the NWS can be considered a model of public-management reform or even, if we follow Drechsler and Kattel (2008), a political orientation that encompasses the ideas of political power and modernisation (Pollitt 2008):

> First, the state remains a strong steering and regulating presence within society. Thus the objective is not the minimal state … The state is … the guarantor and partner of both a strong economy and a civilized, socially cohesive society. It is the initiator or facilitator of a whole range of

> additional democratic mechanisms, central and local, both representative and direct … Second, the state is steadily modernizing, professionalizing and seeking improved efficiency. But there is no assumption that aping the private sector … is the *only way* [author's italicization] to achieve efficiency and professionalism. Private sector methods *may* [author's italicization] be chosen on some occasions and for some policies, but they have no automatic priority or superiority. (Pollitt 2008, 14)

This makes the NWS a genuine post-post-NPM, Weberian-based, system, as emphasised by Drechsler (2005a), with lessons learned from the NPM experience. As Pollitt (2008, 14) underlines, NWS is not just a mix of traditional Weberian bureaucracy with some NPM efficiency tools; rather, it seeks to modernise the state and includes both "Weberian" and "Neo" elements. The latter "preserve the main part of the traditional Weberian model and modernise it (which … can take various context- and country-specific forms)". (Drechsler and Kattel 2008, 96) This comes in accordance with Larbi's (1999) claim that a careful and selective adaptation of some NPM elements to certain sectors may be beneficial for societies. (article **IV**) However, although NWS takes into consideration the genuine lessons learned from the NPM experience, it may tend to go back to top-down forms of governance, which are too rigid and inflexible to meet citizens' increased demands as generally postulated. (Dunn and Miller 2007) One could also claim that the NWS is, after all and in spite of any updates, a historical concept, and as societies and individuals substantially change over time and have indeed experienced great changes under the influence of technology (article **IV**), most recently and still currently ICT, new claims and expectations should be counted in the formulation of PA reforms, because they do address human living-together today and thus must adapt to them. (Drechsler 2011) These new claims and expectations can be found in a particularly strong and pronounced way in the political economy of the Commons-based peer production (article **IV**): "With attention to the specific local reality" (Drechsler 2005a) the aforementioned offers interesting chances for successful PA reform stressing the essence and the importance of abundance, distribution, and intrinsic positive motivation (article **IV**) for the Horkheimerian perspective of a just society. Moreover, as discussed later in more detail, peer projects can redefine the ways that citizen involvement in the democratic mechanisms can be exercised.

Therefore, the next section investigates what effects the Commons-based information production can have on enhancing and enriching the modern democratic structures in a PSA. It deals with the dangers of such a shift in the democratic process and examines whether and how participatory ICT can facilitate an environment for peer production in the political field.

2.3. Politics: Open source democracy and wikipolitics[36]

In modern complex society, according to Habermas (1996) – a student and successor of Horkheimer –, public opinion does not rule but only influences bureaucratic power and administrative mechanisms towards certain directions. Citizens have been reduced "to the status of members of a market society … which redefines the state as a service company for clients and customers." (Habermas quoted in Drechsler 2001, 12) Actually, as Habermas (1996) highlights, citizens do not control social processes, but rather they countersteer, instead of steering, institutional complexity. Historically democracy, the unfinished project of modernity (Habermas 1996), has always been in an arduous search process of reinventing itself: "Like fire, painting or writing, democracy seems to have been invented more than once, and in more than one place". (Dahl 1998, 8) And as democratic processes are tightly connected with information flows and communication channels (Habermas 1988; 1996), it can be argued that nowadays, new opportunities, mainly induced by the technological progress especially in the ICT sector, emerge, simultaneously transforming and being transformed by a new subjectivity. As described in previous paragraphs, a PSA embraces and promotes direct social-value production based on the assumed equipotency (i.e. no prior formal filtering for participation) of its participants and organised through the free co-operation of equals, in view of the performance of a common task, with forms of decision-making and autonomy that are widely distributed throughout the network. How can this networked environment facilitate a better political environment or in other words, a better democracy? But, before that, what do we really mean by better democracy? How do we perceive the enhancement of democratic structures?

Democracy could be said to be about the resolution of competing claims and visions of the good society in an arena open to all. (Alexander in Rushkoff 2003) In democracies, the utopia of politics sometimes is perceived as a number of processes based on equal and open participation in decision-making, where every person has their say. So, in this section the enhancement of democracy is understood as a step closer to the aforementioned utopia. It has been frequently claimed (see only Benkler 2006; Bruns 2008; Lessig 2004; Rushkoff 2003; 2007b) that the participatory context, in which the myriad Commons-based projects bloom, signals the return to autonomy, cooperation and collectivity; new social norms rise. At the same time, numerous political scientists highlight the need for embracing co-operation, because in a different case the world will be ruled by "one power structure in terms of economic-technological development, military power and knowledge production". (Suoranta and Vaden 2008, 182) Rushkoff demonstrates that the current political structures can be changed:

[36] This section is based on article **III**.

> Transparency in media makes information available to those who never had access to it before. Access to media technology empowers those same people to discuss how they might want to change the status quo. Finally, networking technologies allow for online collaboration in the implementation of new models, and the very real-world organisation of social activism and relief efforts … We are heading not towards a toppling of the democratic, parliamentary or legislative processes, but towards their reinvention in a new, participatory context. (2003, 63)

He considers the modern information age as a second Renaissance:

> Printing press, perspective, extended metaphor, circumnavigation of the globe, re-invention of the 'individual', the beginnings of calculus all find their modern parallels in the internet, holography, hypertext, orbiting the globe, re-invention of the collective, the beginnings of systems theory … old, repressed ideas, like the value of collaboration and cooperation, are being reborn in the next context of connectivity. (2007b)

During the first renaissance, people were transformed from passive recipients into active interpreters of the world. In the current renaissance, it is claimed that people play a new role, the role of author, the role of creator, while the ICT give us the tools to develop collective narratives while connecting to each other. (Rushkoff 2003) In an information-based society in which a participatory, open and free culture rises, it is asserted that societies aspire towards "a highly articulated and dynamic body politic: a genuinely networked democracy, capable of accepting and maintaining a multiplicity of points of view". (Rushkoff 2003, 51) The promise of this "networked democracy", as in Commons-based information production, lies in encouraging broader participation and taking advantage of the collective wisdom and the intelligence of the crowds. According to Jenkins et al. (2006), the ICT induce a participatory culture that contains low barriers to civic participatory engagement and activism as well as new forms of social connection, solidarity and collectivism. Echoing the models of Commons-based peer production, open-source democracy (a concept introduced by Rushkoff (2003)) is related to a "model for the open-ended and participatory process through which legislation might occur in a networked democracy." (Rushkoff 2003, 56) Members of Commons-based communities experience the way that their actions affect the whole, and as a result, they are more conscious of "how their moment-to-moment decisions can be better aligned with the larger issues with which they are concerned." (Rushkoff 2003, 60-61)

Open-source democracy deals with local communities connected to each other that are experienced as places to implement and design policies, incrementally, that will eventually have an effect on the whole. It can be said that open-source democracy is actually a strand of online-participatory democracy, as it concerns a particular context of democratic goals: Enabling participation through input and consultation; inducing the engagement and deliberation; and it has no

relation, say, with e-voting or simple digital feedback. The Sunlight Foundation[37] is a representative example of an organisation supported by donations, which aims to promote processes of open source democracy and increase transparency and accountability in the US government. It encourages citizen participation by aggregating existing information and digitising new information and advocating for policy changes towards a more open, participatory government. Moreover, the WhiteHouse.gov[38] is a governmental initiative that strives, according to its mission statement, for open government by tracking how government uses tax-payers' money as well as "empowering the public – through greater openness and new technologies – to influence the decisions that affect their lives." Similar projects have also been developed in other countries like Australia, UK, Canada, Greece and many others, initiated by either governments, non-profit foundations or citizens.

In that context, it can be said that wikipolitics[39] constitutes those socio-technological applications and processes that promote transparency, openness and/or participation by distributing governmental data and information concerning policy implementation and design as well as exploiting the untapped collective intelligence resources. It aims to strengthen democratic processes by facilitating electronic input to policy development and online policy consultation; after all, it is about content co-creation. So wikipolitics, what Rushkoff (2003 63) refers to when writing: "Networking technologies allow for online collaboration in the implementation of new models", is the means that seems to have the potential to give rise to open-source democracy. But, as Clift (2004, 3) notes, "there is no 'leap frog' path that easily leads to responsive governance that supports human and economic development." Getting over the hype in media coverage of the early 1990s, the Internet and ICT are not inherently democratic and capable of leading absolutely on their own towards a democratic revolution. "ICTs might be functional to implement a certain kind of democracy, while it might lead to undemocratic results in another institutional setting", Hilbert says (2007, 7). The advent of the Social Web has enabled large-scale interactions via emerging web technologies such as wikis. Butler, Joyce and Pike (2008, 1108) arrive at the conclusion that the "true power of wikis lies in the fact that they are a platform that provides affordances which allow for a wide variety of rich, multifaceted organisational structures." According to

[37] http://www.sunlightfoundation.com/

[38] http://www.whitehouse.gov/open/about/

[39] In article **III**, all those ICT which are used for content creation related to democratic mechanisms are called "wikipolitics", influenced by the prominent Commons-based project regarding content production, Wikipedia. It is not the author's purpose to create a technical terminology, but rather using one word (instead of "interactive technologies", "democratic ICT", "deliberative technologies", etc.) that relates to politics as well as to a popular Commons project makes it easier for the non-expert reader to become familiar with the essence of those socio-technological application and processes.

Suoranta and Vaden (2008, 11), wikis ideally exemplify the Habermasian potential of digital technology and communication (see Habermas 1984; 1987), as they "seem to promise almost limitless global open collaboration in terms of content production, discussion and argumentation." Wikipolitics is only a means to an end and not vice versa. According to Rawls (2003), the focus in the design of democratic information and communication processes should be premised on procedures, rather than on truthful results, anyway. In addition, a great challenge for wikipolitics is to "efficiently steer and correctly administer the information overflow of a very large number of participants". (Hilbert 2007, 21) "New information technologies are not simply tools to be applied, but processes to be developed", Castells (2000, 31) points out.

However, Varoufakis' (2007) doubts whether ICT can really summarise citizens' opinions, arguments and suggestions into a collective verdict that provides societies with co-created political content: "These splendid hopes rest entirely on an erroneous diagnosis: namely, that our democratic deficits is [sic] a technical problem in search of a technological solution." He explains:

> As long as our societies are typified by a stark separation of the political from the economic sphere, reserving equal rights for the former while allowing the latter to be characterised by increasing inequality in the allocation of property rights, wiki … can play no significant role in civilising them. Wiki may help democracy but only if it is employed in the context of a wider political project of redesigning property rights in such a way as to make possible a world in which people form units of production which create and distribute value in a participatory manner; in a manner such that no one employs anyone, everyone contributes labour and ideas, while each is rewarded according to contribution but also need. Until then, all wiki can achieve is, at best, interesting experiments in non-price spontaneous order (like Wikipedia) and, at worst, an e-Mob that is as distant from an e-Demos as Genghis Khan was from a contemporary critic of nationalist divisions.

In a similar vein, Pawley (2007) notes that:

> It is perhaps the case that to be optimally effective, such re-imaginings of political action must be accompanied by a re-imagination of the institutions that provide them. Such a solution, while optimistic, offers the best chance of transcending tensions between participation and passivity, centralisation and subsidiarity, and past and future.

But perhaps such an institutional redesign is under way as well, closely related to the technological facilitation of participation. In information production, humans co-create and distribute value in a participatory manner: "production – of knowledge and politics – becomes diffuse and decentered, distributed throughout the system, disrupting previous spatial and temporal continuities." (Hartzog 2007) An important question that could be posed, however, is whether

citizens will actually embrace the possibility of participation. Hilbert (2007, 129) notices that "the argument is that the average citizen has many other private interests and does not want to get bogged down in political details. The common counterargument is that citizens see no point in participation because of the limited civil influence allowed by political institutions". Hence, he (2007, 129) concludes that "political apathy is the consequence". To put it in Barber's words (2003, 265,272), "the taste for participation is whetted by participation: democracy breeds democracy … [citizens] are apathetic because they are powerless, not powerless because they are apathetic." Despite the fact that I do not completely agree with such a linear, one-directional causal explanation, I share Hilbert's view (2007, 129), echoing Leggewie (1997), that "digital transparency in the public sector would … stimulate people's willingness to participate" in the decision-making and deliberation process.

Another important issue concerning wikipolitics is transparency and its democratic nature. The programming of the ICT tool determines "the democratic institution that channels and guides public deliberation". (Hilbert 2007, 117) Hence, it must always be ensured that ICT cannot be manipulated, and democratic decisions have to be made regarding its programming. Open-source software and open protocols have to be used in order to have transparency in the process. Further, Elliot et al. (2007) highlight two other key threats facing the use of Web nowadays as a medium for open-source democracy:

> [First the] exploitative manipulation of the medium through the harvesting and subsequent misuse of personal information, as well as the biasing of the Net's infrastructure through legislation associated with net 'non-neutrality'. Such moves undercut public trust and faith in the system to protect their rights while providing an accurate representation of the digital world.

Regarding the protection of privacy, wikipolitics must balance the "democratic independence of the individual, the increase of information efficiency for the benefit of the individual and the protection of the public from criminal individuals". (Hilbert 2007, 120)

One of the most significant challenges is that of online accessibility, i.e. the standards and methods in order to ensure equal access to content across barriers of distance, cost and usability. (Elliot et al. 2007) Having no access to digital infrastructure and being digitally illiterate constitutes an important barrier to equal access to open-source democracy. As with other technologies, the distribution of ICT follows a centre-periphery scheme: the centre is distinguished by certain characteristics (higher income, level of education), whereas the periphery tends to be at a lower level of development. (Hilbert 2007) This reminds one of long-established patters of inequality. (Hilbert 2007) However, as Elliot et al. (2007) underline, the aforementioned "might also be

seen as a signal for the need to provide digital network access as a basic, free service. Not only would this help provide access to emergent forms of online democracy, but it might also help spur many more forms of social, civic and economic participation." It is necessary to distribute the essential ICT, which ensure the availability of information regardless of time and location, if we want to consider wikipolitics as a medium to "democratise democracy". Already initiatives such as the *One Laptop Per Child*[40] as well as the two world summits on the information society[41] have focused on safeguarding the right to the access to ICT. In that context, it is encouraging that the costs for ICT equipment are falling and the mechanisms for collaboration are blooming. However, as Suoranta and Vaden (2008) maintain, even in the "Western" world, let alone the rest of the world, giant strides to reach satisfactory levels of digital literacy are still necessary.

Wikipolitics projects, influenced by the mode of Commons-based peer production, attempt to operate based on similar principles and organised in online communities. As Iandoli, Klein and Zollo (2008, 6) note, in order for online communities, i.e. self-organised systems where top-down management and centralisation can be found only to a very limited extent, to work properly, three important governance problems have to be dealt with:

- Attention governance: we must attract a considerable number of users, reduce the risk of premature convergence and enable sufficient exploration of the search space by countervailing the influences of informational pressure, social pressure and common knowledge;
- Participation governance: we must retain a critical mass of motivated diverse users, and provide them with support and incentives for evidence-based reasoning as well as the sharing of unique personal knowledge;
- Community governance: we must identify the rules and the organizational structures of the community in terms of the process and roles that enable attention governance and effective participation.

[40] The main page of the OLPC initiative is http://laptop.org/en/laptop/software/

[41] World Summit on the Information Society Geneva 2003 – Tunnis 2005 at http://www.itu.int/wsis/index.html, http://www.itu.int/wsis/docs/geneva/official/poa.html and http://www.itu.int/wsis/docs2/tunis/off/6rev1.html

Further, in article **III**, three cases of wikipolitics[42], which try to adopt an open-source approach to democratic processes, are examined. The investigation of these wikipolitics cases showed that their empirical results so far seem positive and capable of creating effective fissures within the traditional, hierarchical paradigm. However, various problems and dysfunctionalities were documented, most of them typical of what virtual communities face in Commons-based projects. Minority prevalence; group polarisation; tyranny of structurelessness; information overload; platform manipulation; protection of privacy; the necessity for user-friendly architectures with natural narrative conversational modes of human interaction; and a change in the consciousness of many politicians and citizens, are only some of the issues and the problems that a scrupulous and scientifically designed wikipolitics project has to deal with.

In article **III**, the concepts of open-source democracy and wikipolitics were introduced and were discussed under a critical eye. On the one hand, it has been realised that modern ICT offers new ways for humans to produce and organise their economic, cultural and political life, as the economically advanced world seems to shift towards new paradigms which are apparently less hierarchical and more transparent, based on an ethos that entertains openness, participation and co-operation in various fields of human activity. According to Benkler (2006, 9), "individuals are using their newly expanded practical freedom to act and co-operate with others in ways that improve the practised experience of democracy, justice and development, a critical culture, and community". Although open-source democracy introduces new forms of democratic practice that constitute a ray of hope for a consensual form of social life, as described in Horkheimer's work (1993; 2002), it has to go a long way towards rebuilding what can be criticised as the intolerant, alienated civilisation of the modern

[42] The first one was Future Melbourne which, according to Mark Elliot, one of the key contributors, dealt with "the transformation of a traditional city planning exercise governed by a few, to a global, wiki-based collaboration on the future of Melbourne, Australia." The goal was to leverage the potential of collaboration and to take advantage of Web 2.0 opportunities. The second one was wikipolitics.gr (today it is inactive and has been substituted by other more advanced projects), developed by the dominant socialist party in Greece, PASOK and supported by Re-public Journal, which was a platform for collaborative politics. Every citizen could participate – providing his/her ideas, comments, views, suggestions and criticism – in the formulation of questions that the parliamentary members of PASOK would present at the sessions of the Greek parliament. The third one was the deliberatorium platform – still in an experimental phase – developed by Iandoli, Klein and Zollo, scholars from MIT and Naples University. Their platform relies on argumentation in order to avoid problems and flaws that the wiki technologies carry. They examine how online virtual communities are working and use certain models of process deliberation. The difference between deliberatorium and wiki technology is that the former supports the organisation of knowledge through reasoning, using argument maps and assessment tools. Those maps outline the formulated ideas and suggestions in such a way that the users can easily monitor and participate in the processes.

world. While ICT is rapidly evolving, and the actual application and practices are quite recent, and reliable empirical data are rare, it is becoming, or remaining, considerably difficult to assess the future of democracy. It seems that it is good advice to "take a step back and look at the issue from the perspective of what the human person can and should be, and then consider what network technology generally … does." (Drechsler 2004, 16)

Instead of "Conclusions": A Word on the Commons Ideology

This final section stands here, as its title suggests, instead of "conclusions": it is the emphasis put on ideology in relation to PSA that justifies such a choice. Ideology is understood not only as a system of ideas[43], but also as a product of socialisation that aims to offer social change. Following Held's (1980, 186) interpretation of Horkheimer's view, "ideologies can express 'modes of existence'. Therefore, ideologies are often packages of symbols, ideas, images and theories through which people experience their relation to each other and the world." Actually this section serves as the arena where the ideological basis of PSA stands or falls against critiques as well as against the danger of dogmatism. How much is really needed of "sharing", "openness", "collaboration", "transparency", "networking" and "participation", i.e. central notions of PSA, for a better society, as defined in Horkheimer's work? As mentioned in the first chapter, this dissertation contributes to the development of a Critical Theory not oriented toward the preservation of contemporary society, but to its transformation into a society shaped by (more?) reasonableness, peace, and happiness, by increasing freedom in circumstances of domination and oppression. (Horkheimer 2002) Therefore, the question that is formulated is as follows: Does the Commons ideology premised on sharing, collaboration, openness, transparency, networking and participation increase such freedom? The answer, one could argue, is quite obvious: Of course it does, as more of them would empower democratic structures and thus increase freedom, which – if not a goal in itself – increases human happiness. So, following this rationale, more transparency and openness would entail more freedom and thus more happiness. Based on Brandeis (1995), one could superficially argue that only what can be seen can be disinfected; so, if more information was revealed, society would become free of corruption.

However, Lessig, who is a prominent figure of the Commons movement and a member of the advisory board of the Sunlight Foundation, makes a very interesting point against transparency and openness in an article from 2009 in *The New Republic*:

[43] The New Oxford American Dictionary defines ideology "as a system of ideas and ideals, esp. one that forms the basis of economic or political theory and policy." (electronic version in Apple's Mac)

> Like the decision to go to war in Iraq, transparency has become an unquestionable bipartisan value … Its virtues and its utilities seem so crushingly obvious. But I have increasingly come to worry that there is an error at the core of this unquestioned goodness. We are not thinking critically enough about where and when transparency works, and where and when it may lead to confusion, or to worse. And I fear that the inevitable success of this movement – if pursued alone, without any sensitivity to the full complexity of the idea of perfect openness – will inspire not reform, but disgust. The 'naked transparency movement' … is not going to inspire change. It will simply push any faith in our political system over the cliff.

