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García Puchades, W.; Lloret Romero, MN. (2013). Cultural Peer Production in Times of Crisis. International Journal of Technology, Knowledge and Society. 9(3):163-170.



The final publication is available at

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CULTURAL PEER PRODUCTION IN TIMES OF CRISIS*

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INTRODUCTION

The economic crisis affecting some European countries and the United States has reduced drastically the funding aimed to the cultural field. In this way cultural production is shown monopolized by large private companies which are minimizing risks because of their fear to lose money. Therefore, they only give financial support to those projects that could be consumed by the majority of people. Finally, the consequence is a cultural panorama in which cultural innovation is getting more and more difficult.

Davies and Ford (1999) predicted what was going to happen in the artistic field ten years later in their article "Art Futures". They described new work identities and ways of relating with the private sphere that had already been implemented. The accuracy of the authors when defining some roles and trends such as the interest in the "prosumer" (producer-consumer) or the "pro-am" practice (professional-amateur), as well as the role of the "culturpreneur" (cultural entrepreneur) is surprising. Besides this, although they did not reach absolute discernment in predicting the current economic crisis, it is interesting to consider the scenario that could relate to some dynamics that begin to appear and suggest if vaguely, what processes would be necessary to open a new paradigm between economy and culture.

Therefore, it is expected that the private sphere continues reproducing the processes and dynamics that are tried in the cultural sphere in a more confident way so as to redefine its position. The cultural field will have to admit that it cannot depend either on public bodies and infrastructures that centralize production or the economic and political fluctuations to which these entities are submitted. This awareness on the need to try self-managed models of cultural production will drive to search for more sustainable alternatives settled in local frameworks, thus generating participative economies based on net models that can become emancipated from too institutional strata and massive

^{*} This study is part of the research project named "El arte de la participación. El uso de las tecnologías de la información como herramienta de creación colectiva en el arte contemporáneo hispanoamericano". This project, with reference number HAR2012-33154, has been financed by the Ministry of Economy and Competitiveness.

markets. The funding sources could include private and public partners but there must also be teams working specifically on negotiating terms in order to formulate new collaborative strategies that can be beneficial for the interests of the human tissue that holds the net, both regarding the cultural, symbolic and social impact, and the legal protocols and licences that are more suitable (Martínez 2008).

In recent decades, and according to these predictions, some cultural projects have arisen as an alternative to the dominant model of cultural production. These projects are named "common-based P2P projects". Their power is based on the fact that its infrastructure does not depend either on public resources or on the law of supply and demand, but on the resources and interests shared by a crowd of individuals (Benkler 2002; Bauwens 2005; Benkler & Nissenbaum 2006; Menichinelli 2007).

However, the common-based peer to peer production does not only appear as an alternative infrastructure to develop its own projects without depending on public funding or market laws, but as an alternative ethics of the production. As we will see, participation in these projects implies learning about the behaviors related to some individual and social virtues such as autonomy, generosity, sociability, etc. So, as opposed to other more utopian and idealistic models, this one is presented, here and now, as a material and ideological alternative to the dominant model of production.

The following text will try to explain why peer to peer cultural production is useful in these times of crisis. We will try to justify that in two ways: firstly we will show the advantages that the P2P model of cultural production offers if compared with the dominant models of cultural firm production; secondly we will deal with the moral virtues associated with the participation in these projects.

INFLUENCE OF CRISIS IN ARTISTIC AND CULTURAL PRODUCTION

Over the last decades the model of cultural production has been dominated by two different funding patterns: the private or business pattern and the public or state pattern. According to the first one, cultural production is considered as a consumer article ruled exclusively by the logic of the exchange value of the market. This logic is grounded in the economic law of supply and demand. In this model, cultural production is linked to show business and mass, thus reducing the cultural supply to those products that can be consumed by the majority of people (Benkler 2002, 1).

As an alternative to this firm model, the state model has tried to expand the variety of cultural production by supporting risky and innovative proposals with subsidies and funding. This second model has not been subject to obtaining economic benefits as has business model; it has been independent of the market's interests instead. This economic independence has enabled it to develop other ways of controlling the cultural production linked to ideological aspects (political, religious, ethnic, etc.).