Of course, it seems obvious that the free distribution of governmental information, from weather or GPS data to legal, cultural, scientific or even touristic data, has historically produced great value for economy and society. Nevertheless, what Lessig means is that when transparency and openness, naked by themselves, are not incorporated in complex chains of comprehension with deeper or broader goals, they do not produce good results, but on the contrary, they may have several serious negative implications. A world, flooded by information torrents and short attention spans, makes naked transparency useless, if not harmful, where the most cynical is the most salient and the most salient is the most stable. (Lessig 2009)

A good recent example of this, as well as a further interesting perspective, is presented by the case of Wikileaks, an organisation that discloses confidential information mainly about government and corporate intrigue. Wikileaks' "Afghan and Iraq War Logs"[44] have sparked controversy in both academic and media cycles. Do Wikileaks' actions for transparency and openness really empower democracies and benefit public good? The main argument against Wikileaks' information release concerning the "War Logs" is that it can destabilise the international-relations field as well as being a threat to combatants that fight in these areas. According to its website[45], Wikileaks aims to defend the freedom of speech and media publishing, and improve the world's common historical record by supporting the rights of all people to create new history. Lovink and Riemens (2010) point out that Wikileaks actually represents a quantitative turn rather than a qualitative one due to the low costs and subsequent spread of ICT, and also because of the instant reproducibility and dissemination of information. They argue that Wikileaks "can also be seen as a 'pilot' phase in an evolution towards a far more generalized culture of anarchic exposure, beyond the traditional politics of openness and transparency"; or what Lessig would call "naked transparency". And it seems quite peculiar that

[44] The New York Times has created a special web-page at http://www.nytimes.com/interactive/world/war-logs.html for the classified military documents of the wars in Iraq and Afghanistan.

[45] See the section "Introduction to Wikileaks" which is available at http://www.wikileaks.org/media/about.html.

Wikileaks' internal organisation is quite opaque and blurred, although openness and transparency are supposedly the project's main virtues. The challenges for a qualitative leap are not only the organisation and interpretation of "this Himalaya of data" (Lovink and Riemens 2010), but also the critical examination of which information is published (and how). There is no reason why private or confidential data which are irrelevant and non-detrimental to good public policy should be released. Moreover, selective or ex-parte information disclosure can be an influential means of power, creating biased impressions and distracting attention. In such an ambivalent context, it remains unclear whether projects like Wikileaks act for the public good. Against transparency and openness triumphalism, Commons-oriented reforms should "disabuse us of the illusion that this technology is just a big simple blessing." (Lessig 2009) In other words, societies and states should be aware of the thorns that may tear their skin while striving to smell the rose, i.e. of the genuine ambivalence of those concepts. Hence, how forcefully or gently the stem will be grabbed is an issue that should be closely, patiently and carefully investigated.

Other fundamental concepts of PSA are those of sharing and free culture that have also sparked praise (see only Anderson 2009; Bauwens 2005a; Benkler 2006; Howe 2008; Lessig 2004; Negroponte 1995; Surowiecki 2004) and criticism (see only Bauerlein 2008; Helprin 2009; Keen 2007; Lanier 2010; Postman 1993; Siegel 2008). Keen (2007) and Lanier (2010) are amongst the most widely read critics who assert that the sharing and free-culture movement is actually a threat to society, being full of seductive utopian delusions and fostering low-quality creativity. According to them, free culture dogmatism for releasing immediately all intellectual creations without any constraint or protection, or form of payment, is nonsense. However, what Commons licences, such as CC or GPL, actually do is to provide the creator precisely with the necessary legal infrastructure protecting his/her creation, recognising him/her as the creator, and offering him/her the freedom to share in the way he/she wants. This is not necessarily a threat to the mainstream culture industry, as the traditional model can co-exist with the Commons-based one. Lanier (2010, 122) fears that the little emphasis put on the first-order expression threatens a great deal of original culture and creativity:

> I don't claim I can build a meter to detect precisely where the boundary between first- and second-order expression lies. I am claiming, however, that the web 2.0 designs spin out gobs of the latter and choke off the former. It is astonishing how much chatter online is driven by fan responses to expression that was originally created within the sphere of old media and that is now being destroyed by the Net … Since the web is killing the old media, we face a situation in which culture is effectively eating its own seed stock.

One must be careful not to overdo it here: On the one hand, free culture or FOSS should not be considered the holy grail of human emancipation, but

criticism often goes off the rails as well when attacking the collaborative/participatory Commons-based projects. Lanier (2010, 126) depreciates FOSS claiming that "open wisdom-of-crowds software movements have become influential, but they haven't produced the kind of radical creativity … [Linux] is a superbly polished copy of an antique." The list of FOSS projects which are innovative, and sometimes even technologically superior to industrial-based software production, is, however, endless. Even the Apache Web server software, which has played a key role in the development of the Web, is FOSS; not to mention hundreds of educational, scientific, healthcare, media, assisting, programming, storage, networking, business and operating FOSS applications.

In addition, Lanier (2010) and Keen (2007) see the collaborative/participatory Commons-based communities as Fascist-, Stalinist- or Maoist-style collectivism, concluding that Internet users march towards a dystopia under the guidance of an authoritarian collective voice. Yet, autonomy is the core characteristic of peer production, as contributors participate through self-selection, and their artefacts are communally validated. As mentioned in previous chapters, the whole system operates in heterarchies, where hierarchies spontaneously emerge to sustain Commons-oriented creativity and empower the quality process. However, since the danger that the Commons march towards a dystopia, due to their ambivalent nature, even under different auspices than the ones Lanier and Keen mention, then there is an issue to be reckoned and dealt with.

In an immaterial economy, Commons-based initiatives seem, as has been comprehensively argued here, capable of creating fissures within the current paradigm and giving rise to alternative modes of production, governance and property, which are based on intrinsic positive motivation and, echoing Perez (2002; 2009), do not see people as resources but rather as creative capital. Perez's theory of great surges can offer valuable insights into the evolution of modern civilisation. According to her model, long-term development at first looks like the relentless advance of technology. However, progress takes place by overlapping surges, with each surge lasting approximately 40-60 years:

> A great surge of development is … the process by which a technological revolution and its paradigm propagate across the economy, leading to structural changes in production, distribution, communication and consumption as well as to profound and qualitative changes in society. (Perez 2002, 15)

Following her analysis, as outlined in article **IV**, during the last two centuries, societies have experienced five technological revolutions with each evolving "from small beginnings in restricted sectors and geographic regions", ending up "encompassing the bulk of activities in the core country or countries and diffusing out towards further and further peripheries, depending on the capacity

of the transport and communications infrastructures." (Perez 2002, 15) A great surge of development consists of five phases, which, although not strictly separated, can be identified as sharing common characteristics throughout history. To be more concrete, firstly we have "irruption" (technological explosion) that is the initial development of the new technologies in a world where the bulk of the economy is made of old, maturing and declining industries; then "frenzy" follows, which is a very fast development of technology that needs a lot of finance (this is when the financial bubbles are created). These two first phases constitute the installation period, when finance and greed prevail in a free market atmosphere. Next, turbulent times come (i.e. collapse, recession and instability) in what she calls "the turning point", when the institutional changes are made for the deployment period to begin. A lot of institutional innovation (hopefully) takes place, and economies are enabled to take full advantage of the new technology in all sectors of the economy and to spread the benefits of the new wealth-creating potential more widely across society. These synergies occur in the early stage of "deployment" (synergy phase) until they approach a ceiling (maturity phase) in productivity, new products and markets. When that ceiling is hit, there is social unrest and confrontations while the conditions are being set for the installation of the next revolution. It could be argued that the current crisis is in fact "what Perez calls a turning point in the middle of the diffusion of a techno-economic paradigm." (Kattel, Drechsler and Reinert 2009, 1) And although recession is the current situation, what lies ahead may be a "Golden Age". This thesis suggests that a PSA incarnates what Perez considers to be institutional changes, which create the necessary infrastructure to spread the benefits of the new wealth, i.e. the Commons sphere, and its potential on society. (article **IV**)

But in politics, if societies do not devote time and resources to experiment and research in order to have a better understanding of the real threats and potential of open-source democracy and wikipolitics, dystopia is a possible scenario. (article **III**) Although open-source democracy introduces new forms of democratic practice, it remains unclear whether and how they can effectively redefine democracy. (article **III**) Still, fiduciary solutions are needed for several governance problems that online communities face. Moreover, as democracy deficits are not merely a technical problem in search of technological solution (Varoufakis 2007), change in the consciousness of both people and politicians is needed. (article **III**) To make this point clearer, and to end on a more personal note, it might be suitable to quote from my experience as an external consultant to the team of the Greek Prime Minister's Office (tGPMO) concerning issues of the open-source approach to public policy (or in other words a simple PSA). To begin with, it is known that Greece faces serious socio-economic problems. Black economy, lack of transparency and subsequent corruption, bureaucracy and nepotism dominate the social, economic and political scene, tainting the internal legitimacy of the system. The private sector is closely connected with state activities, setting barriers to a creative and socio-economically efficient

competitive market. The interwoven problems of poverty, unemployment and precariousness, over-lending, ineffective education, ineffective health and insurance systems all need broad solutions and synergetic coalitions.

It can be claimed that unless novel approaches are adopted, the crisis will become deeper and deeper. The tGPMO realised that an open-source approach to public policy, although not a panacea, could offer certain solutions and serve as a stepping stone towards the betterment of the country. However, some politicians, who seemed at that point to share that vision, thought that if we masquerade the bureaucratic elephant as a white horse using a technological veil along with a revitalised socialist-like rhetoric (Commons ideology), then it will run as fast as a horse. As Carlota Perez told me in a conversation we had about technological utopianism back in 2009: “Looking like a horse, the elephant can easily enter the village, and while villagers are admiring its beauty, the short-tempered elephant can launch deadly attacks. What most of the villagers would think is, ‘How evil these white horses are!’ and never trust horses again.”

Just lifted from its cradle, a PSA requires much public debate, time, experimentation as well as numerous political struggles to take place. These are not (and should not) be battles in which a class merely fights against another class, but creative struggles where the multitudes strive for the Commons sphere. From the struggles for the independence of the Internet and the sustainability of peer-production projects to the promotion of distributed energy production, it is necessary for the masses to realise that their seemingly irrelevant political agendas actually share a common purpose: The enforcement of the Commons sphere. At the same time, seeing that Commons-based production is more productive regarding the immaterial field, states should enable and empower direct social-value creation, promote modes of Commons-oriented modes of entrepreneurship and experiment with open-source democracy and wikipolitics, for the moment, in small-scale projects. Hopefully, the theory of PSA could connect with those tasks, “which in the particular historical moment are taken up by progressive social forces”, i.e. not by “the whole mankind … in the first instance” but by “those groups which are interested in the tasks” (in Held 1980, 192), and capture Horkheimer’s strife for human emancipation in order to create rational social conditions, as described in his work.

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SUMMARY IN ESTONIAN

Kokkuvõte

Tänapäeva globaliseerunud maailmas, kus paljud rahvad liiguvad informatsioonipõhiste ühiskonnastruktuuride poole (viited artiklis **III**), on ilmne, et interneti mõju ületab tehnokraatliku sfääri piire. Käesolev uurimusprojekt käsitleb interneti (põhiliselt sotsiaalvõrgustike), ühiskonna ja demokraatia omavahelisi suhteid dialektika seisukohalt. See uurimus püüab leida ambivalentse (ühte ja samasse objekti vastandlike tunnetega suhtumise) raamistiku kontekstis, mis arvestab kõikvõimalikke probleemide ja ohtudega, võimalusi inimkonna arenguks. Eesmärgiks on soodustada uuritava nähtuse mõistmist, eelkõige võimalusi ja positiivseid tulemusi silmas pidades. Töös järgitakse Frankfurdi koolkonna lähenemisviisi ja eriti Horkheimeri mõtteid.

Esiteks seletaksin kuidas antud juhul mõistetakse ning kasutatakse selliseid olulisi kontseptsioone nagu „informatsiooni tootmine“ ja „sotsiaalvõrgustik“. Ma eeldan, et informatsiooni loomine veebis toimub kas patenteeritult/omaniku õigustega või üldkasutatavalt (patenteeritud või Commons baasil loodud platvormidel). Nende kahe „töökoha“ informatsiooni loomise protsessid omavad teatud ühiseid jooni, kuid selle kõrval ka mõningaid põhjapanevaid erinevusi. On püütud selgitada informatsiooni tootmise strukturaalseid suhteid, pidades silmas poliitilise majanduse teatud olulisi kontseptsioone, selliseid nagu tööjõud, omand ja juhtimine (haldamine, majandamine). Võiks arvata, et omandiõigustega (patenteeritud) platvormid asuvad 50:50 võidukas positsioonis, kus omanikud saavad kasumit ja kasutajad rahuldavad oma vajadusi, selliseid nagu suhtlus/kommunikatsioon, reputatsiooni loomine ja teadmiste saamine (artiklid **I**, **IV**). Platvormide omanikud eitavad oma sõltuvust kunstlikult tekitatud vähe kättesaadavuse reziimist, kasutades ära informatsiooni küllust kuid võimaldades ka ühiskonna osalust. Samas omanikuõigustega platvormide arhitektuur ühendab nii avatud kui suletud elemente kindlustamaks nii kasumit kui kontrolli platvormi kasutuse üle? (artikkel **I**) See muudab omanikuõigustega platvormid kui avaliku teabe hooldajad ohtlikuks (artikkel **I**). Lisaks sellele, tänu omanike spekulatiivsele iseloomule, tõusevad esile sellised probleemid nagu privaatsus ja elektrooniline järelvalve, modifitseeritud (koos moodustatud) virtuaalsed kogukonnad ja ekspluateerimine ning on-line manipuleerimine ja kontroll (artikkel **I**).

Teisalt hõlmab üldkasutatava informatsiooni majandus (üldkasutatava informatsiooni majandamine) uusi tootmis-, omandi- ja juhtimisviise (vt artiklid **II**, **III**, **IV**), mis ilmselt suudaksid panustada tänapäeva kapitalismi muutmisele konsensusel põhinevale ühiskonna- ja majanduse korraldusele. Üldkasutusel baseeruv paradigma võimaldab ressursside jaotust juhindumata riiklikust planeerimisest või turgudest (turumajandusest) (artiklid **II**, **III**, **IV**, **V**) ning luua informatsiooni kasutuse väärtust läbi koostöö ja kollektiivse

(sotsiaalse/ühiskondliku) tegevuse (tootmise). On ilmne, et internet ja sotsiaalsed võrgustikud (sotsiaalsete veebide platvormid) omavad nii vabastavaid kui orjastavaid aspekte ja 'otse ühenduses olevate' ('online') kogukondade ning kasutajate vaheline võitlus peaks võimaldama ühe võitu teise üle. (artikkel **I**)

Järgnevalt ma üritan leida vastuseid küsimusele kas, vaatamata sellele, et uued kontrollivormid, tsensuur ja ekspluatatsioon hakkavad tekkima, uued, üldkasutusel baseeruvad töö-, tootmis-, omandi- ja juhtimisviisid saavad sellegipoolest tänapäeva demokraatiaid (demokraatlikke ühiskondi) ümberkujundada. Väidetakse, et üldaksutatava informatsiooni tootmine, mida võib käsitleda kui majandusliku tootmise ja ühiskondliku kogemese eraldiseisvat sektorit, täiendab turgu (turumajandust) kuid samas ka võitleb selle vastu, olles võitlusareeniks ühikonna liitmiseks, isemajandamiseks (-juhtimiseks) ja kollektiivseks varustamiseks : „Mingis mõttes on üldkasutatav sektor tsiviilühiskonna määrang nagu seda kirjeldab Alexis de Tocqueville, kuid tal on erinevad võimed." (Bollier 2009, 295)

Järgmisena ma analüüsin neid võimsusi (võimalusi) koos nende puudustega, väideldes ja näidates, kuidas üldkasutatavusel põhinevad töö-, tootmise, omandamise ja juhtimise viisid võivad läbipõimida ja hõlmida riike ja turgusid, viies Partnerriigi (Partner State) kontseptsiooni juurde, mis läheneb demokraatia Utoopiale, mille eesmärgiks on vatavalt Horkheimerile (1993, 21) 'inimolevuste omaenda ajaloolise eluvormi loomine'. Partnerriigi kontseptsioon (Partner State Approach –PSA) on tegutsemisviiside ja ideede kogum, mille põhimissiooniks on võimaldada otsest ühiskondlike väärtuste loomist kasutajate kogukondade kaudu ning keskenduda üldkasutatava sfääri (Commons sphere) kaitsmisele (nii füüsiliselt kui ka informatiivselt/ nii platvormi enda kui seal sisalduva informatsiooni kaitsmisele) ja samuti ka ettevõtluse ning osaluspoliitika jätkusuuutlikkuse propageerimisele. Kuna inimesed jätkavad üldkasutatava informatsiooni (information Commons) rikastamist ja laienendamist, luues alternatiivset poliitilist majandust kapitalismi sees, partnerriigi kontseptsiooni (PSA) omaks võttes, võtab riik endale lepitaja rolli, taandudes binaarsest riik/erastamise dilemmast ja minnes üle kolmainsuse valikule, mis kujutab endast optimaalset valikut/segu riiklike ettekirjutuste, erasektori vabadusest ja autonoomsetest tsiviilühiskonna projektidest. (Bauwens 2010). Seega riigi roll kulgeb Teise Maailmasõjaajast pärinevast heaoluriigi mudelist partnerriigi mudelisse, mis hõlmab 50:50 jätkusuutlike mudeleid nii ühiskonnale kui turule (majandusele).

Lisaks eelnevale, pidades silmas üldkasutatava informatsiooni platvormi (information Commons) võidukäigu vastandlikku (ambivalentset ehk ühte ja samasse objekti vastandlikke tunnetega suhtuvat) konteksti ning lähtuvalt Bauwensi mõtetest, püüan süstematiseerida partnerriigi kontseptsiooni (PSA) hõlmates kahte inimelu põhjapanevaid elualasid: majandus ja poliitika. Peale

selle, seoses vaidlustega ümber Uue Weberi Riigi (Neo-Werberian State - NWS) kontseptsiooni ja Uue Avalku Sektori Juhtimise (New Public Management-NPM) pärandi, ma väidan, et kuigi NWS on arvesse võtnud NPM kogemusi, see võib ikkagi tagasi viia juhtimismudelitele ülevalt alla, mis on liiga jäigad ja paindumatud et kodanike suurenevaid nõudlusi rahuldada (Dunn, Miller 2007). Võib väita ka seda, et NWS on vaatamata uuendamistele lõppude lõpuks siiski aegunud ajalooline kontseptsioon ja, kuna ühiskonnad ja indiviidid on aja möödudes tunduvalt muutunud, eriti just tänu tehnika ja infotehnoloogia arengule, avaliku halduse reformimisel tuleb arvestada uute väljakutsetega, kuna see kätkeb endas inimeste kooselu ja peab sellega kohanduma (Drechsler 2005a). Seega ma kinnitan, et need uued väited ja ootused väljenduvad tugevalt ja selgelt üldkasutatava platvormi baasil omataoliste isikute loodud informatsiooni poliitökonoomias (artikkel **IV**): „Spetsiifilist kohalikku reaalsust silmas pidades“ (Drechsler 2005a). Eelmainitu pakub huvitavaid võimalusi avaliku halduse reformimiseks, rõhutades positiivse sisemise motivatsiooni külluse ja leviku tähtsust ja tähenduslikkust Horkheimeri õiglase ühiskonna perspektiivis.

Edasi ma arutlen selle üle, millist mõju võib omada üldkasutatavate platvormide baasil informatsiooni loomine kaasaegsete demokraatlike struktuuride rikastamisele ja tugevdamisele partnerrigis (PSA). Kirjeldan selle demokraatiaprotsessi nihke ohtusid ja üritan analüüsida kas ja kuidas osalusel põhinev info- ja kommunikatsioonitehnoloogia (IKT) võib soodustada omataoliste isikute loovat keskkonda poliitikas. Artiklis **III** ma tutvustan avatud infoallikate demokraatiat ja wikipoliitikat, mida vaatlen kriitilise pilguga. Ühelt poolt võib tõdeda, et kaasaegne info- ja kommunikatsioonitehnoloogia pakub inimestele uusi võimalusi oma majandusliku, kultuurilise ja poliitilise elu korraldamisel, kuna majanduslikult heal järjel olev maailm näib liikuvat uute paradigmade poole, mis on ilmselt vähem hierarhilised ning baseeruvad avatuse, osaluse ja koostöö printsiipidel kõigis inimtegevuse valdkondades (artikkel **III**). Samas, lähtuvalt kirjandusest ja nelja kindla juhtumi uurimisest (artiklid **II**, **III**), ma järeldan, et vaatamata sellele, et avatud infoallikate demokraatia võimaldab uusi demokraatia praktiseerimise viise, mis annavad lootust konsensusel põhinevale ühiskonnaelu korraldusele, on veel pikk maa käia kaotamaks sallimatus ja võõrandumine tänapäeva maailmas. Kuna info- ja kommunikatsioonitehnoloogia areneb väga kiiresti ning selle kasutamine ja praktiseerimine on levinud alles hiljuti ning usaldusväärseid empiirilisi andmaid on veel vähe, on demokraatia tulevikku raske hinnata (artikkel **III**). Tundub, et hea nõuanne on „ astuda üks samm tagasi ning vaadelda probleemi lähtuvalt sellest, milline üks inimolevus võiks ja peaks olema ja siis arvestada, mida võrgustikutehnoloogia üldiselt teeb“ (Drechsler 2004, 16).

Olles alles esile kerkinud, nõuab partnerrigi kontseptsioon (PSA) palju avalike debatte, aega ja eksperimenteerimist, seejuures ka poliitilisi võitlusi. Need ei saa ega tohigi olla lahingud, kus üks klass lihtsalt võitleb teise vastu. See peab

olema loov võitlus, milles suured inimhulgad püüdlevad ühise sfääri poole (Commons sphere). Alates võitlusest interneti iseseisvuse eest ja omataoliste isikute loomeprojektide jätkusuutlikkuse eest (vt artikkel **I**) kuni jaotatud energia tootmise propageerimiseni (vt artikkel **V**), massid peavad mõistma, et nende näiliselt ebaolulised poliitilised plaanid omavad ühist eesmärki, milleks on Commons sfääri tõhustamine. Samal ajal, arvestades sellega, et üldkasutatavatel platvormidel toodetu on produktiivsem mittemateriaalses valdkonnas (viited artiklites **II**, **IV**), riigid peaksid võimaldama ja võimendama otsese sotsiaalse väärtuse loomist (artikkel **IV**), edendama üldkasutatavatele platvormidele orienteeritud ettevõtluse vorme, eksperimenteerima avatud infoallikate demokraatia ja wikipoliitikaga esialgu väikemastaapsete projektidena (vt artikkel **III**). Loodetavasti suudab partnerriigi kontseptsioon (PSA) haakuda nende ülesannetega, „millistega praegusel ajaloolisel momendil tegelevad progressiivsed sotsiaalsed jõud“, see tähendab „mitte kogu inimkond ... esialgu“, vaid „need grupid, kes on nendest ülesannetest huvitatud“ (Held 1980, 192), ning liitub Horkheimeri võitlusega inimeste vabaduse eest loomaks ratsionaalsed ühiskondlikud tingimused, nagu kirjeldatud tema töös.

PUBLICATIONS (Articles I-IV)

Article I

Kostakis, Vasileios. 2009. “The Amateur Class, or, The Reserve Army of the Web.” *Rethinking Marxism* 21 (3), 457-461.

The Amateur Class, or, The Reserve Army of the Web

Vasilis Kostakis

Abstract

This article deals with the transformation of the computer industry that has been inaugurated by the new version of the Web. The advent of the social web or Web 2.0, according to Tim O'Reilly (2006) gives rise to the formation of the amateur class and to new modes of exploitation, as the amateur starts to have control over the means of Web production. The function of Web 2.0 within capitalist production is to exploit and valorize the volunteer contributions of amateurs. The argument on which this paper is based is that Web 2.0 exhibits both emancipatory and exploitative aspects, and the role of amateurs should be to foster one over the other.

Key Words: Web 2.0, Amateur Class, Exploitation, Netarchists, Commons

Web 2.0 and the exploitation of collective intelligence and creativity are interwoven concepts. Web 2.0 has emerged from the interstices of the first edition, initiating a new corporate revolution in the computer industry. The new design of the Web transformed the complex Internet into a smooth navigation and production platform. Web 2.0 facilitates social creativity, collaboration, and information sharing among users, who can own the data on a site and exercise control over it (O'Reilly 2006). The ''architecture of participation,'' which a Web 2.0 site may have, encourages users to add value to the application as they use it (O'Reilly 2006). The advent of Web 2.0 gave rise to several business ventures such as eBay, Facebook, Flickr, MySpace, del.icio.us, and YouTube, which generate huge profits. Web 2.0 contains a set of enabled participative practices and tools that the business models fund in order to exploit the collective intelligence.

Paul Graham states that there are basically three roles one can assume in the world of the Web: the professional, the amateur, and the final user (Kleiner and Wyrick 2007). I would also add a fourth category, that of the hacker, which has some characteristics of the professional (i.e., profound and specialized knowledge) and some of the amateur (i.e., romanticism). In other words, echoing Wark (2004), who considers hacking a pure experimental activity free from constraint, a hacker is a ''professional amateur'' who produces new information beyond the private property form. The key difference between the amateur class and the hacker is that the amateur is exploited by the owners of the platforms and seems incapable of producing a surplus of liberty that is, a true Commons without the help of a pro (which could be either a hacker or a professional). The amateur remains dependent on the owner of the platform in

the same way that the owner is dependent on the amateur class, which adds value to the business venture. This does not mean that a professional or a hacker may not use platforms such as Facebook or Flickr, adding value to them; however, in this paper I focus on the amateur class for the following reason: the formation of the amateur class as a class comes with the advent of Web 2.0, when the amateur starts to have control over the means of production. In Web 1.0, there was no concrete space for the amateur whereas the roles of the professional, the hacker, and the final user were prescribed. The amateur was incapable of producing because of the stuffy and intricate nature of Web 1.0. In contrast with the final user, the amateur was willing to participate in production of Web 1.0, but he or she lacked the necessary knowledge to handle the convoluted means of production. In the labyrinth of Web 1.0, there was a surplus population eager to participate in production; the reserve army of Web 1.0 was composed of loose amateurs who had not yet formed the amateur class, as happened later in Web 2.0. In a similar vein, the reserve army of Web 2.0 still consists of some amateurs who are not advanced enough to participate in immaterial production; this is the latent part of the working Web 2.0 population. The latent part consists of the population a reservoir of potential workers that is not yet fully integrated into capitalist production (Marx 1889). The amateurs, who produce no matter their age, are regimented in the workplace the platforms not in a hierarchy but in networks, while platforms are being smoothed in order to exploit the surplus population. One might speculate that a new version of the Web will try to solve, in a more efficient way, the aforementioned problem: to exploit more amateurs that is, people who, compared to the hacker or professional class, are less advanced but quite eager to participate in Web production, receiving a small financial reward, if any.

The amateur (in Greek, 'amateur' *ερασιτέχνης* comes from the synthesis of 'lover' *εραστής* and 'art' *τέχνη*) creates in his or her free time in order to fulfill hierarchically superior needs, without aiming primarily at financial gain (most of the time he or she is not paid at all) and his or her knowledge is not as specialized as the hacker's or the professional's. Marx claims that the fetter of human freedom is neither religion nor philosophy but money (Singer 1980). The amateur seems to break with the common perception and a rupture with the past occurs. He or she is reclaiming the genuine value of the world by not seeing the alienated essence of human labor: that is, money (McLellan 1977) as an end in itself. The production of the amateur class is not generally organized by a logic of monetary incentives, but is chiefly based on values like sharing, respect, socialization, and recognition. The amateur, like the hacker described by Wark (2004), creates without owning exclusively: both are advocates of collective work, innovation, and freedom. Arvidsson (2007) considers the type of economy in which the amateur is participating an ''ethical economy'' where humans create an intersubjective order through communication and interaction. He thinks that modern corporate capitalism is not compatible with an ethically

sound social order, and believes that this ethical economy manifests deeper, more fundamental changes within the current social order.

Web 2.0 created the conditions for exploitation of the amateurs' reserve army. Flickr, MySpace, Facebook, del.icio.us, and YouTube are representative parts of the exploitative side of this new Web platform which, by activating the abilities of the amateur as well as his or her desire for creativity, captures him or her, in this way making a strategically important step toward the initiation of immiscible business practices. The amateur's voluntary participation is therefore being transformed into (surplus) value for the administrators of the aforementioned social networks and services. The means of production became available to the amateurs with the advent of Web 2.0, and the exploitation of collective intelligence and creativity was reborn. Nevertheless the platforms, as Trebor Scholz and Paul Hartzog (2007) underline, continue to be owned by the corporations. This is a new expression of the capitalist relations of production: in industrial production the worker the ''professional,'' according to the previous categorization sells his or her time and labor in order to get a financial reward without, most of the time, enjoying the pleasure of creation, self-esteem, and fulfillment, while, at the same time, the company grows richer. Moreover, the laborers would be alienated as the production process is based on competition. In a similar fashion, in Web 2.0's intellectual production, which is not premised on competition, the amateur enjoys the pleasure of creation, communication, and socialization as well as self-esteem (receiving sometimes a small financial reward) while the corporations make huge profits (mainly from advertisements) from this tradeoff. In October 2007, Microsoft bought a 1.6 percent share of Facebook for $246 million (McCarthy 2007), and one year later Google Inc. had reached a deal to acquire the YouTube company for $1.65 billion (Reuters 2006). Even in the Web production of amateurs, where there is almost no paid labor, capital is being accumulated.

Marx (1889) stated that, in the industrial world, capital accumulation constantly produces a redundant population of laborers, a population of greater extent than suffices for the self-expansion of capital and therefore a surplus population. However, in the production of the amateurs, there is no wage dependency and therefore almost no marginal cost when exploiting an additional amateur. Hence the netarchists or netocrats those that own the platforms and promote participation try to exploit as many amateurs as possible. Minimizing the reserve army is quite an achievable target. Netarchists or netocrats, who are the capitalists within Web production, are dangerous as trustees of the various plans for reinforcement of the sphere of the commons due to their speculative nature (Bauwens 2005). It is in the amateurs' and hackers' hands to abolish the new capitalist relations of production exploitation by the capitalist who owns the platform in the name of creation and reinforcement of the sphere of the commons.

Deleuze and Guattari write that ‘‘we do not lack communication, on the contrary we have too much of it. We lack creation. We lack resistance to the present’’ (1994, 108). Although the amateur creates and resists the present, there is something more to be achieved: the independence and autonomy of the platform should, by all means, be a tactical goal of his or her political struggle. It is obvious that a new form of social contract is emerging from the production of the social Web. Using Web terminology, it could be called ‘‘Social Contract 2.0,’’ which encompasses new meanings and ways of production (peer production) and ownership (peer property), constituting an abstract act of commitment toward creation of a real sphere of the commons. In peer production, which is a third open mode of production, decisions arise from the free engagement and cooperation of producers: this mode is radically different from market-based production, premised on equivalent exchange (Benkler 2006), and planned economies based on hierarchical structures. Peer property is a form of communal shareholding where the resources are held in common (Bauwens 2005; Fiske 1991) under legal forms such as the Creative Commons or the General Public License (Bauwens 2005). Peer property is radically different from private or state property. Whereas traditional forms of property are exclusionary (‘‘if it is mine, it is not yours’’), peer property forms are inclusionary (‘‘if it is mine, it can be yours as well’’) (Bauwens, 2005); whereas a state owns and manages public property for its people, in peer property people co-own and co-manage their property the commons (Bauwens 2005). Hence, the alternative to the netarchical platforms would be a true commons based on the peer triptych (i.e., peer production, property, and governance), where the management of collective intelligence and social creativity will not rely on private, for-profit companies driven by the ‘‘Netarchical ideology’’ (what Barbrook and Cameron tried to describe in 1995 under the term the ‘‘Californian ideology’’). Although netarchists seem to embrace participation, they see capitalism as the only conceivable horizon for the future of humanity (Bauwens 2005).

In conclusion, it is true that the broad categorization and generalization in this paper may lead to errors of interpretation in specific cases. I hope in this article to have shed some light on tricky aspects of Web 2.0. Web 2.0 exhibits both emancipatory and exploitative aspects, and the role of amateurs is to foster one over the other. It may seem that amateurs give up some rights to the owners of platforms in order to receive the chance to create. On the other hand, the netarchists owners of the platforms aim at exploiting as many amateurs as they can, generating huge profits from the free labor. The amateurs maintain a social order where the production of immaterial value leads away from wage dependency, as they produce in order to satisfy their higher needs. In a flood of creation the independence and autonomy of the platform toward reinforcement of the commons is more than a realistic goal to be achieved. As Bauwens (2007) notes, new ways of thinking are needed that require ‘‘the continued

strengthening of sharing and commons communities as the key agents of social change.''

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Article II

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Identifying and Understanding the Problems of Wikipedia's Peer Governance

Vasilis Kostakis

Introduction

The open source software Linux and the popular free online encyclopedia *Wikipedia* are considered as prominent peer production projects, where individuals voluntarily participate and, using mechanisms of self–governance, produce digital commons. Peer production, a term coined by Benkler (2006), is a third open mode of production that has become typical of the Internet recently, where decisions arise from the free engagement and cooperation of producers. Peer governance is a new mode of governance and bottom–up mode of participative decision–making (Bauwens, 2005a; 2005b). It is the way that peer production, the process by which common value is produced, is managed.

However, criticism has been levelled against *Wikipedia* regarding its mode of governance. According to some of this criticism, the power structure within *Wikipedia* is invisible, vague and opaque, giving rise to a tyranny of structurelessness (Freeman, 1970; Bauwens, 2008). Critical questions such as "what kind of problems does *Wikipedia's* governance experience?" and "why does it happen?" are examined in this paper. The narrative of this paper is structured around the conflict between inclusionists and deletionists. In conclusion, some tentative enhancement proposals are articulated.

Main characteristics of peer governance

Coffin (2006) mentions some obvious characteristics of successful open source/p2p communities. Firstly, the membership is open and widespread, premised on participation. The free collaboration among the members is geographically dispersed, asynchronous and organized in networks. Moreover, projects are transparent and dialogues among participants are recorded, with the materials of projects like *Wikipedia* subject to open review (there is a mechanism for institutional history). So, at the first glance, *openness, networking, participation* and *transparency* appear as the main characteristics of governance in peer projects. More closely, these projects do not operate in strict hierarchies of command and control, but rather in *heterarchies*. They operate "in a much looser [environment] which … allows for the existence of multiple teams of participants working simultaneously in a variety of possibly opposing directions." [1] According to Bruns (2008), heterarchies are not simply adhocracies, but *ad hoc* meritocracies which, however, are at risk of transforming themselves into more inflexible hierarchies. In addition, following Bauwens (2005a; 2005b), peer projects are based on the organizing principle of *equipotentiality*, *i.e.*, everyone can potentially cooperate in a project — no

authority can pre–judge the ability to cooperate. In peer projects, equipotential participants self–select themselves to the section to which they want to contribute (Bauwens, 2005b). Moreover, unlike panoptism (*i.e.*, the way knowledge is distributed in hierarchical projects where only the top of the pyramid has a full view), peer groups are characterized by holoptism, *i.e.*, the ability for any part to have horizontal knowledge of what is going on, but also the vertical knowledge concerning the aims of the project (Bauwens, 2005b).

Leadership and benevolent dictatorships

Stadler (2008) submits that leadership in peer projects is not egalitarian, but *meritocratic*: "Everyone is free, indeed, to propose a contribution, but the people who run the project are equally free to reject the contribution outright … The core task of managing a Commons is to ensure not just the production of resources, but also to prevent its degradation from the addition of low quality material." Further, benevolent dictatorships are common (Bauwens, 2005a; 2005b; Malcolm, 2008). For instance, these can be found in Linux project where Linus Torvalds is the benevolent dictator (Malcolm, 2008) or in *Wikipedia* where Jimmy Wales holds that role. Coffin (2006) highlights the necessity for a benevolent dictator (who typically is one of the founders of the project), adding that the foundation developers and the early adopters set the project ethos as well. The founder, along with the first members, upholds the right to fork. Axel Bruns (interview with Bruns, 2009) defines benevolent dictators "as ones of several heterarchical leaders of the community, who have risen to their positions through consistent constructive contribution and stand and fall with the quality of their further performance." It is obvious that through such leadership roles, they may need to push through unpopular decisions. As Bruns notes, "if they abuse that power, theirs become a malicious leadership" and what we should expect at this point is "a substantial exodus of community members." Therefore, following Bruns' narrative, "the continued existence of the project at that moment would depend very much on whether the number of exiting members can be made up for in both quality and quantity by incoming new participants."

A summary of criticism on *Wikipedia's* governance

Wikipedians describe their project's power structure as "a mix of anarchic, despotic, democratic, republican, meritocratic, plutocratic, technocratic,and bureaucratic elements" (Wikimedia Foundation Board of Trustees, 2008). As Bruns [2] points out, this passage shows something more than an "existing lack of clarity about governance structures" as well as "the continuing experimentation with approaches to community self–regulation which is currently taking place in a variety of spaces on the site." Moreover, Bruns (interview with Bruns, 2009) emphasizes that there is a need to distinguish between different national *Wikipedias*. In this paper, I concentrate on the

English version of *Wikipedia*, as the majority of literature deals with it. Its massive amount of content creates a number of governance problems. It is difficult for a relatively small group of administrators to keep track of everything that happens — or to express it in Bruns' style (interview with Bruns, 2009) — "in the far–flung regions of the site."

Moreover, committed Wikipedians are not sometimes enough to prevent committed vandals from disruption: "As *Wikipedia* has grown, Wales has been forced to impose some more centralized, policelike measures — to guard against 'edit warriors', 'point–of–view warriors', 'revert warriors' … ." (Pink, 2005) "We try to be as open as we can", Wales says, "but some of these people are just impossible." (Brown, 2007; Pink, 2005) Butler, *et al.* [3] point out that the hierarchy of roles creates "a class of people who apply the control mechanisms for the group: the administrators." Forte and Bruckman (2008) underscore that the vagueness of the distinction among social and technical powers of the administrators leads to the accumulation of power in one section of the *Wikipedia* community. Thus, administrators are the enforcers of policy and take more authoritative roles "making more and more interpretive and 'moral' decisions about user behavior." [4]

Furthermore, according to Bauwens (2008) a power structure in *Wikipedia* has been created, largely invisible and vulnerable to the tyranny of structurelessness, as described by Freeman (1970):

"Contrary to what we would like to believe, there is no such thing as a 'structureless' group. Any group of people of whatever nature coming together for any length of time, for any purpose, will inevitably structure itself in some fashion. The structure may be flexible, it may vary over time, it may evenly or unevenly distribute tasks, power and resources over the members of the group. But it will be formed regardless of the abilities, personalities and intentions of the people involved. The very fact that we are individuals with different talents, predispositions and backgrounds makes this inevitable. Only if we refused to relate or interact on any basis whatsoever could we approximate 'structureless' and that is not the nature of a human group."

Freeman's argument is that in seemingly structureless groups hidden structures may impose different things on the rest.

An unregistered user of *Wikipedia* I randomly contacted cynically plays on the words when commenting that Jimmy Wales created "the structurelessness of a tyranny" indeed. Another random user observes that *Wikipedia* lacks a "functional system architecture" and "functional social contract." In fact, following a user named Yehuldi, "there is a social contract, and most users and most admins adhere to it. The fundamental flaw is that there is no way to deal with the minority of admins who don't." Bauwens (2008) emphasizes that after

the recent debate amongst deletionists and inclusionists and the requirement of notability, "the editors are dominating the process, to the detriment of the more expert contributors of articles, and growth has stopped; on the side of the Foundation, it now transpires that the Board wishes to diminish the influence of the community and its voting rights." It would be interesting to see the main points of criticism according to the relevant *Wikipedia* article (January 2009) entitled *Criticism of Wikipedia*: "The major points of criticism of *Wikipedia* are the claims that the principle of being open for editing by everyone makes *Wikipedia* unauthoritative and unreliable … that it [*Wikipedia*] exhibits systemic bias, and that its group dynamics hinder its goals."

Case study: Inclusionists versus deletionists

Wikipedia faces several governance problems, each with various ramifications. In this section a particular issue related to *Wikipedia's* problematic governance is investigated. We examined an internal struggle between deletionists and inclusionists. It is based on a three month study (January–March 2009) of relevant literature, internal e–mail lists, external Web sites concerning *Wikipedia*, and e–mail interviews with (ex–)Wikipedians (some of them randomly chosen and others selected on the basis of their involvement in contributing to the development as well as criticism of *Wikipedia*) and experts (Bauwens, Bruns and Hartzog have written extensively on peer governance). The aim was to document the discourse of a battle between deletionists and inclusionists and the governance process at work.

An article published in the *Economist* (2008), under the title "The Battle for *Wikipedia's* Soul," made widely known the internal struggle between two conflicting visions, the first one supported by inclusionists, and the second supported by deletionists. The inclusionists argue for a wide coverage of human knowledge, as *Wikipedia* should feature as many articles as users can produce. The maintenance of a certain relevance and quality for *Wikipedia's* entries lies at the heart of detelionists' arguments. Deletionists — who claim that *Wikipedia* should be more cautious and selective regarding its content. They point to, for example, entries for almost 500 fictional Pokemon characters, indicating that they are harmful to the credibility and public image of the encyclopedia. Many inclusionists maintain that such disparities will disappear on their own, under the condition that *Wikipedia* is less retrictive editorially, so that anyone can add content about anything. They argue that *Wikipedia* does not have space constraints like a printed encyclopedia. They point to the fact that a majority of visitors reach specific entries in *Wikipedia* via search engines, thus never seeing trivial entries. On the other hand, deletionists assert that a certain quality threshold for articles will make *Wikipedia* more successful. They claim that so many entries for trivial subjects will lead to *Wikipedia* not taken very seriously.

I will next examine the governance process in terms of this discussion.

The governance process, inclusionists and deletionists

The *Wikipedia* entry entitled "Deletionism and Inclusionism in *Wikipedia*" (January 2009) offers an illuminating account about the history of this conflict. *Wikipedia* follows some specific policies about content creation. These policies are specific but at times are also inconsistent and conflicting. Concerning conflict resolution and inclusion, there are pages titled "Articles for Deletion," where apart from discussing content, refer to "differing perspectives on how to edit an ideal encyclopedia." [5] When a given debate is completed, an administrator judges community consensus [6]. Entries which do not require discussion are immediately deleted by administrators (Riehle, 2006). If a decision of a administrator is disputed, the community discusses it in a field called "Deletion Review." On some occasions, controversial disputes and issues spread across the Internet outside of *Wikipedia*. In some cases, in internal *Wikipedia* conflicts, persistent debaters can wear down their opponent (O'Neil, 2009). Barry Kort, a Wikipedian and a MIT Media Lab scientist, suggests [7] that the source of the conflict between inclusionists and deletionists can be traced to *Wikipedia's* lack of a conflict resolution process over content. "Festering content disputes eventually become disputes over the demeanor of combative editors." [8] In spite of the fact that *Wikipedia* has some policies over content creation, Kort notes that:

"Wikipedia has evolved a helter–skelter hodgepodge of WP:RULES which are mutually inconsistent and conflicting. Those who become adept at gaming the system can thus pick and choose among the hodgepodge of rules to clobber their adversary (and even justify a block or a ban)."

Hence, the resolution process over content gave birth to the battle between inclusionists and deletionists. During this conflict two associations were initiated by administrators — the Association of Inclusionists Wikipedians (AIW) and the Association of Deletionists Wikipedians (ADW). Each has a Wikimedia page, where their members, perspectives and principles are treated. Hartzog [9] noted that the Web pages of ADW visibly follow traditional organizational practices while AIW considers itself as a movement.

Several (ex–)Wikipedians interviewed thought that this battle was detrimental to *Wikipedia*. G., a *Wikipedia* contributor, pointed out that "the time spent arguing fine points could be used elsewhere, creating content or solving other problems." F., another *Wikipedia* contributor, remarked that "this inclusionist vs deletionists thing has been absolutely overstated. The majority of us [contributors] create and contribute content and do not participate in this battle, which after all only weakens our motive power." Moreover, C., a prominent ex–Wikipedian once a deletionist and later an inclusionist, pointed out the problems with *Wikipedia's* governance:

"The crux of the battle between 'inclusionists' and 'deletionists' is over what subjects should be considered 'notable' for purposes of inclusion in *Wikipedia* … I would not say that the policy itself is really part of the problem. Rather, it is open editing policy and the 'consensus' policy, and how they are administrated, that I identify as the more likely culprits [he means the instant and anonymous editing of articles] … . *Wikipedia's* governance is so diffuse and dysfunctional, that even they don't know how to describe it … I was interested to see that Jimbo Wales [nickname of Jimmy Wales, *Wikipedia's* founder] effectively admitted … that *Wikipedia's* policies were essentially made up as they went along. This *ad hoc* nature of *Wikipedia's* governance, coupled with some basic flawed assumptions upon which the project was based, made all the drama with *Wikipedia* inevitable."

However, C. clarified that the inclusionism vs. deletionism debate would still have taken place even if *Wikipedia* had a more rational and functional governance mechanism: "It's just that it would have been less of a distraction" he remarked, adding that this conflict was not a root problem but a symptom. Bauwens [10] disagrees with C.'s remarks and maintained that the battle was actually a root problem. Bauwens suggested that when there are abundant resources, people do not have to fight over resources but instead self–aggregate. When there is scarcity, decisions have to be made about allocation through democratic, hierarchical or market mechanisms. Thus, following Bauwens' view, "what deletionism does, is to artificially create a scarcity and hence a power mechanism where none was objectively necessary. So, [this battle] is a fundamental issue." Concluding, Bauwens underlined that "of course you can argue that even with deletionism, an appropriate democratic mechanism may have been selected, and that would have mitigated the rampant power abuse … So, in a way, there are different levels of analysis, very much inter–related so that any root cause never exists on its own, causing all the others."

Hartzog, in an e–mail exchange between me and Bauwens (2009), took the point further seeing inclusion and exclusion (as he prefers calling deletionism) as a consequence of drawing boundaries:

"The challenge in both communities and knowledge spaces is how to create aggregates in which boundaries are interpenetrated and overlapping. In knowledge spaces, it's tagging, *i.e.*, non–'mutually exclusive' categorization schemas. In communities, it's cosmopolitan multiculturalism, *i.e.*, non–'mutually exclusive' categories. I think that the problem has always been central to human civilization, but the information technologies … have given us an ease and speed that bring the problem to the fore."

Hartzog ended his philosophical narrative with Adorno, saying that "we can't avoid categories and boundaries, so all we can do, and we must do it, is to remain reflective and compassionate about our inclusions and exclusions."

Bruns [11] considered the debate over inclusion or deletion as more suited to *Britannica* than *Wikipedia* — as "in *Wikipedia's* digital environment, there's certainly no commercial or practical reason to exclude any topic from being covered (unlike *Britannica*, where adding another topic requires more staff resources and adds further to the page count)." Therefore, Bruns [12] argued: "the question of whether a topic is worthy of inclusion in the encyclopedia now comes down more simply to a question of whether anyone is able to write a good entry about it — and 'good' here means both well–written and in line with *Wikipedia's* core principles of NPOV, verifiable, and not based on original research." Like F. and G., some of *Wikipedia's* contributors I contacted, Bruns [13] wondered to what extent the importance of that struggle has been overstated and how much of this struggle between different philosophies is connected with day–to–day practice within *Wikipedia* itself. In other words, perhaps the start of a division is taking place, between those who are attempting to develop a conceptual framework for describing different schools of thought amongst *Wikipedia's* contributors at a more abstract level, and those who continue to edit and develop *Wikipedia* at a practical, everyday level [14]. Bruns does not belittle the search for better theoretical frameworks to describe *Wikipedia*, as he believes it is important that *Wikipedia* is reasonably clear about what it chooses to cover or not to cover [15]. However, he suggests that the vast majority of *Wikipedia's* users and contributors probably would not know that there are factions called deletionists and inclusionists, and would not self–define as one or the other:

"[They] may even say that in practice, the decision between including and deleting is made on a much more fine–grained, case–by–case basis that shows a great deal more complexity than a simple dichotomy is able to do. And that … is a result of what *Wikipedia* fundamentally is: it's not a controlled, even controllable, well–organised mechanism for developing a reliable knowledge base that asymptotically approaches perfection through careful editorial quality control processes (as encyclopaedias of the traditional type may once have claimed to be), but something much more unruly — a sometimes messy, self–organising, continuously unfinished collaborative process that relies not on hierarchical structures, but on the wisdom of crowds for its quality control processes." [16]

Reflections

Wikipedia is about representations of knowledge, about unfinished artifacts in a constant process of creation and evaluation. It does not rely on hierarchical structures, but on the wisdom of the crowds for its quality control processes.

This is undoubtedly a valuable lesson learned by Bruns (2008; interview with Bruns, 2009). It illustrates that *Wikipedia* is a peer project, most of the times, relied upon self–organized, uncontrollable, heterarchical structures. Of course, this does not imply that there are no particular requirements to be met. On the one hand, *Wikipedia* follows some certain rules (WP:RULES) for content creation, which are in some cases mutually inconsistent and conflicting. Therefore, administrators who are adept at manipulating the rules are capable of defeating their foes in order to justify a deletion, block or ban. Active and organized minorities often prevail over the uncoordinated majority and others.

Many critically commented on the lack of clarity of *Wikipedia's* rules and on the absence of a functional conflict resolution process for content disputes, without turning these disputes into editorial slugfests. The majority of participants in this research suggested that there is an urgent need for reform. In particular, Kort [17] pointed out that "the whole Rules and Sanctions paradigm is ill–conceived and should be scrapped in favor of a '21st Century Community Social Contract Model' consistent with collegial norms of academic and scholarly enterprises." Further, it was argued that artificial scarcity, which the deletionist approach inevitably creates, leads to a need for a power mechanism. An inclusionist view, on the other hand, would avoid many internal conflicts. Moreover, from discussions with (ex–)Wikipedians, it became clear that this battle over content is detrimental to the project. This struggle facilitates an "unproductive need" for self–definition, while the case itself is much more complex than just a simple dichotomy.

The consensus of my discussions and interviews with experts and (ex–)Wikipedians can be very well reflected in Bruns' comments [18]: "If those criteria [*Wikipedia's* core principles — neutral point of view, verifiability, non–original research] are met, I can't see any reason to delete a submitted entry — however obscure the topic may be." Hence, a recommendation could be that the project return to its inclusionist roots. At the same time, following Kort's proposal, an unambiguous community social contract model should be openly formulated to secure, protect, empower and enrich the peer mode of governance.

Lessons for peer governance

Wikipedia's mode of governance is an unfinished artifact. It follows the constant reform and refinement of social norms within the community. However, open participation in combination with an increasing number of participants makes the situation more complex (O'Neil, 2009). By examining the battle between inclusionists and deletionists, it was understood that *Wikipedia's* lack of a clearly defined constitution, or what Kort [19] calls a "Community Social Contract Model," breeds a danger for local jurisdictions where small numbers of participants create rules in conflict with others (O'Neil, 2009). These challenge

the sustainability of the peer project. Arguably, the degree of openness in every aspect of a peer project's governance should be questioned and closely investigated.

During conflicts, persistent, well–organized minorities can adroitly handle and dominate their opponents. The values of communal evaluation and equipotentiality are subverted by such practices. As Hilbert [20] remarked group polarization is a significant danger that open, virtual communities face: "discourse among like–minded people can very quickly lead to group polarization … which causes opinions to diverge rather than converge … [so], it is very probable that the strongest groups will dominate the common life." In these cases, transparency and holoptism are in danger. Decisions are being made in secret and power is being accumulated. Authority, corruption, hidden hierarchies and secrecy subvert the foundations of peer governance, that is openness, heterachy, transparency, equipotentiality and holoptism — the very essence of *Wikipedia*.

Peer governance is a suitable mode to govern large sources, working more effectively in abundance [21]. This constitutes the main argument why *Wikipedia* should return to its inclusionist roots, while a functional, scrupulous and scientifically designed resolution process for content disputes and an unambiguous community social contract model needs to be implemented.

Conclusions

As noted earlier, the main characteristics of peer governance are equipotentiality, heterarchy, holoptism, openness, networking, and transparency. "The aim of peer governance is to maximize the self–allocation and self–aggregation by the community, and to have forms of decision–making that do not function apart and against the broader collective from which they spring." [22]

Wikipedia is constantly at risk of transforming itself into an inflexible, despotic hierarchy, while new disputes are emerging about the mode of content creation and governance. As the size of *Wikipedia* increases (in terms of both content and participants), it becomes more difficult and complex for a relatively small group of administrators to keep track of everything that happens "in the far–flung of the site." [23] Co–ordination problems on interpersonal and interorganizational levels as well as gaps concerning the interests and the identities of the inter–Wikipedian communities result in governance crises, threatening the sustainability of the project. Active and organized minorities often prevail over the uncoordinated majority and others. Further, the vague distinction among the social and technical powers of administrators — who sometimes take more authoritative roles and make more 'moral' decisions about user behavior — leads to power accumulation in one section of the community (Forte and

Bruckman, 2008). A functional resolution process for resolving content disputes and an unambiguous community social contract model are needed. *Wikipedia* may follow some rules regarding content creation, which, however, in some cases are mutually inconsistent and conflicting. Thus, administrators, adept at gaming the system, can pick and choose among rules, and defeat their opponents. Moreover, how do you balance participation and selection for excellence? In other words, "how to make sure that truth does not become the rule of the majority and that expertise can find its place?" [24]

In addition, artificial scarcity, the fundamental point of deletionists, leads to a need for a power mechanism. A line has to be drawn between the sphere of abundance, where self–allocation is natural, and the field of scarcity, where cost–recovery requirements demand choices. As has been articulated, for the latter, some formal democratic rules are needed. According to Bauwens [25]:

"Rules and requirements that select for excellence and function against external attacks are legitimate, but processes that protect a privileged layer are illegitimate and destroy or weaken both the self–aggregation and the democratic procedures. So, what can go wrong? 1) The sphere of abundance can be designed to create artificial scarcities, which create limited choices and therefore power to choose … 2) In the sphere of the Foundations, such as the Wikimedia Foundation, which manage the infrastructure of cooperation, a lot can go wrong … such as a lack of differentiation between community and private business interests, and the lack of community representation in the Foundation … So, when the private power of Jimmy Wales and the formal leaders of the Foundation mix and merge with the informal powerbase of the privileged editors, there is a lot of potential for abuse."

Proposals

Bauwens [26] suggested that in the case of *Wikipedia* it would be essential "to return the project to its inclusionist roots, *i.e.*, recognition of abundance; the strengthening of democracy and community representation in the Wikimedia Foundation; full transparency and business divestment in the Foundation." Based on my research, I side with a moderate inclusionist perspective of *Wikipedia's* content. After all, to put it in Bruns' style (2008), *Wikipedia* is about "representations of knowledge." A bottom–up self–organizational mode is enhanced by the reform of rules for content creation, creation of a functional process for resolving content disputes and the formulation of an unambiguous community social contract model. These developments are crucial steps supporting the sustainability of the project and empowerment of peer governance.

While some worry about a danger of the tyranny of the majority, a notion of meta–governance — that is operating in a context of negotiated decision–

making — will handle many issues. Bauwens, partly echoing Jessop (2003) on meta–governance, noted:

"A possible solution is to create a mirror page for experts, who do not make the final decision, but can point to scholarly weaknesses in the open pages. I would also recommend the allowing of personal or collective forks, so that people can encounter a variety of perspectives, next to the official consensus page."

In peer projects, the reintroduction of certain elements of traditional organization (hierarchy or market; project–based organization) contributes to their sustainability (Loubser and den Basten, 2008; Benkler, 2006). These elements are, after all, part of what it is understood as peer governance — an heterarchical, hybrid mode of organization. Bauwens' proposition of allowing experts to have their own distinct voice (even in the form of a mirror page) corresponds to Forte and Bruckman's [27] interpretation of Ostrom's (2000) principles: "the continued presence of the old–timers, who carry a set of social norms and organizational ideas with them," contributes to the sustainability of the project. In addition, a distinction is required for the social and technical powers of administrators, in order to avoid power accumulation.

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Notes

1. Bruns, 2008, p. 26.
2. Bruns, 2008, p. 140.
3. Butler, *et al.*, 2008, p. 1,107.
4. Forte and Bruckman, 2008, p. 8.
5. Rettberg, 2005, p. 9.
6. *Wikipedia*, 2009. "Criticism of *Wikipedia*" (January); *Wikipedia*, 2008. "Wikipedia: Protection policy" (October).
7. Interview with Kort, 2009.
8. *Ibid.*
9. Interview with Hartzog, 2009.
10. Interview with Bauwens, 2009.
11. Interview with Bruns, 2009.
12. *Ibid.*
13. *Ibid.*
14. *Ibid.*
15. *Ibid.*
16. *Ibid.*
17. Interview with Kort, 2009.
18. Interview with Bruns, 2009.
19. Interview with Kort, 2009.
20. Hilbert, 2007, p. 120.
21. Interview with Bauwens, 2009.
22. *Ibid.*
23. Interview with Bruns, 2009.
24. Interview with Bauwens, 2009.
25. *Ibid.*
26. *Ibid.*
27. Bruckman, 2008, p. 10.

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Interviews

The following table contains the names and roles of the interviewees as well as the methods and periods of the interviews:

Name	Role	Method	Period
Bauwens, M.	Founder of the P2P Foundation	E-mail Exchange (Semi-structured interviews) & Google Talk chat	February 2009
Bruns, A.	Associate Professor at Queensland University of Technology. Author of Blogs, Wikipedia, Second Life and Beyond: From Production to Produsage (Peter Lang, 2008)	E-mail Exchange (Semi-structured interviews)	February 2009

C. (anonymity)	Active Member & Author of Wikipedia Review	E-mail Exchange (Semi-structured interviews)	February 2009
G. & F. (anonymity)	Active (ex-)Wikipedians & Wikipedia Review users (randomly chosen)	E-mail Exchange (Structured interviews)	February 2009
Hartzog, P.	PhD Student at University of Michigan working on Panarchy	E-mail Exchange (Semi-structured interviews)	February 2009
Kort, B.	MIT Media Lab scientist & Wikipedia contributor	E-mail Exchange (Semi-structured interviews)	February – March 2009
Yehuldi & two anonymous Wikipedia users	Users of Wikipedia & Wikipedia Review	They participated in a discussion that took place in Wikipedia Review forum http://wikipediareview.com/ (membership is required). I did not actively get involved in the discussion	January 2009

The full content of most of the interviews has been published at http://blog.p2pfoundation.net/peer-governance-and-wikipedia-interview-with-bauwens-bruns/2009/06/22; http://blog.p2pfoundation.net/peer-governance-and-wikipedia-interview-with-cedric-and-barry-kort/2009/06/23; and http://blog.p2pfoundation.net/peer-governance-and-wikipedia-interview-with-hartzog-discussion-with-bauwens-cedric-hartzog/2009/06/24, accessed 28 July 2009.

Article III

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The Advent of Open Source Democracy and Wikipolitics: Challenges, Threats and Opportunities for Democratic Discourse

Vasilis Kostakis[1]

Abstract

It has been claimed that the Web 2.0, the open source movement, and the emerging mode of peer production have inaugurated a new era of debate about openness, participation, and cooperation as bedrocks for rebuilding the civilizations of the modern world. By way of introducing the concept of wikipolitics, this paper examines whether, and if so how, politics and democracies can benefit from this emerging participatory spirit and modern ICTs, and to document possible dangers of such a shift in the democratic process.

Keywords: open source, wikipolitics, peer production, democratic discourse.

A radical change in the organization of information production has been observed during last decades. Two parallel shifts have taken place: The most economically advanced societies are moving towards an information-based economy (i.e., emphasis on financial services, marketing, software, science, and culture), while the declining costs of information and communication technologies (ICTs) make them available to a much wider portion of the world's population (Benkler, 2006). This has led, in turn, to the creation of a new communicational, interconnected, virtual environment in which a new social, productive, and exchange model has emerged that is radically different from the industrial one (Benkler, 2006). This new paradigm has been described by Benkler (2006) as commons-based peer production, which reduces the value of proprietary strategies and makes shared information more important through large-scale, cooperative information production efforts. Bruns (2008) has called this era "produsage," where "produsers" (producers + users) simultaneously innovate, produce, distribute, and consume, all premised on an ethos of participation, sharing, communication, and collaboration. Therefore, peer production, in this context, is a new mode of production that has been enabled

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through Internet-based coordination, where decisions arise from the free engagement and cooperation of the people who coalesce to create common value. It is a mode arguably more productive in the creation, production, and distribution of nonmaterial value (i.e., knowledge, information, or culture), in which the creative energy of multitudes is coordinated into meaningful projects without the traditional hierarchical organization (Bauwens, 2005a, 2005b; Benkler, 2006). The on-line free encyclopedia Wikipedia, which hosts millions of pages of information and knowledge; the thousands applications of FLOSS (i.e., free/libre/open source software, e.g., Linux); the Apache Web server that provides a foundation for open, collaborative software development projects; and the LibriVox project, a digital library of free public-domain audio books read and recorded by volunteers, are just a few examples of the legion of the ongoing peer production endeavors. Simultaneously, it has been frequently argued (Bauwens, 2005a; Benkler, 2006; Lessig, 2004) that culture is becoming more participatory and self-reflective, "where many more of us participate actively in making cultural moves and finding meaning in the world around us" (Benkler, 2006, p. 15). Millions of blogs, the open access movement, and the free dissemination of music, photography, and literature via Creative Commons licenses provide an account of the so-called "free culture movement" (Lessig, 2004).

The present paper, by and large, subscribes to this perspective and takes it as its framework and starting point. This, in turn, leads to several questions. If produsers in the economic arena can create common value via open, self-governed, networked, virtual communities—especially regarding nonmaterial production—what should and/or could be done in the procedure of democratic discourse? If, as argued by Surowiecki (2004), the crowds are actually wiser than the few experts and capable of making better decisions under certain conditions (that is, the crowd needs to be diverse and decentralized with independent members), then how can modern ICTs of the so-called networked area, in coordination with the open source culture, summarize citizens' opinions, arguments, and suggestions into a collective verdict that may provide societies with co-created political value? What effect can the open source movement in software and knowledge production have on enhancing and enriching modern democratic structures? What are the dangers of such a shift of the democratic process? This paper addresses the concept of wikipolitics, examining whether and how wikipolitics can facilitate an environment for peer production in the political field, and discussing the potential dangers, based on the study of a prominent peer project, Wikipedia.

Introduction to wikipolitics

Staring at open source democracy

Historically, democracy has been in an arduous search process of reinventing itself: "Like fire, painting or writing, democracy seems to have been invented more than once, and in more than one place" (Dahl, 1998, p. 8). And because democratic processes are tightly connected with information flows and communication nowadays, new opportunities, mainly induced by the technological progress especially in the ICT sector, are emerging and simultaneously transforming and being transformed by a refreshed subjectivity. Bauwens (2005a, 2005b) argued for the emergence of the peer-to-peer (P2P) concept. This specific form of relational dynamic, based on an assumed equipotency (i.e., no prior formal filtering for participation) of its contributors and organized through the free cooperation of equals in view of the performance of a common task, creates a common good, with forms of decision making and autonomy widely distributed throughout the network. How can this networked environment facilitate a better democratic discourse or, in other words, a better democracy and indeed a better society? Before addressing that, what do we really mean by better democracy? How do we perceive the enhancement of democratic structures and the democratic discourse? Democracy could be said to be about the resolution of competing claims and visions of the good society in an arena open to all (Alexander, 2003). The democratic utopia is perceived as a number of processes based on equal and open participation in decision making, where every person has its say. So, in this paper, the enhancement of democracy is understood as a step closer to the aforementioned utopia. Some scholars (Bauwens, 2005a, 2005b; Benkler 2006; Bruns, 2008; Lessig, 2004; Rushkoff, 2003, 2007) claim that the participatory context, within which the myriad commons-based peer production endeavors are blooming, signals the return to autonomy, cooperation, and collectivity: New social norms are emerging. At the same time, numerous political scientists highlight the need for embracing cooperation, because otherwise the world would be ruled by "one power structure in terms of economic-technological development, military power and knowledge production" (Suoranta & Vaden, 2008, p. 182). Moreover, Sen (2002) underlined the importance of sharing common good in order to enrich human freedom.

Rushkoff (2003) demonstrated that the current political structures can be changed:

> Transparency in media makes information available to those who never had access to it before. Access to media technology empowers those same people to discuss how they might want to change the status quo. Finally, networking technologies allow for online collaboration in the implementation of new models, and the very real-world organisation of social activism and relief efforts …We are heading not towards a toppling of the democratic, parliamentary or legislative processes, but towards their reinvention in a new, participatory context. (p. 63)

In 2007, Rushkoff considered the modern information age as a second renaissance:

> Printing press, perspective, extended metaphor, circumnavigation of the globe, re-invention of the "individual", the beginnings of calculus all find their modern parallels in the internet, holography, hypertext, orbiting the globe, re-invention of the collective, the beginnings of systems theory…. old, repressed ideas, like the value of collaboration and cooperation, are being reborn in the next context of connectivity. (Answer 1, para. 1)

During the original Renaissance, people were transformed from passive recipients into active interpreters of the world. In the current renaissance, people are playing new roles: the role of author, the role of creator (Rushkoff, 2003). ICTs, or what Rushkoff (2003) calls "interactive media," can arguably provide the tools to develop collective narratives while remaining connected to each other. In a networked, information-based society (Bauwens, 2005a, 2005b; Bell, 1976, 1978; Benkler, 2006; Castells, 2000, 2003), in which a participatory, open, and free culture is emerging, societies aspire towards "a highly articulated and dynamic body politic: A genuinely networked democracy, capable of accepting and maintaining a multiplicity points of view" (Rushkoff, 2003, p. 51). The promise of this "networked democracy" lies in encouraging broader participation and taking advantage of the collective wisdom and the perspectives of the crowds. According to Jenkins (2006), ICTs induce a participatory culture that contains low barriers to civic participatory engagement and activism, as well as new forms of social connection, solidarity, and collectivism.

"Open source democracy" (a concept introduced by Rushkoff, 2003) is related to a "model for the open-ended and participatory process through which legislation might occur in a networked democracy" (p. 56). Members of open source communities experience the way that their actions affect the whole and, as a result, they are more conscious of "how their moment-to-moment decisions can be better aligned with the larger issues with which they are concerned" (Rushkoff, 2003, pp. 60–61). Open source democracy deals with interconnected local communities that are experienced as places to design and implement policies incrementally; this eventually will have an effect on the whole. It can be said that open source democracy is actually a strand of on-line participatory democracy, or "eDemocracy," since it concerns a particular context of democratic goals: enabling participation through input and consultation; inducing engagement

and deliberation; and having no relation, for instance, with e-voting or simple digital feedback. In a nutshell, it tries to redefine modern democratic discourse in the digital information age. Open source activity is, in some ways, similar to "crowdsourcing," although I prefer using the term *open source* because it stresses concepts such as openness, the common good, and collaboration.

Wikipolitics constitutes those sociotechnological applications and processes that can exploit the untapped collective intelligence resources. It aims to strengthen democratic processes by facilitating electronic input within policy development and on-line policy consultation. After all, it is about content co-creation. So wikipolitics, where "networking technologies allow for online collaboration in the implementation of new models" (Rushkoff, 2003, p. 63), is a means with the potential to give rise to open source democracy. But, as Clift (2004, p. 3) noted, "There is no 'leap frog' path that easily leads to responsive governance that supports human and economic development." Getting over the hype in media coverage of the early 1990s, the Internet and ICTs are not inherently democratic or capable of leading absolutely on their own towards a democratic revolution. "ICTs might be functional to implement a certain kind of democracy, while it might lead to undemocratic results in another institutional setting," said Hilbert (2007, p. 7). However, nowadays, as will be explained in the next section, technology reflects a change of attitude towards participation and openness, expressed in the formation of new interactions—P2P relations—while new forms of political and productive organization are emerging. Open source democracy, along with wikipolitics, is being built upon this new relational dynamic at work.

The evolution of technology and the emergence of a new social order

At this point, it will be helpful to shed light on the evolution of technology and the emergence of new modes of social organization, specifically following Bauwens' (2005b) analysis developed in his "P2P and Human Evolution" essay, since this provides a framework for the analysis to come. According to Bauwens, premodern technology was participative in a nondifferentiated world: The tools of the artisans were extensions of their bodies, and their societies were not differentiated, meaning people were part of a whole that was dominated by spirits (their ancestors, spirits of nature, objects, etc.). In the modern era (industrial capitalism), technology became less participative but more differentiated: Nature was considered an object (i.e., a resource to be used), while tools no longer served as an extension of the human; rather, the human

became an extension of the machine. In the industrial system of production, humans and machines were of the same nature, both cogs in the system. Nowadays, in the postmodern, information-based, networked era, machines are intelligent, but in a way different than humans (i.e., machines lack creative innovation, problem-solving, and decision-making capabilities). During the process of "informationization," a new paradigm has emerged (although coexisting with the old one): Computers are becoming extensions of the human brain while humans cooperate with them, thus enabling an effective communication among a much wider human community.

According to this argument, technology would reflect a change of attitude towards participation. This change is expressed in the formation of new P2P relations, while new forms of political and productive organization are emerging. These new forms do not offer solutions to the problems per se, but they constitute alternative, new processes for arriving at solutions. An increasing number of people are now able to manage their political, social, and productive lives through a variety of interdependent networks. These trends contribute to the formation of a social order increasingly based on meaningful cooperation. These new forms of civilization combine subjectivity (new values), intersubjectivity (new relations), objectivity (an enabling technology) and interobjectivity (new forms of organization; i.e., peer production as a new mode of production in the information and knowledge sector) that mutually strengthen each other in a positive feedback loop.

It can be said that there are two primary questions to be answered. The first one is an ontological question: How is technology transforming us? The second question, and the focus of this paper, is a political one: What can we make out of technology (Feenberg, 1998)?

The essence of wikipolitics

The advent of Web 2.0 has enabled large-scale interactions (O'Reilly, 2006) via emerging Web technologies such as wikis. Butler, Joyce, and Pike (2008, p. 1108) arrived at the conclusion that the "true power of wikis lies in the fact that they are a platform that provides affordances, which allow for a wide variety of rich, multifaceted organizational structures." According to Suoranta and Vaden (2008, p. 11), wikis ideally exemplify the Habermasian potential of digital technology and communication (see Habermas, 1984) because they "seem to promise almost limitless global open collaboration in terms of content production, discussion and argumentation." Wikipolitics is only a means to an end. According to Rawls (2003), the focus in the design of democratic information and communication processes should be premised upon procedures, rather than on truthful results. In addition, a great challenge for wikipolitics is to "efficiently steer and correctly administer the information overflow of a very large number of

participants" (Hilbert, 2007, p. 21). Indeed, "new information technologies are not simply tools to be applied, but processes to be developed" (Castells, 2000, p. 31).

Is there any specific example of wikipolitics being put into practice? This paper will deal later with three projects that can be considered wikipolitics cases because they have many of the characteristics of wikipolitics, as described above, and bring some empirical results. They will be briefly introduced here already. The first one is the Deliberatorium platform initiated by Iandoli, Klein, and Zollo (2008), scholars from MIT and Naples University. The researchers were trying to create a platform that would allow for collective deliberation, suggestions formulation, and decision making concerning important, complex issues, such as climate change. The second wikipolitics project studied here was called wikipolitics.gr;[1] it is now inactive. Developed by PASOK,[2] the dominant socialist party in Greece, and supported by the on-line journal *Re-public* and the newspaper *Ta Nea*,[3] this platform facilitated collaborative politics. Future Melbourne,[4] the third wikipolitics project, dealt with "the transformation of a traditional city planning exercise governed by a few, to a global, wiki-based collaboration on the future of Melbourne, Australia," according to Mark Elliot (2008, para. 1), a key contributor. The goal was to leverage the potential of collaboration and to take advantage of Web 2.0 opportunities. Therefore, the city's 10-year plan was migrated "to a wiki-based collaborative environment for both internal and public consultation" (Elliot, 2008). All these cases were studied in winter 2008-2009, and, exactly after 2 years, they were re-examined and their progress is documented within the relevant sections that follow in this essay.

As was mentioned above, if the crowds are really wiser than a few experts, and democracies are not as transparent and participatory as they could be (and assuming transparency and participation are good, and indeed essential, for democracy) a question comes to the fore. Under these circumstances, can the modern ICTs, in coordination with the open source culture, summarize citizens' opinions, arguments, and suggestions into a collective verdict that may provide societies with co-created political content?

Varoufakis' (2007) main objection to the wikipolitics notion was that "these splendid hopes rest entirely on an erroneous diagnosis: Namely, that our democratic deficits [sic] is a technical problem in search of a technological solution." He explained,

> As long as our societies are typified by a stark separation of the political from the economic sphere, reserving equal rights for the former while allowing the latter to be characterised by increasing inequality in the allocation of property rights, wiki…can play no significant role in civilising them. Wiki may help democracy but only if it is employed in the context of a wider political project of redesigning property rights in such a way as to make possible a world in which people form units of production which create and distribute value in a participatory manner; in

> a manner such that no one employs anyone, everyone contributes labour and ideas, while each is rewarded according to contribution but also need. Until then, all wiki can achieve is, at best, interesting experiments in non-price spontaneous order (like Wikipedia) and, at worst, an e´Mob that is as distant from an e´Demos as Genghis Khan was from a contemporary critic of nationalist divisions. (Varourfakis, 2007)

In a similar vein, Pawley (2007) noted,

> It is perhaps the case that to be optimally effective, such re-imaginings of political action must be accompanied by a re-imagination of the institutions that provide them. Such a solution, while optimistic, offers the best chance of transcending tensions between participation and passivity, centralisation and subsidiarity, and past and future.

But perhaps such an institutional redesign is under way as well, closely related to technological facilitations of participation. In nonmaterial production, humans co-create and distribute value in a participatory manner: The production of knowledge and politics becomes diffuse; it is distributed throughout the system and, thus, disrupts former spatial and temporal continuities (Hartzog, 2007). It is not accidental that the emergence and the conceptualization of wikipolitics and open source democracy coincide with the observed emergence of what has been called new modes of property and governance: peer property and peer governance. Peer property includes the universal common property regimes and legal means for social reproduction of peer projects, which are inherently more distributive than both public and private property (Bauwens, 2005a, 2005b). For instance, the General Public License or some forms of the Creative Commons licenses are examples of peer property legal regimes. In other words, peer property is a modern form of communal shareholding whereby resources are held in common and each individual contributes according to his/her willingness and ability (Fiske, 1991). Peer governance is a new mode of governance and a bottom-up mode of participative decision making that is being tested in peer production projects such as FLOSS production and Wikipedia (Bauwens, 2005a, 2005b). Thus, peer governance is the way that peer production, the process where common value is produced, is organized and managed. It could be argued that the emergence of peer processes supported by the Commons and the open access movements facilitates a wider political context in which reimagining politics at the institutional level is possible.

An important question that could be posed, however, is whether citizens will actually embrace the possibility for participation. Hilbert (2007, p. 129) noticed, "The argument is that the average citizen has many other private interests and does not want to get bogged down in political details. The common counterargument is that citizens see no point in participation because of the limited civil influence allowed by political institutions." Hence, Hilbert (2007, p. 129) concluded, "Political apathy is the consequence." In Barber's (2003, pp. 265, 272) words,

"The taste for participation is whetted by participation: Democracy breeds democracy … [Citizens] are apathetic because they are powerless, not powerless because they are apathetic." Despite the fact that I do not completely agree with such a linear, one-directional causal explanation, I share Hilbert's view (2007, p. 129) that "digital transparency in the public sector would … stimulate people's willingness to participate."

Another important issue concerning wikipolitics is transparency and its democratic nature. The programming of an ICT tool determines "the democratic institution that channels and guides public deliberation" (Hilbert, 2007, p. 117). Hence, it must always be ensured that ICTs cannot be manipulated. Open source software and open protocols have to be used in order to ensure transparency in the process. Elliot et al. (2007) highlighted two key threats facing the use of Internet nowadays as a medium for open source democracy:

> [the] exploitative manipulation of the medium through the harvesting and subsequent misuse of personal information, as well as the biasing of the Net's infrastructure through legislation associated with net 'non-neutrality'. Such moves undercut public trust and faith in the system to protect their rights while providing an accurate representation of the digital world. (para. 13)

Regarding the protection of privacy, wikipolitics must balance the "democratic independence of the individual, the increase of information efficiency for the benefit of the individual and the protection of the public from criminal individuals" (Hilbert, 2007, p. 120).

One of the most significant challenges is that of on-line accessibility, that is, the standards and methods in order to ensure equal access to content across the barriers of distance, cost, and usability (Elliot et al., 2007). Having no access to digital infrastructure and being digitally illiterate constitute important barriers to equal access in open source democracy. As with other technologies, the distribution of ICTs follows a center–periphery scheme: The center is distinguished by certain characteristics (higher income and level of education), whereas the periphery tends to be at a lower level of development (Hilbert, 2007). This follows long-established patterns of inequality (Hilbert, 2007), which, following Elliot et al. (2007, para. 14), "might also be seen as a signal for the need to provide digital network access as a basic, free service." It can be claimed that more access to emergent forms of on-line democracy might also help spur many more forms of social, civic, and economic participation (Elliot et al., 2007).

Therefore, if the goal is to consider wikipolitics as a medium for democratizing democracy, it is necessary to widely distribute essential ICTs to ensure the availability of information regardless of time and location. Already movements such as the One Laptop per Child[5] and the two world summits on the

information society[6] have focused on safeguarding the right to ICT access. In that context, it is encouraging that the costs for ICT equipment are falling and the mechanisms for collaboration are blooming. However, Suoranta and Vaden (2008) maintain that even in the Western world, let alone the rest of it, giant strides to reach satisfactory levels of digital literacy are necessary. Nonetheless, as Clift commented in 2004, "Waiting for the digital divide to close will eliminate the opportunity to build social expectations for civic uses of the Internet while the medium is still relatively new."

Wikipolitics cases

Web 2.0 and virtual communities

It has been argued (O'Reilly, 2006) that with the advent of the Web 2.0 large-scale interactions take place via the emerging Web technologies such as blogs, forums, wikis, e-mail, podcasts, and so on. Therefore, using such "collective intelligence technologies" nowadays makes it possible to "draw together knowledgeable individuals, analytic tools and information sources on a scale that was impossible a few short years ago" (Iandoli et al., 2008, p. 1). The emergence of new ICTs, along with growing on-line virtual communities, gives rise to new practices in the production of politics. However, several differences exist between on-line virtual communities and traditional organizations. Interaction within the virtual community takes place mainly or solely via the Web; individual contribution is basically voluntary and limited to three forms: knowledge provision, knowledge rating, and knowledge organization (e.g., classification; Iandoli et al., 2008). According to these authors, a virtual community is a self-organized system where top-down management and centralization can be found only to a very limited extent.

However, as Iandoli et al. noted, in order for virtual communities to work properly, three important governance problems have to be addressed:

> Attention governance: We must attract a considerable number of users, reduce the risk of premature convergence and enable sufficient exploration of the search space by countervailing the influences of informational pressure, social pressure and common knowledge;
> Participation governance: We must retain a critical mass of motivated diverse users, and provide them with support and incentives for evidence-based reasoning as well as the sharing of unique personal knowledge;
> Community governance: We must identify the rules and the organizational structures of the community in terms of the process and roles that enable attention governance and effective participation. (2008, p. 6)

The *Re-public* team developed the wikipolitics.gr platform. The interview with their developers involved, among others things, the three challenges raised by Iandoli et al. (2008) and how the team was dealing with them during the operation of wikipolitics. Moreover, the strengths and weaknesses of such a

platform were identified and speculations about the future of democratic discourse were made. The e-mail exchange with Mark Klein regarding Deliberatorium followed a similar vein. The examination of Future Melbourne was built on an on-line discussion that took place at P2P foundation's blog[7] in the middle of 2008, as well as on material extracted from the project's official Web platform.[8]

Discussion with Priftis and Hatzopoulos of PASOK's wikipolitics platform

The wikipolitics.gr project began in 2007 with a wide-ranging on-line interview with PASOK's leader, and current (from 2009) prime minister of Greece, George Papandreou. More than 1,000 citizens submitted their questions, which were evaluated by about 50,000 citizens. Then Papandreou replied to those with the highest rating. In late 2008 the wikipolitics-parliament project was launched. In early 2009 I interviewed Thanasis Priftis and Pavlos Hatzopoulos, the initiators of the wikipolitics.gr platform and editors of *Re-public*, and our discussion focused more on the parliamentary usage of wikipolitics.gr that had just completed its first phase. Later, in mid-2009, two open discussions (with various evaluation processes) about education affairs as well as green development took place via wikipolitics.gr. In late 2009, before the national elections in Greece, wikipolitics.gr gathered citizens' suggestions for the agenda of the first 100 days of cabinet, if PASOK would rise in power, which it did. After that the platform became inactive, and was superseded by the more sophisticated opengov.gr that is the web page of Greek prime minister's office for open government, run by almost the same people.

It is still interesting to address the 2009 interview with Priftis and Hatzopoulos,[9] the people behind wikipolitics.gr and, now, the main figures of Greek prime minister's office for open government, since many of their views have been the cornerstones of their efforts *"to empower democratic structures through ICT"* (Priftis). The beginning of the conversation dealt with the correlation between modern ICTs and participation in politics. They viewed ICTs promoting participation as only partly true since, on one hand, the *"Web is really us"*:

> *In theory, the more you adopt participatory ICT, the more possibilities you have towards the realization of an open party: Openness opens the way for investment in people. On the other hand, when trying to adapt this idea to real life, things are not so easy as they might seem. The existing bureaucratic, hierarchical model of governance and organization within a political party—even if its leadership wants to—is very difficult to relinquish. Only a few PASOK members of the Parliament, say nine or ten, have understood the dynamics of this open culture. But they cannot act very differently in an old-fashioned political scene; where hierarchical filters gobble up a large part of the bottom-up voices.... Furthermore, the use of ICT does not guarantee that it will effectively strengthen democracy. Culture and social norms, law, and faults in implementation threat such an initiative.* (Priftis)

The methodology of wikipolitics.gr is quite simple:

> *We are trying to convert a bureaucratic process [at that time, the process involved the submission of questions to the Greek Parliament] into a more transparent one by connecting it to the digital world. Such a process predicates open access to information and wants to deliver accountability that will win citizens' approval.* (Priftis)

As Priftis noted, at that period of time, the implementation of the wikipolitics.gr project was in an early phase: *"We are experimenting and creating fissures in the existing mechanism… After all, we are trying to build up a momentum in order to ensure and strengthen democracy in the information age."* Their work aspired to show that all of the questions to be submitted to the Parliament would be at least open to a more transparent process where citizens could have their say. For instance, Anna Diamantopoulou, a prominent PASOK member who became Greece's minister of education and innovation policy when PASOK came to power in 2009, submitted a question to the wikipolitics.gr platform while still a member of Parliament for open discussion about converting the ugly roofs of the housing blocks in Athens into green gardens. The comments made by the citizens offered many interesting insights and inputs, so that the question actually submitted to the Greek Parliament was really coauthored by Ms. Diamantopoulou and dozens of active citizens, as Priftis and Hatzopoulos told me. At the time of our interview, citizens were to start discussing and evaluating the suggestions of PASOK about technical education in Greece. *"The next step,"* Priftis said in 2009, *"is that all the questions of the PASOK members of the Greek Parliament would be available for discussion at the wikipolitics.gr platform."* This is now taking place at the opengov.gr platform for several, but not all, of the bills that are to be presented in the Parliament for passage.

When asked about the function of their platform, Priftis and Hatzopoulos replied that a stable team of people maintains wikipolitics.gr, while a critical mass of citizens quite often offer their commentaries. *"In the beginning, we were worried about the prevalence of quantity over quality… We are constantly trying to create clearly defined ways to gather and assess the inputs,"* Priftis said. In a similar vein, Clift (2004, p. 28) advised that "without structured ways to gather, evaluate, and respond to public input online, there will be diminishing value received or perceived with each additional public comment." In addition, Priftis and Hatzopoulos realized the need for a more automated mechanism regarding the coordination between their team and the members of Parliament:

> *We push the comments and the formulated ideas to the PASOK members of the Parliament. With our platform, we want to show that every citizen should have the right to participate in the debate over particular issues, even via lottery.* (Hatzopoulos)

Our conversation ended with Hatzopoulos' speculations about the future of politics:

> *We live in a contradictory, globalized society. Peer production and Commons coexist with the capitalistic, speculative production and the exclusive ownership. Every effort, so far, to subvert capitalism was "symmetrical," and thus doomed to failure: symmetry in a world that is asymmetrical and contradictory. Hence, we believe that we are moving towards a mixed political system that includes discrepant and asymmetric elements that coexist. Societies have to devote time and resources to have a better understanding of the real threats and potential of wikipolitics, as the dystopia is always a possible scenario.*

Discussing the Deliberatorium platform

In 2009, I discussed this platform via e-mail with Mark Klein, a principal research scientist at the MIT Center for Collective Intelligence and one of Deliberatorium's main developers. According to Klein, the initial results (from three evaluations—200 people in Naples, Italy, 300 people in Zurich, Switzerland, and 100 people at Intel in Massachusetts, USA) showed that large numbers of people, without special training, could effectively use this tool to create large deliberation maps on complex topics. Klein told me that next steps included the development of new functionalities aimed at (a) making it easier to find/enter content in large maps; (b) collecting metrics on the progress and problems in a deliberation; and (c) integrating deliberation maps with social media tools that are based on narratives and conversations (e.g., chat, e-mail, wikis). The current version of the Deliberatorium tool has incorporated many of these changes and can be found on-line.[10] The access is open and some of the collected data is analyzed as part of an ongoing study on improving the support of large-scale web-mediated collaborative work, as their website states.

Klein was also asked to articulate his ideas regarding the effects that Deliberatorium could have on the production of politics, that is, decision-making and problem-solving processes. Klein hoped that,

> *The Deliberatorium will make it possible for large numbers of people to much more effectively and systematically collect and evaluate a wide range of ideas concerning how to solve complex problems. I believe it can help in two ways:*
>
> > *Take better advantage of the cognitive diversity our societies offer to increase the range of solutions being considered. In current social computing systems, all too often only a tiny fraction of the possible solution ideas see the light of day, because of problems such as redundancy and dysfunctional collaboration dynamics.*
> >
> > *Foster decision-making based on evidence and logic rather than bias and emotional manipulation. The Deliberatorium is designed to encourage people to explain why they support given ideas, and uses a*

> *community-rating scheme that rewards coherent, well-supported arguments.*

Talking about open source democracy and wikipolitics, as realized in the current research project, I asked Klein whether he agreed with the view that the Deliberatorium platform could be one of the means towards open source democracy. He replied,

> *Open source democracy has different meanings to different people. I think many see it as being about giving everyone an equal voice in making decisions that affect them. While I appreciate that value, my focus is more on finding ways to use our collective intelligence to identify the best possible responses to pressing problems. Since I am exploring the use of reputation and proxy voting systems, you might even say that the Deliberatorium embodies meritocratic, rather than democratic, principles. But I think it is compatible with open source democracy, since my work aims to help people identify possible solutions and is agnostic about the process by which people eventually decide which of these solutions is adopted.*

Finally, Klein referred to the main strengths and weaknesses of that platform. He mentioned that its main strength is that *"it allows us to tap, in ways not previously possible, the skills and knowledge of large numbers of people in the service of solving complex multi-disciplinary problems."* On the other hand, Deliberatorium's main weakness is the fact that *"it is based on a style of interaction that is somewhat formal and artificial."* However, as Klein clarified, their goal is *"to integrate the strengths of a deliberation map with the narrative conversational modes of interaction that people find natural."*

The Future Melbourne Project

According to Elliot (2008)[11], Future Melbourne was the first project in Australia that used a wiki for public consultation and the first one in the world that did it so extensively in a city planning process. It contained more than 150 targets to measure the city's progress towards achieving them through six key goals: a city for people, a prosperous city, an eco-city, a knowledge city, a creative city, and a connected city. In 2007, the vision that gave rise to the Future Melbourne project was the reengineering of Melbourne's city process for generating its next 10-year strategic plan (2010-2020). Elliot (2008) noted,

> Previously, such plans were produced using cooperative participation (contribution of discrete elements that are synthesized by someone other than the contributors). However a requirement of this project was that the new plan be produced by collaborative participation (contribution with the capacity to add/edit/delete by all in order to inclusively represent the perspectives of all involved through collective contribution and synthesis). (para. 2)

In a nutshell, according to Future Melbourne's Web platform, this project constituted a community plan that aimed to

- Engage citizens in creating a vision for the future, setting priorities, and contributing to decision making;
- Value and utilize local networks;
- Focus on people and places, requiring a more flexible and joined-up [collaborative] approach to policy and service delivery;
- Connect the top-down and bottom-up policy processes that influence resource allocation.

The strategic planner and wiki administrator of the project (Dale Bowerman, "6 Responses," item 6, in Elliot, 2008), deemed that this new form of on-line consultation/participation would need some time before the majority of people feel comfortable in taking part. Discussing the maturity of this new mode of governance, Elliot wrote,

> It won't be long until special interest groups and lobbyists develop a better understanding of the potentials. This will likely spawn more conflict (along with healthy debate) surrounding the struggle for the representation of a decision. However, I see this in no way as a drawback; rather it would simply be an indication of maturity of the medium through the mirroring of life's normal activities within it. At which point, our dispute resolution policies would no doubt develop accordingly and given enough time, perhaps the need to be able to represent more perspectives/interests in policy would exert pressure upon government to rethink how "valid" policy is formed, created and updated. (2008, "6 Responses," item 2)

Coordination problems on interpersonal and interorganizational levels, as well as gaps concerning the interests and the identities, were often to be found in virtual communities and may result in subsequent conflicts. Therefore, Future Melbourne had a specific plan (informed by the Wikipedia experience, Elliot, 2008, "6 Responses," item 2) for conflict resolution.

Further, Bauwens (commenting in Elliot, 2008) assumed that the separation of the idea formation from the representational and interest-based decision making is a key step for the success of such a wikipolitics project. He believed,

> What is happening until today is that "interests" distort not only representation, but also crucially the input phases of solution-seeking, so that solutions are filtered a priori with interests already in mind, thereby prohibiting good ideas to filter through. But if we have a mechanism to allow good ideas to filter through, then it becomes a lot more difficult, with that transparency build in, for illegitimate interests to come through to the back door, and they can only acquire legitimacy by engaging with

> the good ideas, not filtering them out a priori. (Bauwens in Elliot, 2008, "6 Responses," item 3)

With regard to Bauwens' comment, Elliot (2008, "6 Responses," item 4) stated, "This sums up the ideal role … providing a publicly accessible means of developing the ideas, which opens them up to scrutiny and discussion, while enabling the further development of the ideas in a transparent and open-access way." Elliot thought that the Future Melbourne project had already achieved this.

At the moment Future Melbourne has accomplished its mission and the "Post Implementation Review" conducted by Collabforge (n.d.), an organization specialized in social media and government using modern ICTs, investigated the degree of its success. According to this report, wikis are a viable platform for public consultation that should be further examined. Following the review, important recommendations in this regard are that the opportunities for further implementation of collaborative on-line consultation must be explored; that a link between the delivery of on-line consultation and the development of digital literacy is necessary; and that policies for the development and the implementation of an innovative change management program, which adopts and integrates the new ICTs and processes in a sustainable way, are of a crucial importance.

Wikipedia project

Wikipedia, the popular free, on-line encyclopedia, is often hailed as a prominent peer production project where individuals voluntarily participate and produce a vast knowledge base. However, various criticisms (Bauwens, 2008; Butler et al., 2008) have been recently leveled against Wikipedia regarding the mode of governance that is followed. Although Wikipedia is not a wikipolitics project, it is a virtual community and shares several similarities with wikipolitics. So, using the Wikipedia project as a point of departure, I will try to identify and draw some conclusions regarding the dysfunctional and problematic situations of the governance mechanism. This study will allow for further considerations concerning the dangers of misplaced openness and participation for open-source democracy and wikipolitics projects.

Introduction to Wikipedia

The Web 2.0 has triggered large-scale interactions in unprecedented ways and gave rise to many collaborative projects, such as the well-known free encyclopedia:

> Wikipedia is a free, web-based, collaborative, multilingual encyclopedia project supported by the non-profit Wikimedia Foundation. Its 18 million articles (over 3.6 million in English) have been written collaboratively by

> volunteers around the world, and almost all of its articles can be edited by anyone with access to the site. Wikipedia was launched in 2001 by Jimmy Wales and Larry Sanger and has become the largest and most popular general reference work on the Internet, ranking around seventh among all websites on Alexa and having 365 million readers.
> The name *Wikipedia* was coined by Larry Sanger[10] and is a portmanteau of *wiki* (a technology for creating collaborative websites, from the Hawaiian word *wiki*, meaning "quick") and encyclopedia. (Wikipedia, 2011, para. 1 & 2)

This is how Wikipedia defines itself. It uses the wiki technology that allows anyone to create and edit content on-line, in an open access and participatory context. Wikipedia is actually what Bruns (2008, pp. 104, 137) calls "representations of knowledge" rather than a "synthesis of a unified position of, and on, knowledge or 'truth' itself":

> [It] provides a central, accessible, and easily editable space for the compilation and maintenance of such communal knowledge and an effective means for the aggregation of multiple and diverse such community knowledge bases into a unified, single project devoted to the compilation, synthesis and extension of representations of human knowledge about the world. (p. 104)

In other words, Wikipedia offers a draft of history that is subjected to continuous revision (Rozenzweig, 2006), so it is about unfinished artifacts in a constant process of creation and evaluation (Bruns, 2008). The content creation remains always incomplete, since it relies on the constant constructive participation of the community (Bruns, 2008). Bruns further commented that the government processes in Wikipedia are not related to any form of direct democracy. The heterarchy[12] structure, however, is constantly at risk of transforming itself into a more inflexible hierarchy of administrators. In the next subsection, the main governance problems are discussed, based on the study of internal forums, external Websites concerning Wikipedia, and e-mail interviews with (ex-)Wikipedians and experts.

Governance problems

The Wikipedia project is premised on values such as transparency, mass collaboration, equipotentiality,[13] holoptism,[14] heterarchy, communal evaluation, and sharing. However, the creation of an allegedly open playing field occasionally entails the prevalence of active and organized minorities or individuals over less active members of the community. Group polarization is another danger that open, virtual communities, such as Wikipedia, face: "Discourse among like-minded people can very quickly lead to group polarization … which causes opinions to diverge rather than converge… [so], it is very probable that the strongest groups will dominate the common life" (Hilbert, 2007, p. 120). Further, according to Bauwens (2008), a power structure

in Wikipedia has been created that is largely invisible and hence vulnerable to the tyranny of structurelessness, as described by Freeman (1970):

> Contrary to what we would like to believe, there is no such thing as a "structureless" group. Any group of people of whatever nature coming together for any length of time, for any purpose, will inevitably structure itself in some fashion. The structure may be flexible, it may vary over time, it may evenly or unevenly distribute tasks, power and resources over the members of the group. But it will be formed regardless of the abilities, personalities and intentions of the people involved. The very fact that we are individuals with different talents, predispositions and backgrounds makes this inevitable. Only if we refused to relate or interact on any basis whatsoever could we approximate "structurelessness" and that is not the nature of a human group. (para. 5)

Freeman's argument is that even seemingly structureless groups possess some structure, even if it is hidden, that may impose various practices and processes on the rest. An unregistered user of Wikipedia who I contacted at random in a forum[15] cynically commented that Jimmy Wales, one of Wikipedia's co-founders, created *"the structurelessness of a tyranny"* (personal correspondence, Informant 1, January 2009). Another user observed that Wikipedia lacks *"functional system architecture"* and *"functional social contract"* (personal correspondence, Informant 2, January 2009). A user named Yehuldi noted, *"There is a social contract, and most users and most admins adhere to it. The fundamental flaw is that there is no way to deal with the minority of admins who don't"* (personal correspondence, Informant 3, January 2009).

Wikipedia is constantly at risk of transforming itself into an inflexible, despotic hierarchy, while new disputes are emerging about the governance mode of content creation. As the size of Wikipedia increases, it becomes continually more difficult for a relatively small group of administrators to keep track of everything that happens "in the far-flung [reaches] of the site" (Bruns, cited in Kostakis, 2010). Based on my observations (Kostakis, 2010) and discussions, coordination problems on interpersonal and interorganizational levels, as well as gaps concerning the interests and the identities of the inter-Wikipedia communities, result in governance crises (conflicts about participants' editing practices, unjustified bans, power abuse by administrators, the so-called battle among inclusionists and deletionists, as documented by The Economist, 2008, etc.) and threaten the sustainability of the project. Further, the vagueness of the distinction between the social and technical powers of the administrators (who sometimes take more authoritative roles and increasingly make "moral" decisions about user behavior) leads to power accumulation in one section of the community (Forte & Bruckman, 2008). According to interviews I conducted with active (ex-) Wikipedians (Kostakis, 2010), a functional resolution process for resolving content disputes and an unambiguous community social contract model are lacking. Wikipedia may follow certain rules regarding content creation that in many cases

are mutually inconsistent and conflicting. Thus, administrators who are adept at gaming the system can pick and choose among the hodgepodge of rules, "clobber" their adversary, and justify a deletion, a block, or a ban. Moreover, another problem to be solved is the balance between participation and selection for excellence; in other words, "how to make sure that truth does not become the rule of the majority and that expertise can find its place" (Bauwens, cited in Kostakis, 2010).

Reflections in relation to wikipolitics

The study of the Wikipedia case (Kostakis, 2010) brought to the fore several potential threats and problems that on-line, virtual, open communities—including wikipolitics sites—face. In a nutshell, the documented dysfunctions and threats are the following:

- Active and organized minorities may prevail over the uncoordinated majority and other individuals, and individuals adept at the function of the platform can adroitly handle it and dominate their opponents
- Group polarization
- The tyranny of structurelessness with hidden hierarchies
- An overload of information that makes it difficult for administrators to keep track of everything
- Coordination problems on interpersonal and interorganizational levels, as well as gaps concerning the interests and the identities of the intercommunities, may result in governance crises.

Of course, wikipolitics projects differ from Wikipedia in that, for the moment at least, they are not self-governed: Administrators in wikipolitics projects are paid employees that manage and maintain each project. The examination of Wikipedia's governance problems showed how important the presence of a clear and consistent set of rules and principles is, in other words, a community social contract[16] that will reduce the chance of power abuse, protect from the danger of corruption provoked by unsavory individuals (or group of individuals), and facilitate selection for excellence when needed.

Conclusion

The aim of the current paper was to contribute to the theory of open source democracy and provide an understanding of the nature, the effects, and the potential of the concept of wikipolitics for a revitalized democratic discourse. The research issues were approached from both a theoretical and a pragmatic perspective. In theory, I demonstrated that, on the one hand, modern ICTs offer new ways for humans to produce and organize their economic, cultural, and political lives, as the economically advanced world seems to shift towards new paradigms that appear less hierarchical and more transparent, based on a participatory ethos. On the other hand, the threats and the problems of an open

source approach, and consequently of wikipolitics, were documented: There is no leapfrog path that can instantly transform democracy. Minority prevalence, group polarization, the tyranny of structurelessness, information overload, platform manipulation, protection of privacy, an unambiguous and clear social community contract enforced by law, a user-friendly architecture with natural narrative conversational modes of human interaction, and a change in the attitude of some politicians and citizens are only some of the issues and the problems that a scrupulous and scientifically designed wikipolitics project must confront.

Although open source democracy introduces new forms of democratic practice, it remains unclear whether and how they can effectively redefine democracy. Still, fiducial solutions are needed for several governance problems that on-line communities face. Moreover, as democracy deficits are not merely a technical problem in search of technological solution (Varoufakis 2007), change in the attitude of both people and politicians is needed. To make this point clearer, and to end on a more personal note, it might be suitable to quote Carlota Perez, the prominent theorist on great surges and techno-economic paradigm shifts, about technological utopianism and the efforts Greece has made under George Papandreou to take advantage of modern ICTs. In the name of openness and transparency some politicians, who seemed at that point to share that vision, thought that if we masquerade the bureaucratic elephant (e.g., Greece) as a white horse using a technological veil, then it will run as fast as a horse: Looking like a horse, the elephant can easily enter the village, and while villagers are admiring its beauty, the short-tempered elephant can launch deadly attacks. What most of the villagers would think is "How evil these white horses are!" and never trust horses again (Personal communication, Carlota Perez, 2009).

The investigation of the three cases of wikipolitics (Deliberatorium, wikipolitics.gr, and Future Melbourne) showed that their empirical results so far seem positive and capable of splitting the traditional hierarchical paradigm. In general, all the examined cases showed that there are possibilities for large numbers of people to effectively collaborate in the formulation and the evaluation of a wide range of ideas regarding the solution of complex problems. We saw that some of the theoretical conclusions articulated by the Deliberatorium team had been verified by the function of the wikipolitics.gr platform: The three main governance issues to be dealt with in an on-line community (attention governance, participation governance, and community governance) are vital towards sustaining it. However, the ICTs used in wikipolitics projects have to become less artificial and formal and adopt more natural narrative or conversational modes of human interaction. Also, they have to be user-friendly so that users can easily and quickly grasp and handle them. Some of the discussions echoed Clift's (2004) advice that significant barriers to successful wikipolitics application are the bureaucratic fears of quantity over quality and the scarcity of time faced by citizens. Therefore, well-structured ways for content submission and evaluation are needed, something that

seemed to happen in the case of Future Melbourne. In addition, during our discussion with the wikipolitics.gr team, it was understood that the traditional hierarchical modes of organization within political parties and societies, in general, arise as an obstacle towards a new, more participatory era for democracy.

It becomes obvious that the open source approach, which entertains openness and cooperation in various fields of human activity, has a long way to go towards rebuilding a tolerant, integrated civilization of the modern world. Because ICTs are rapidly evolving, and their application and practices are quite recent, reliable empirical data are still rare. Moreover, it is considerably difficult to assess the future of democracy. "Our economic life determines the political life" a Marxist would say. Peer production, a mode of production based on collaboration and communication, rings the bell for the creation of nonmaterial value: Together we have everything; together we know everything. Hence, it is up to us—the citizens—to achieve the next step towards to the genuinely democratic utopia: Together we decide everything.

Endnotes

1. The main page of wikipolitics.gr can be found at http://www.wikipolitics.gr/
2. See http://en.wikipedia.org/wiki/Panhellenic_Socialist_Movement for more info about PASOK.
3. The main page of Ta Nea is accessible from http://ta-nea.dolnet.gr/
4. The main page of the Future Melbourne project can be found at http://www.futuremelbourne.com.au/wiki/view/FMPlan
5. The URL to main page of the OLPC initiative is http://laptop.org/en/laptop/software/index.shtml
6. Background and information on the World Summit on the Information Society Geneva 2003 – Tunnis 2005 can be found at the following Websites:
   http://www.itu.int/wsis/index.html
   http://www.itu.int/wsis/docs/geneva/official/poa.html
   http://www.itu.int/wsis/docs2/tunis/off/6rev1.html
7. The discussion can be found at http://blog.p2pfoundation.net/future-melbourne-the-dawning-of-the-age-of-p2pgovernance/2008/06/06 (retrieved April 30, 2009). Elliot's post includes interesting comments by Michel Bauwens (founder of the P2P foundation), Zbigniew Lukasiak (user interface consultant), and Dale Bowerman (strategic planner and wiki administrator of the Future Melbourne project).
8. See the dispute resolution plan at http://www.futuremelbourne.com.au/wiki/view/FMPlan/PoliciesAndGuidelines#Dispute_Resolution
9. Pavlos Hatzopoulos and Thanasis Priftis were interviewed in person in Greek and, thus, their quotes have been translated in English by the author.

10. The Deliberatorium platform can be accessed at http://franc2.mit.edu/ci/login

11. All of the quotes concerning the Future Melbourne project are derived from an on-line discussion that took place at P2P foundation's blog in the middle of 2008, as well as on material extracted from the project's official Web platform.

12. Peer production projects such as FLOSS or Wikipedia do not operate in strict hierarchies of command and control. Rather they operate "in a much looser [environment] which…allows for the existence of multiple teams of participants working simultaneously in a variety of possibly opposing directions" (Bruns, 2008, p. 26). The "leadership is determined through the continuous communal evaluation of participants," and "through the degree of community merit they are able to build in a process" (Bruns, 2008, p. 26). In this sense, peer projects' heterarchies are not simply adhocracies, but ad hoc meritocracies.

13. In peer production projects, such as FLOSS or Wikipedia, all participants have an equal ability to contribute, although not all the participants have the same skills and abilities, a situation termed equipotentiality (Bauwens, 2005a, 2005b).

14. Holoptism is the ability for any part to know the whole (Deleuze, 2005). In peer production projects, holoptism allows participants free access to all information, in contrast with panoptism where participants have access on a need-to-know basis only (Bauwens, 2005b).

15. The conversations with three former Wikipedians contributors (two anonymous and one with the username Yehuldi) took place randomly in Wikipedia's Review forum in February 2009 at http://wikipediareview.com/index.php?showforum=19; see also the interview information provided in the Appendix.

16. Regarding Wikipedia, Barry Kort, a MIT Media Lab scientist and active Wikipedian, said to me in an interview, "The whole Rules and Sanctions paradigm is ill-conceived and should be scrapped in favor of a 21st Century Community Social Contract Model consistent with collegial norms of academic and scholarly enterprises."

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Appendix

Consent for publication has been given by all participants for interviews and conversations conducted for this research project:

Bauwens, Michel, interview in February 2009 via e-mail exchange; subsequent Google talk, April 2009.

Bruns, Axel, interview in February 2009 via e-mail, with semi-structured questions.

C., G., and F. are active (ex)Wikipedian users wishing to keep their anonymity and were contacted regarding questions about the problems of Wikipedia's governance in February 2009. The structured interviews took place either via email or via the message tool of the website Wikipedia Review at http://wikipediareview.com/ (membership is required).

Hatzopoulos, Pavlos, interview in April 2009 via e-mail exchange.

Klein, Mark, interview in February 2009 via e-mail exchange. I had contacted all of the initiators of collaboratorium (the former name of Deliberatorium, i.e., Iandoli, Zollo, and Klein). They decided that Klein would answer my (semi-structured) questions.

Kort, Barry, interview in 2009. He received structured questions via email in the beginning of February and returned the responses to me in March.

Priftis, Thanasis and Hatzopoulos, Pavlos, face-to-face interview in Athens, Greece, in February 2009. The 90-minute conversation in Greek was recorded and the most significant points were translated into English. The interview was semi-structured.

Yehuldi and two other anonymous Wikipedia users took part in a discussion that took place in Wikipedia Review forum, in January 2009. These informants noted within the article.

Article IV

Kostakis, Vasileios. 2011. “Commons-Based Peer Production and the Neo-Weberian State: Synergies and Interdependencies.” *Halduskultuur – Administrative Culture*, xxx - xxx (forthcoming).

Commons-Based Peer Production and the Neo-Weberian State: Synergies and Interdependencies

Vasilis Kostakis[1]

Abstract

After the demise of the New Public Management (NPM) and the rise of the concept of the Neo-Weberian State (NWS) as one possibility for the post-NPM Public Administration (PA) paradigm in Europe and beyond, one of the problems the NWS may face is that, while it takes into consideration the genuine lessons learned from the NPM experience, it may have a tendency to go back to a dirigistic, top-down, rigid form of governance in which citizens and government are each other's "Other". This could possibly be ameliorated if one could combine the NWS with one of the recently emerging and most intriguing modes of political economy, namely Commons-based peer production. This alternative mode of production and governance can arguably offer interesting chances for successful PA reform, stressing the essence and the importance of abundance, distribution and intrinsic positive motivation for and within a responsive state.

Key words: New Public Management; Neo-Weberian State; peer production; peer governance; commons

1. The demise of the New Public Management and the emergence of the Neo-Weberian State

The concept of the New Public Management (NPM) originates from the early 1980s, when neo-liberal governments dominated the scene while the Welfare State model was allegedly in crisis. (Drechsler 2005a) Founded "on themes of disaggregation, competition, and incentivization" (Dunleavy et al. 2006, 467), it has often been described as "a useful model for developing countries to follow". (Manning 2001, 297) It has been widely claimed (e.g. Greer 1994; Zifcak 1994; Mascarenhas 1993; Walsh 1995; Larbi 1999) that a common feature of the states which took the NPM route has been the economic crises that triggered the quest for efficiency and for lowering the costs of public services. NPM techniques are drawn from the private sector with an increasing use of market principles and business practices and an emphasis on efficiency and performance. (Drechsler 2005a) They may come from Anglo-America, as Drechsler (2005a) mentions, but, according to Barzelay (2001, 160-161) "the equation of NPM with an Anglo-American approach to public management

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policy is hardly a recipe for policy analysis and learning on an international scale." Larbi (1999) claims that in the 1990s, variants of NPM techniques and practices were applied in several transitional economies as well – many of them, though, have chosen only some items from the NPM menu. (Turner 2002)

Manning (2001, 297), a senior public-sector-management specialist with the World Bank, argues that the "victory of NPM was very partial" as it changed the debate over the models of Public Administration (PA), but "did not silence other public management voices and certainly did not take us to the end of managerial history." Drechsler (2005a) sees NPM as "part of the neo-classical economic imperialism within the social sciences" that is based on the idea that all human behaviour is always motivated by self-interest and, more concretely, profit maximisation. One of the main arguments of Drechsler's (2005a) critique is that NPM considers public and private interests as identical. "The use of business techniques within the public sphere", he writes, "confuses the most basic requirements of any state, particularly of a Democracy, with a liability: regularity, transparency, and due process are simply much more important than low costs and speed." Lynn (2008, 24) argues that "the managerialism promoted by global capitalism is highly vulnerable to the forces of democracy in significant part because it has lacked democratic legitimacy." In a similar vein, Greve and Jesperson (1999, 147) articulate that "the concepts of citizen, citizens rights and citizen participation are almost non-existent in NPM debates." Moreover, there is no empirical evidence that NPM reforms have increased either productivity or welfare; but on the contrary, already van Mierlo (1998, 401) outlines that "several years of attempts and experiences of public management reforms in western Europe and other OECD countries give evidence of relative failure rather than success." However, Larbi (1999) does not see the problem in the concept of NPM itself, but claims that the main reason for the unsatisfactory results of NPM is the institutional environment that persists and constrains the implementation capacity.

On the other hand, Drechsler (2005a) makes another point attacking the very essence of NPM economics where quasi-markets are created within administrative organisations in order to create market behaviour. He argues that:

> Such a behavior can only develop in genuine and not in quasi- (i.e. pseudo-) markets. For example, if there are product monopolies and no free consumer choice – if one administrative institution is supposed to have a contract with a predetermined other, regarding a product or service that cannot be delivered by anyone else, for instance –, then there cannot be a free market either, nor its beneficial consequences.

Batley (1996, 748) maintains that "the presumption that involving the private sector makes for higher levels of performance is given only partial support" by the evidence. In addition, Clarke and Newman (1997, ix) notice that "NPM is often portrayed as a global phenomenon – a core element in the process of

convergence between states, overriding distinct political and cultural characteristics." Bouckaert and Mikeladze (2008, 7) also stress this point stating that "we are providing the right answer to the wrong question", as "culture and context do matter".

Drechsler and Kattel (2008, 98) conclude that the demise of NPM is, nowadays, a fact: "NPM is certainly dead – not as dead as a doornail, perhaps, but among scholars not a viable option anymore." Despite the fact that the NPM reform message has become sympathetic to states that had been rather resistant previously, such as India (Chakraverti 2004; Shah and Bakore 2006) or Japan (Yamamato 2003), nowadays it seems that this wave has largely stalled or been reversed: The "NPM is arguably as much a casualty of the global economic crisis as are the markets and market mechanisms which underpin it". (Levy 2010, 234) Dunleavy et al. (2006) argue that the cognitive and reform scheme of NPM may still be afloat with few of its elements in an active development; however, NPM policies are intellectually dead-ends being gradually replaced by a variety of information-technology-centred approaches:

> The overall movement … is toward 'digital-era governance' (DEG), which involves reintegrating functions into the governmental sphere, adopting holistic and needs-oriented structures, and progressing digitalization of administrative processes. DEG offers a perhaps unique opportunity to create self-sustaining change, in a broad range of closely connected technological, organizational, cultural, and social effects. (Dunleavy et al. 2006, 467)

Dunleavy et al.'s articulation is taken up later again, when dealing with the political economy of Commons-based peer production.

A viable alternative to NPM, which has entered the field of debate concerning the future of PA, is the concept of the Neo-Weberian State (NWS) that was first introduced by Pollitt and Bouckaert in their book *Public Management Reform: A Comparative Analysis* (2004) and later advanced by Drechsler (2005a and 2005b), Drechsler and Kattel (2008), Pollitt (2008), Potucek (2008), Randma-Liiv (2008) and others. According to Pollitt and Bouckaert (2004), the NWS can be considered a model of public-management reform or even, if we follow Drechsler and Kattel (2008), a political orientation. This encompasses the ideas of political power and modernisation:

> First, the state remains a strong steering and regulating presence within society. Thus the objective is not the minimal state … The state is … the guarantor and partner of both a strong economy and a civilized, socially cohesive society. It is the initiator or facilitator of a whole range of additional democratic mechanisms, central and local, both representative and direct … Second, the state is steadily modernizing, professionalizing and seeking improved efficiency. But there is no assumption that aping the private sector … is the *only way* [author's italicization] to achieve

> efficiency and professionalism. Private sector methods *may* [author's italicization] be chosen on some occasions and for some policies, but they have no automatic priority or superiority. (Pollitt 2008, 14)

This makes the NWS a genuine post-post-NPM, Weberian-based system, as emphasised by Drechsler (2005a), with lessons learned from the NPM experience. As Pollitt (2008, 14) underlines, the NWS is not just a mix of traditional Weberian bureaucracy with some NPM efficiency tools; rather, it seeks to modernise the state and includes, as will be discussed in more detail later, both "Weberian" and "Neo" elements. The latter "preserve the main part of the traditional Weberian model and modernize it (which … can take various context- and country-specific forms)". (Drechsler and Kattel 2008, 96) This comes in accordance with Larbi's (1999) claim that a careful and selective adaptation of some NPM elements to certain sectors may be beneficial for societies.

However, although the NWS takes into consideration the genuine lessons learned from the NPM experience, it may tend to go back to top-down forms of governance, which are too rigid and inflexible to meet citizens' increased demands as generally postulated. (Dunn and Miller 2007) One could also claim that the NWS is, after all and in spite of any updates, a historical concept, and as societies and individuals substantially change over time and have indeed experienced great changes under the influence of technology, most recently and still currently Information and Communication Technologies (ICT) (see only Castells 2000, 2003, 2009; Bauwens 2005; Benkler 2006), new claims and expectations should be counted in the formulation of PA reforms, because they do address human living-together today and thus must adapt to it. (Drechsler 2011) These new claims and expectations can be found in a particularly strong and pronounced way in one of the recently emerging and most intriguing modes of political economy, namely Commons-based peer production. Building on Drechsler (2005a and 2005b) and putting the "human person into the center of administrative decision-making" (Drechsler 2005a), this essay argues that the optimal solution for "a responsive and responsible state" (Drechsler 2005a) should contain elements not only from NPM but also from the alternative modes of production and governance as exemplified by Commons-based projects, such as the Free/Open-Source Software[2] and Wikipedia[3]. As the next sections will try to demonstrate, the latter does not conflict with the NWS, but actually can help, synergise and enrich it in spheres where it proves to be more productive and effective than the classical, hierarchical state.

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[2] There are a myriad of FOSS projects. Some prominent ones can be found at http://www.linux.org/, http://www.gnu.org/, http://www.ubuntu.com/, and http://www.mozilla.org/. All the URLs in the footnotes were retrieved on 25 December 2010.

[3] http://www.wikipedia.org/.

2. The emergence of Commons-based peer production

Within information production ("information" stands for culture, knowledge and data), one of the most important movements over the last two decades has been the emergence of the Commons-based Peer Production (CBPP), a term coined by Yochai Benkler (2006). During that period of time, two parallel shifts could be observed: Not only did the most advanced states move towards an information-based economy, but the declining costs of ICT made them also available to a much wider fraction of the population. (Benkler 2006; Castells 2000, 2003, 2009; Bell 1976) According to Benkler (2006), this has led to the creation of a new communicational, interconnected, virtual environment that has given birth to a new social productive and exchange model radically different from the industrial one. CBPP, exemplified by projects such as Free/Open-Source Software, the free encyclopaedia Wikipedia or LibriVox, the digital repository of books narrated by volunteers[4], reduces the value of proprietary strategies, making public, shared information more important, and allows for large-scale, co-operative information production efforts. (Benkler 2006) Bruns (see Bruns 2008; Kostakis 2010, 2011) calls this "produsage", where produsers (producers + users) simultaneously innovate, produce, distribute and consume, impregnated with an ethos of participation, sharing, communication and collaboration. Thus, CBPP, in this context, is a third mode of production that has been enabled through Internet-based co-ordination, where decisions arise from the free engagement and co-operation of the people who coalesce to create common value. (Kostakis 2010, 2011) It is a mode arguably more productive concerning the creation, production, and distribution of information value, in which the creative energy of multitudes is co-ordinated into meaningful projects without the traditional hierarchical or market-based organisation. (Bauwens 2005; Benkler 2006)

Benkler, in the book *Wealth of Networks* (2006), makes, amongst others, two intriguing economic observations which challenge the mainstream understanding of Standard Textbooks Economics (STE). CBPP projects serve as examples where STE's assumption that in the economic production, the human being solely seeks profit maximisation, is turned almost upside-down. In CBPP, multitudes of volunteers contribute to information-production projects, gaining knowledge, experience, reputation and communicating with each other, i.e. they are motivated by intrinsic positive incentives. This does not mean that the monetary motive is totally absent; however, it is relegated to being a peripheral concept only. (Kostakis 2009) Many aspects of human expression, according to Benkler (2006, 461), "are replete with voluntarism and actions oriented primarily toward social-psychological motivations rather than market appropriation." The second challenge comes against the conventional wisdom that, to put it in Benkler's words (2006, 463), "we have only two basic free

[4] http://www.librivox.org/.

transactional forms – property-based markets and hierarchically organized firms." CBPP can be considered the third one, and it should not be treated as an exception but rather as a widespread phenomenon, which, however, for the moment, is not counted in the economic census: "Worse", as Benkler highlights (2006, 463), "we do not count them [CBPP processes] in our institutional design". In STE terms, CBPP can be considered, as Bauwens (2005) maintains, "only in the sense that individuals are free to contribute, or take what they need, following their individual inclinations, with an invisible hand bringing it all together, but without any monetary mechanism." Hence, in contrast to markets, i.e. the holy grail of STE, in CBPP, the allocation of resources is not done through a market-pricing mechanism, but hybrid modes of governance are exercised, and what is generated is not profit, but use value, i.e. an Information Commons. (Bauwens 2005)

It can be argued that CBPP projects flourish in states of information abundance, giving rise to new modes of governance as a result of the new productive forces of production, i.e. the combination of means of labour (ICT and abundant information) and human labour power (person's ability to work; in the case of CBPP mostly brain-power), while new relations of productions are developed. The near-zero marginal cost for reproducing information goods, which are non-rival (the use of one unit does not diminish the use value of the next one; on the contrary, it may increase its value), leads to states of abundance for resources, tools and goods. If CBPP "describes the processes of information production within on-line, collaborative, voluntary communities which produce common value using mechanisms of self-governance, then peer governance [Commons-based peer governance, CBPG] is the way that peer production is organised." (Kostakis 2010) It is a bottom-up mode of participative decision-making where decisions are taken through the unconstrained engagement and free co-operation of producers. (Bauwens 2005; Kostakis 2010) Kostakis' study (2010) on the characteristics of CBPG, using Wikipedia and the internal battle between inclusionists and deletionists as a case study, supports that CBPG is actually an unfinished artefact that follows the constant reform and refinement of social forms within the online communities. It is a suitable mode to govern large sources, working more effectively in abundance (Kostakis 2010); whereas in the scarcity realm, democratic – in the form of representation – or market-based modes tend to prevail.

Especially when abundance is replaced with scarcity (as happened in Wikipedia when deletionists demanded a strict content control), power structures emerge as CBPG mechanisms cannot function well. (Kostakis 2010) In order to have a better understanding of abundance, it is important to realise how scarcity, i.e. "the condition when available goods do not meet demands" (Hoeschele 2010, 19), is created. Hoeschele (2010, 19-20) suggests that there are three ways that scarcity can be generated:

> First, the total amount of a good or service can be reduced. For example, the expansion of market activities may reduce the amount of goods provided by nature (such as clean air) … Second, barriers can be placed between people and a good. Of potentially many ways to obtain that good, only one or a few may be left available, leading to the creation of a bottleneck … Third, new wants or needs can be created, or existing ones modified, so that demand for a commodity exceeds supply … All three basic mechanisms not only increase scarcity, but also curtail freedom by forcing increased expenditures on people and reducing available options of how to satisfy their needs.

"Throughout history", Hoeschele maintains, "we can conceive of social power as having been based in part on the construction of scarcity." That is why abundance is a key to CBPP projects' sustainability.

The reintroduction of certain elements of traditional organisation (hierarchy or market) contributes to their sustainability as well (Loubser and den Basten 2008; Benkler 2006), whenever there is a need to manage scarcity. A benevolent dictatorship can be the result of spontaneous hierarchy, in which the leader of the project – for instance, in the Linux project, Linus Torvalds is the benevolent dictator (Malcolm 2008) or in Wikipedia, Jimmy Wales holds that role (Kostakis 2010) –, whose sole role is to serve the community, has authority which comes from responsibility and not from the power to coerce. (Weber 2004) These elements are, after all, part of what it is understood as CBPG – an heterarchical (heterarchies, following Stephenson (2009), bring together elements of networks and hierarchies and are the most relevant organisational structure, as they provide horizontal links, which allow for various elements of an organisation to collaborate, while optimising individually several success criteria), hybrid mode of organisation which combines traditional modes of organisation with network-based ones; or, to quote Weber, "an imperfect mix leadership, informal coordination mechanisms, implicit and explicit norms, along with some formal governance structures that are evolving and doing so at a rate that has been sufficient to hold surprisingly complex systems together." (2004, 189)

Before discussing CBPP and CBPG in relation to the NWS, it would be important to show how the former differ from or complement the seemingly relevant concept of the Digital-Era Governance (DEG). Dunleavy et al. (2006, 468) stress the central significance of ICT-based changes "in management systems and in methods of interacting with citizens and other service-users in civil society in the underpinning and integrating of current bureaucratic adaptations." They (2006, 468) view this influence "as having effects not in any direct technologically determined way but via a wide range of cognitive, behavioral, organizational, political and cultural changes that are linked to information systems broadly construed". As mentioned above, DEG summarises this constellation of ideas and reform changes. In a nutshell, it has three key

elements: Reintegration (e.g. reversing fragmentation, network simplification, re-governmentalisation, procurement concentration and specialisation); needs-based holism (e.g. client-focused structures, agile government processes, one-stop provision); and digitalisation (e.g. automation, Web 2.0 governance, electronic service delivery, moving toward open-book government). (Dunleavy et al. 2006)

CBPP has been emerging in the so-called digital era, and it represents some of those cognitive, behavioural, organisational, political and cultural changes linked to ICT. However, in the context in which Dunleavy et al. (2006) describe DEG, it seems that they draw ideas from transactional services and from the business sector – one can argue that DEG is still prone to frame citizens as consumers bringing in mind the general vein of NPM – but not from CBPP initiatives: In their analysis, CBPP is not explicitly touched at all. In addition, it has been contended (Bauwens 2005; Benkler 2006) that CBPP reflects a change of consciousness towards participation, creating a new public domain, an Information Commons, as exemplified by certain initiatives which inaugurate a more co-operative social order. The political economy of CBPP, according to Bauwens (2005), incarnates the egalitarian side of this new digital culture, connected to the older traditions of co-operation of the workers and peasants – to the search for a meaningful life which becomes an expression of individual and collective creativity. Hence, it becomes obvious that the CBPP is a mode of production, complemented by certain processes of property and governance, that all together create and manage a Commons.

It is also important that CBPP is not confused with Non-Governmental Organisations (NGO) – although Commons-based projects may be run and/or supported by NGO – because the former, as was just emphasised, is a mode of social production, whereas the latter is a model of a legally constituted organisation. CBPP may work independently from government for the moment, transcending fixed organisational formats which allow power to consolidate, but this does not mean that governments and states cannot benefit from taking certain lessons from the phenomena of CBPP and CBPG, as will be explained next.

3. CBPP and the NWS

It is now argued here – as a suggestion more along the lines of a research programme, rather than as a fully-developed claim – that CBPP and CBPG can be of particular interest within the discipline of PA as well, because they largely rest on a new ideology and epistemology substantially different from those of the STE that gave rise to NPM. (Drechsler 2005a) In a nutshell, following Drechsler (2005a), from an ideological perspective, STE and NPM interpret all human behaviour under a self-interest, profit-maximisation spectrum, while

from an epistemological one, they share the quantification myth, i.e. qualitative judgements are of no value as "everything relevant can be quantified".

It is especially interesting to look at synergies with the Neo-Weberian concept of state that can learn certain lessons from CBPP and CBPG, especially with the final goal, to put it in Aristotle's terms (see Drechsler 2003), of the Good Life in the Good State. The "Weberian Elements" of the NWS model describe the strong Weberian basis on which reforms should take place in order to ensure that they will work well. (Drechsler and Kattel 2008) But precisely this means that in the debates about the Neo-Weberian possibility, the danger is that one might go back to dirigistic modes of governance in which citizens and government are each other's "Other".

Pollitt and Bouckaert (2004, 99-100) summarise their description of the Weberian basis of the model in the following four points:

> Reaffirmation of the role of the state as the main facilitator of solutions to the new problems of globalization, technological change, shifting demographics and environmental threat;
> Reaffirmation of the role of representative democracy (central, regional and local) as the legitimating element within the state apparatus;
> Reaffirmation of the role of administrative law – suitably modernized – in preserving the basic principles pertaining to the citizen-state relationship, including equality before the law, legal security and the availability of specialized legal scrutiny of state actions;
> Preservation of the idea of a public service with a distinctive status, culture and terms and conditions.

Drechsler and Kattel (2008) stress the necessity of a solid, stable, neutral bureaucracy and suggest that states should avoid change for the sake of change: "The idea of modernization itself should be clarified, what does 'modern' really mean?", they wonder. (2008, 97) The current essay thus tries to contribute to the political orientation for the NWS understanding 'modern' not in the sense of 'new' or 'fashionable', but using it to add elements in line with times and situation.

Apart from the 'Weberian Elements', the NWS includes also some 'Neo Elements' that are summarised in the following four points:

> Shift from an internal orientation towards bureaucratic rules towards an external orientation towards meeting citizens' needs and wishes. The primary route to achieving this is not the employment of market mechanisms (although they may occasionally come in handy) but the creation of a professional culture of quality and service.
> Supplementation (not replacement) of the role of representative democracy by a range of devices for consultation with and the direct

> representation of citizens' views (this aspect being more visible in the northern European states and Germany at the local level than in Belgium, France or Italy).
> In the management of resources within government, a modernization of the relevant laws to encourage a greater orientation on the achievement of results rather than merely the correct following of procedure. This is expressed partly in a shift in the balance from ex-ante to ex-post controls, but not a complete abandonment of the former.
> A professionalization of the public service, so that the 'bureaucrat' becomes not simply an expert in the law relevant to his or her sphere of activity, but also a professional manager, oriented to meeting the needs of his/her citizen/users. (Pollitt and Bouckaert 2004, 99-100)

The narrative of CBPP and CBPG, especially concerning the first two points, could offer interesting insights and introduce novel venues for the set goals. To begin with, it would interesting to address the possibilities of open-source democracy and wikipolitics, as explained in Kostakis (2011), for experimenting in small-scale projects with participatory platforms where citizens can articulate, evaluate or even suggest solutions to their problems and needs. Of course, there is no leap-frog path that can instantly transform democracy (Kostakis 2011): Online communities face many organisational problems – such as minority prevalence, protection of privacy, information overload, platform manipulation, group polarisation, etc. (Kostakis 2010, 2011) – and participatory platforms lack a user-friendly architecture with natural narrative conversational modes of human interaction. (Kostakis 2011) However, the investigation of projects like Future Melbourne, which tried to transform the traditional, hierarchical city-planning exercise run by a few, to a global, wiki-based collaboration concerning the future of Melbourne, shows that their empirical results so far are positive and capable of amending the traditional, hierarchical paradigm. (Kostakis 2011)

Furthermore, CBPP reintroduces the importance of abundance. Opening (non-confidential) public information and freely offering, thus, a significant means of production can have positive externalities and induce the creation of novel projects. For instance, the digital archive of a public television broadcaster can serve as a great repository for further cultural creation. Or the free distribution of public raw data, say, concerning burnt forests can lead to the creation of a digital record with reforestation regions, as the Tilaphos[5] project has done in Greece; which, however, was not supported by the state, but citizens, using their GPS machines, recorded the burnt forests near them, and this created a large database of the burnt areas categorised per regional department. CBPP makes evident that social imagination and creativity become unpredictable since an abundant intellect (i.e. the surplus creativity of people) can have access to resources (information), tools (ICT) and goods (information as final product).

[5] http://www.tilaphos-reforest.blogspot.com/.

Thus, in the management of resources, concerning at least information, it would be important to take into consideration the way that resources are organised within CBPP, which produces more immaterial value than the industrial sector. (Benkler 2006; Bauwens 2005) Moreover, legal regimes, such as the Creative Commons[6] or the General Public Licenses[7] that define the distribution of resources and tools within CBPP, can offer interesting insights while modernising laws, especially, regarding immaterial goods.

In fact, the NWS should – in a normative sense – realise the potential of CBPP, and if Benkler (2006) and Bauwens (2005) are correct in their observations (for instance that CBPP is based on the highest intrinsic motivation; it is more productive in the immaterial field of production; and it creates collaborative relations of production based on synergies), a fundamental mission of a responsive NWS should be the empowerment of direct social-value creation by user communities, because that is the task of the time in which we live, the task of the era of the Social Web (Benkler 2006; Bauwens 2005; Bruns 2008) and of the time in which the second phase of the ICT TEP has to create, hopefully, a Golden Age. In that way, the NWS becomes an arbiter, retreating from the binary state/privatisation dilemma to the triarchical choice of an optimal mix amongst government regulation, private-market freedom and autonomous civil-society projects. (Bauwens 2010)

In addition, as mentioned above and as supported by Bauwens (2005) and Kostakis (2010 with further discussion and references), in states of abundance, at least in the information production of the Internet, CBPG allocates resources and results more effectively than representative democracy or markets. If this claim is correct, then what could that mean for the NWS and PA? CBPG offers people autonomy and the possibility to pursue their interests and passions through their engagement in the social process of co-operation. CBPG processes can arguably be implemented in other aspects of human expression where resources and tools are abundant and are freely distributed, creating fields of unconstrained co-operation, which can produce certain results and goods. In that way, people satisfy some of their higher needs while simultaneously contributing to creative projects whose result may have several positive effects for societies. It becomes obvious that CBPG and CBPP, which represent civil society's efforts to directly produce use value, share a common feature here with the NWS: Context does matter, and higher human needs and incentives are not neglected, as happens in the worldview of STE and NPM. This change in the context, complementarily proposed by the rhetoric of the NWS and the empirical examination of CBPP, should not be neglected even in the current wave of austerity (after the financial meltdown beginning to unfold in 2008) which, if following Dunleavy and Margetts' (2010) warning – although they (2010) notice that for the moment "NPM … has not revived despite the pressure

[6] http://www.creativecommons.org/.

[7] http://www.gnu.org/licenses/gpl.html

on public spending" –, could bring about a return to privatisation, contracting and outsourcing as a way to cut down public-sector budgets. Pollitt reported in May 2011 that "the widespread misery of deteriorating services, mass redundancies and a disgruntled citizenry" is imminent, concluding that "the pain of the cuts must not tempt us to turn inwards. One lesson from the innovation literature is that new ideas and synergies can come from anywhere."

It would be interesting to deal with Carlota Perez' great-surges theory and her model of Techno-Economic Paradigm Shifts, both developed in her 2002 book *Technological Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages*, which can provide thought-provoking insights into the institutional shifts, in which the NWS, along with the concepts of CBPP and CBPG, could arguably play key roles. The Perezian model (2002), which at first looks at long-term development like the relentless advance of technology, has a techno-economic focus, and thus its introduction into the discussion can offer an "over the horizon" projection. According to it, progress takes place by overlapping surges, with each surge lasting approximately 40-60 years:

> A great surge of development is … the process by which a technological revolution and its paradigm propagate across the economy, leading to structural changes in production, distribution, communication and consumption as well as to profound and qualitative changes in society. (Perez 2002, 15)

Following her analysis, during the last two centuries, societies have experienced five technological revolutions with each evolving "from small beginnings in restricted sectors and geographic regions", ending up "encompassing the bulk of activities in the core country or countries and diffusing out towards further and further peripheries, depending on the capacity of the transport and communications infrastructures." (Perez 2002, 15) A great surge of development consists of five phases, which, although not strictly separated, can be identified as sharing common characteristics throughout history. To be more concrete, firstly we have "irruption" (technological explosion) that is the initial development of the new technologies in a world where the bulk of the economy is made of old, maturing and declining industries; then "frenzy" follows, which is a very fast development of technology that needs a lot of finance (this is when the financial bubbles are created). These two first phases constitute the installation period, when finance and greed prevail in a free market atmosphere. Next, turbulent times come (i.e. collapse, recession and instability) in what she calls "the turning point", when the institutional changes are made for the deployment period to begin. A lot of institutional innovation (hopefully) takes place, and economies are enabled to take full advantage of the new technology in all sectors of the economy and to spread the benefits of the new wealth-creating potential more widely across society. These synergies occur in the early stage of "deployment" (synergy phase) until they approach a ceiling (maturity phase) in productivity, new products and markets. When that ceiling is hit, there

is social unrest and confrontations while the conditions are being set for the installation of the next revolution.

It could be argued that the current crisis is in fact "what Perez calls a turning point in the middle of the diffusion of a techno-economic paradigm." (Kattel, Drechsler and Reinert 2009, 1) And although post-collapse/recession is the current situation, what lies ahead may be a "Golden Age". If the NWS model incarnates what Perez considers institutional changes, which create the necessary infrastructure to overcome the crisis and span the benefits of the new wealth on society, (Drechsler and Kattel, 2008) then the timely concepts and time orientation of CBPP and CBPG can serve precisely as the inroads of those organisational, precisely paradigm- and phase-oriented changes for the formulation of models for public-administration reform. Of course, it is important to emphasise that like any other "over the horizon" projection and speculation, these predictions may partly or totally misfire. As CBPP is a timely and quite recent concept, which is rapidly evolving, it may change its character in ways that are not anticipated here.

4. Conclusion

The aim of this essay was to shed light on the dynamics of the relatively recent concepts of CBPP and CBPG in relation to the NWS. "With attention to the specific local reality", (Drechsler 2005a) CBPP and CBPG can offer interesting chances for successful PA reform stressing the essence and the importance of abundance, distribution and intrinsic positive motivation for the Aristotelian concept of the Good Life and in the Good State. (see Drechsler 2003) These observations are not only of technological nature, but more of a political one contributing to the political orientation of the NWS. Moreover, CBPP projects can redefine the ways that citizen involvement in the democratic mechanisms can be exercised; however, we should keep in mind that the democratic deficits are not merely a technical problem in search of technological solution. (Varoufakis 2007)

Therefore, the main goal of this essay was to tentatively argue that a Neo-Weberian system with both Weberian and Neo- elements could very well, and probably should, adopt and adapt elements, ideas and processes (re)introduced by the timely concepts of CBPP and CBPG. The arguments developed here do not call for a modernisation of traditional Weberianism for the sake of modernisation, but they try to contribute to the political orientation for the NWS, understanding "modern" not in the sense of "new" or "fashionable", but using it to add elements in line with times and situation.

It is important to take into consideration, though, that, echoing Drechsler and Kattel's (2008) articulation regarding NPM reforms, if the Commons-oriented reforms are to work well at all, they will only do so on a strong Weberian basis.

And of course, in order to prevent dysfunctional imitation, we have to remember Bouckaert and Mikeladze's (2008, 7) advice that "a more sophisticated diagnosis, as a function of culture, context, and systems features" allows for "selective transfers, for inspiration by other good practices, for adjustments of solutions, for facilitated learning by doing, for trajectories which are fit for purpose".

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APPENDIX (Article V)

Article V

Papanikolaou, George and **Vasileios Kostakis**. 2011. “An Essay on P2P Energy Policy.” In R. Smite, A. Medosch, K. Mey and R. Smits (eds). *Acoustic Space No. 8: ENERGY*. Riga: RIXC; Liepaja: LiepU MPLab, 26-30.

An Essay on P2P Energy Policy

George Papanikolaou & Vasilis Kostakis

Abstract

This essay, written in a manifesto form, addresses some crucial issues related to the timely topic of the distributed or Peer-to-Peer (P2P) energy production. It uses the emerging mode of the P2P production in the immaterial field of production (information, culture, knowledge) as a point of departure to realize the dynamics of this new energy technology and shed light on its socio-economic aspects.

A radical change in the organization of information production has been observed during last decades. Two parallel shifts have taken place: the most economically advanced societies are moving towards an information based economy while the declining costs of ICT (Information and Communication Technologies) made them available to a much wider fraction of world population. This led to the creation of a new interconnected environment in which a new social productive and exchange model is emerging that is radically different from the industrial one (Benkler, 2006): we are becoming witnesses of the emergence of P2P production (or just *peer production*).

P2P production is a third mode of production that has been enabled through internet-based coordination, where decisions arise from the free engagement and cooperation of the people, who coalesce to create common value, without the traditional hierarchical organization (Bauwens, 2005; Benkler, 2006). The online free encyclopaedia Wikipedia; and the thousands applications of FLOSS, i.e. Free/Libre/Open Source Software, are very few examples of the legion of the ongoing P2P production projects. This new paradigm has also been called 'produsage' (Bruns, 2008), almost synonym to what we call P2P production, where 'produsers' (producers + users) simultaneously innovate, produce, distribute and consume, premised on an ethos of sharing, communication and collaboration. The hybrid role of produser represents the merging of producer and consumer roles, as the produser is actively involved in the collaborative and constant development of existing content in pursuit of further improvement (Bruns, 2008).

In P2P production, the productive processes are organized with the aid of distributed networks, from the bottom-up, and are based on the free choice of individuals to cooperate – without financial reward being their basic motive – for the accomplishment of common goals or projects.

If the detachment of the means of production and their accumulation by a class of owners was the necessary condition for the development of the capitalist

relations, the reunion of the means of production with producers is the most fundamental condition for the genesis of P2P production. Further, the access to distributed capital leads to the creation of a directly accessible infrastructure that allows for the voluntary and autonomous cooperation of individuals giving rise to the concept of produser.

The nature of the current technological infrastructure, which makes the production and distribution of energy possible, does not permit us to talk about P2P production or produsage in the same way as in the sphere of immaterial production. Technological restrictions, such as limited diminution in relation to performance; the relatively high costs for the acquisition of energy producing equipment; and the presence of a hierarchical distribution network of one–way energy flows from big producers to small or bigger consumers, create considerable barriers. Although the horizon for the transgression of these barriers is starting to become visible, it is not imminent: today, it is necessary to plan and effectuate transitional and applicable solutions.

Hence, P2P energy production can be described as the organization of distributed production systems that are interconnected with a network, which permits energy flows from many to many. It is based on the voluntary participation of individual producers, who ideally use renewable sources safeguarding this way a long term sustainability and ecological balance.

P2P energy production is characterized by multiple advantages: it ensures security (the destruction or malfunction of centralised infrastructures paralyses economical activity) and it is also more effective in facing the strategic dangers posed by climate change. Firstly, because it creates a geographically distributed backbone of production activity that deters the depopulation of the countryside, and then because it is friendlier to the environment.

The distributed architecture creates multiple and geographically dispersed positions of dependent work and self–employment in comparison with the concentrative one. Producers adopt a more responsible attitude towards the environment in respect to energy consumption and saving, when they are self-producers and partner managers of their energy sources; it is to their own interest to adopt softer technologies environmentally wise, since they suffer directly by the environmental impacts of their choices.

P2P production can overcome the problem of the absence of social approval for energy investments by local societies, a result of the justified distrust with which the plans of the would-be “green energy squires” are treated. In P2P production the main bulk of energy flows is achieved in the interior of local networks, by saving the energy that is lost during transmission and by reducing the needs for investments on upgrading the networks’ capacity. The interconnection of the electrical network with the internet permits the formation

of smart local networks, where energy demands can be adapted to production, minimizing thus the needs for storing that ultimately reduce energy performance.

The defenders of the current architecture invoke techno-economic arguments such as the high (today) financial performance of concentrative system of electricity production. In these estimates the real cost is obscured, while the negative impacts on society, on the environment, and on future generations are not counted in and remain "external" to the capital performance.

We, therefore, have to invent new indexes that will incorporate the real costs for the society and the environment. For the next years the production of energy will remain an important field of economic activity in the context of the market, so that cost issues will continue to have an incumbent influence on the transition strategies.

Although the genesis of relations of P2P production in the spheres of free software and cultural production was a bottom-up process and was established through legal forms embracing universal property (the Creative Commons or the General Public Licenses, for example), this was made possible because the fundamental prerequisite of the existence of distributed stable capital was already accomplished, via the use of distributed computational power and of a medium (internet) through which, at a low cost, produsers could self-organize. On the contrary, the current cost of technological equipment, technical skills, and the existence, in most cases, of small private properties, make P2P energy production today mainly a business for the middle class. In addition, the current architecture of the electricity network deters a similar "from the bottom-up" emergence of P2P energy production. Although the slow, from the bottom-up development, cannot be ruled out, it is most likely that it will be a parallel "bottom-up" and "top-down" process.

The principal technologies that will prevail in the transitional era (without exhausting the whole picture) are photovoltaic energy production, wind power, and combined heat and power (CHP). The first two use renewable sources, whereas the latter requires raw material that can be differentiated (oil, natural gas, biomass, etc.). The performance of these technologies is greatly dependent on geo-spatial conditions.

Since the access to renewable sources as well as the spatial distribution of human activity is subject to geographical differentiations, we will have to keep an open mind to any technology or mixtures of technologies that can efficiently utilize local wealth and local social conditions. For example, the cogeneration is more suited to dense urban areas where the installation of wind turbines is practically impossible and the use of photovoltaics impinges on the complexity of administrative barriers, especially when it involves the presence of multiple

small properties. The use of photovoltaics is favored by appropriate architectural design of isolated houses in areas of long sunshine duration, whereas the wind potential is richer in island areas of the country.

Policies have to allow for the biggest possible freedom of choice to the producers as to what modes of production will be used and what types of institutional form the cooperation will take, whereas central planning might be proven catastrophic. In reality, central planning will have to be limited to the formation of a loose regulatory framework of participation that will mainly aim at safeguarding ecological sustainability. The production potential of individuals and local societies will have to be set free in order to organize -using the inventiveness that characterizes collective participation- local networks of energy production and distribution.

Policy measures like subsidizing the Kwh generation/consumption are simple to implement and might be quite effective in a transition period, helping the quick return on investments; enhancing thus the necessary distribution of stable capital. We ought to be cautious, however, because these types of policies can disproportionally burden the economically weaker, disrupting in this way the necessary political and economical alliances that constitute the middle class. In the cases of medium sized installations that primarily serve the needs of a geographic community, various patterns of cooperation amongst producers can be developed. The creation of stock companies with transferable shares should not be subsidized and the property rights, which will be strictly confined to the inhabitants of the local society, must be universal and non transferable.

The ownership, the management, in a few words the architecture of the relations that the distribution network defines, form the meeting and conflict point of different social interests. It becomes, thus, the central focal point of policy making. Its public (and not necessarily state) character will have to be secured, its absolute independence from governmental and large corporations, as well as the priority of its use by small producers against big ones. Local societies must have the right to install and manage their own networks.

The technological equipment of the devices interconnecting producers should have an open design and operate via open protocol standards communication. This way, the establishment of strategic monopoly control in the operations of the network by the state and by large corporations (similar to the current established standard that controls telecommunication infrastructures) will be prevented and innovation will be able to develop. At the same time, an opportunity for development will be offered to many medium–small businesses of intensive knowledge having small needs for venture capital. The collective participation of the producers through the open architectures will accelerate the maturation of its services.

Open planning can be supported by the research partnerships of universities, research institutes and private companies. Their research results, at least to the extent that tax payers' money is used, must necessarily and directly fall under the public sphere in the shape of licenses of non exclusive property. In this way, research results could be diffused directly and little businesses that lack the potential to finance research and development can also utilize them.

The current organization of the network tends towards the establishment of an obligatory intermediary, who will intermediate in all exchanges. As favorable as this deal may seam, the intervention of an obligatory intermediary in energy flows introduces a hierarchical element that poses arbitration risks. The sale prices for small producers will finally have to shape freely and the consumers themselves should be the direct buyers in a smart, emancipated and P2P informed energy market. Such a network must permit the direct interconnection and negotiation of many among many, a fact that requires a different topology and technology of interconnection than the one imposed today.

Technological choices are not socially neutral. The dominant public discourse tends to underestimate this aspect and displaces public dialogue in ostensibly technocratic controversies. Behind energy choices and the arguments their defenders evoke, we must detect the interweaving net of corporation interests, social classes, social groups and expressions of political power.

We find ourselves in the middle of a crossroads of renegotiation of almost all of the up to date "constants" of our social and political system, under the weight of a systemic crisis and the unprecedented threat of an ecological disaster. The political powers that aspire to rule in this historical period must prove that they can face and manage, in the name of society as a whole, the problem of sustainable development. In this way, the so-called "green development" will be a common appeal of the entire political spectrum. Its focal point is the architecture of the energy–electricity production process. This is where social and class interests meet and clash and the different strategies unfold.

Since the direct production process is the one that defines distribution, the single most important innate advantage of P2P production is that it ensures, on a long term and on a stable basis, a fairer and more equal distribution of wealth. In P2P energy production the largest part of the energy produced is intended for individual consumption, limiting the field of the market to exchanges of energy. A network that allows, without the mandatory intervention of a third party, the reversal of energy flows between peers, delimitates even more the sphere of the market and the official monetary circulation.

The quality features of the architecture of P2P production build a new economy of autonomy and solidarity that is developed within the capitalist mode of production. P2P energy production launches a triple redistribution:

redistribution from the few and large to the small and many; from the city to the countryside; and from the older to the younger generations. The latter not only because younger people as natural carriers of new technologies will secure more jobs and business opportunities, but also because it raises their environmental shares.

In an unstable historical period, submerged in economic insecurity, the middle class senses the opportunity offered by P2P energy production. By investing in it, the energy safety of households in secured, jobs are created, and a steady income is generated, while it is also beneficial to the environment. In any case, it is an attractive refuge for the financial reserve, at least against the alternative of a parasitic financial system, which is under the threat of collapse. Under conditions of economic crunch, the tax payers face with hostility the idea to subsidize -in the name of the environment- the creation of private investments the products of which they will have the obligation to buy afterwards. More so, when they can become producers of this commodity. This condition brings political claims for distributed access to stable capital (means of energy production) much closer than we imagine today.

These tendencies are, for the moment, organized in a fragmentary manner through civil society organizations, and civic movements that are often manifested by their resistance to the political and financial choices of organized corporate interests and of a state that operates under their influence. The inevitable progressive awareness will sharpen the political struggles giving them an increasingly positive object of contention. The success of a fast P2P transformation in energy production would require a "partner state", i.e. a transformed state that will move from being a patron of corporate interests to being a supporter and organizer of the networks' productive activities.

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Author's note

Precursor of this article is George Papanikolaou's "Peer to Peer Energy Production and the Social Conflicts in the Era of Green Development" published at a special issue of the online journal Re-public about P2P energy at

http://www.re-public.gr/en/?cat=53 (retrieved 28 March 2010). The final manifesto edition was cured and enriched by Vasilis Kostakis.

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