Nevertheless, in our opinion the crisis of the welfare state has brought to light the fact that the logic that really rules over the public or government patterns of cultural production is not a political, religious or ethnic idea, but an economic idea, that is, the *ideo-logic* of the market or the law of supply and demand (Badiou 2008). In other words, the economic crisis has shown that the only existing model that rules over cultural production is the model of firm organization and management (either state or private) ruled by the logic of obtaining benefits according to the market patterns. An example of this is the fact that many European governments have had to reduce the allocations for cultural production (Logopress 2012).

Therefore we are facing a situation in which the dominant model of cultural production is subject to maximizing the flow of benefits. All this favours the emergence of projects that can be consumed by a high number of people but it restricts cultural creation and innovation to a great extent, since the original nature of its proposals is linked to a risk in investment that few companies are willing to assume. Only an autonomous production model independent of market laws could take the risk required by this kind of cultural and artistic projects.

Over the last few years some theorists have considered the P2P production model as the paradigm of a model of cultural production that can escape from the infrastructure of the firm organization and the tyranny of market laws (Benkler & Nissenbaum 2006, 400; Bauwens 2005). In 2002, Yocahi Benkler was one of the first theorists who pointed out that the organization of the individuals' models of economic production was no longer tied to the old dichotomy between firms and markets, but to a new model called "commons-based peer production". Benkler thinks that this form of production allows individuals who work for a company to not be subject to their managers' orders, and those who are in different markets to not be slaves of the price signals (Benkler, 2002). But before explaining how these production models can be an alternative to the existing model of cultural production we will analyze what the logic of a firm production and a commons-based peer cultural production consist of.

THE LOGIC OF FIRM PRODUCTION

In order to describe the productive logic of a firm we will follow the excellent text written by Rajan and Zingales (2000) named "The Firm as a dedicated Hierarchy: A Theory of the Origin and Growth of Firms". According to these authors a firm is characterized by a unique source of value (the critical resource) ruled by three mechanisms: access, specialization and ownership (2000, 39). These mechanisms define the organizational infrastructure that is conditional on the productive roles of the personnel.

There is a clear distinction between two roles in the firm production model: the entrepreneurs and their managers. Entrepreneurs own the critical resources of a firm and control the access to them. So, the more access to the resources a manager has the more power. This way, entrepreneurs establish a vertical hierarchy among their managers. Since there are different degrees of access, managers will develop a specific task within

the production process depending on the resources to which they have access to. Besides this, given the fact that this hierarchical organization is vertical, managers will perform the specific task that their immediate superior has assigned them. So any of them, once specialized in their task, will only become productive if they are part of a team containing their immediate superior (Rajan & Zingales 2000, 3).

Finally the text shows how the size of a firm is directly related to the enforcement of property rights. The relative size of firms in industries with intangible assets should increase when the efficiency of the judicial system improves. A firm that is placed within a state with strong judicial measures on property laws provides entrepreneurs with the confidence to expand their business, employ more managers and specialize its tasks much more (Rajan & Zingales 2000, 27-8)

The organizational cohesion of a firm is based on a logic of dependence and subordination, since participants depend on their superior to perform their task, and ultimately, everyone depends on the entrepreneur. All this prevents the autonomy of firm managers to compete with entrepreneurs within a production area with equal opportunities, even if cooperating with other workers (Rajan & Zingales 2000, 4-6).

In sum, our model suggests that in the formative stages of a business, an entrepreneur uses control over access to the resource and specialized employees, as well as the allocation of ownership over the resource to design the right balance of power between herself and her managers. Too much power to managers will destabilize her own position, too little will give them little interest in the well being of the firm (Rajan & Zingales 2000, 7).

In a firm production model, entrepreneurs, who are the ultimate owners of the critical resources and the access to them, use different constraints among managers to build a hierarchy and avoid the expropriation of resources and market competition. By making use of their position of power in the firm, entrepreneurs show managers that any attempt to compete with them in the market is doomed to failure.

All this is possible due to the fact that the firm's infrastructure prevents managers to have the same access to the firm's critical resources as the entrepreneur, even if different managers wished to share resources. The vertical hierarchy of access and task specialization forces any relationship among managers to be mediated by a superior and ultimately, by the entrepreneur. So there will always be a loss in technique and resources that will make it impossible for managers to be competitive with entrepreneurs. Therefore, managers cannot produce cooperation with others if entrepreneurs do not join them. By forcing every interaction to be approved of by entrepreneurs, any attempt to become "emancipated" within the organization is avoided. (Rajan & Zingales 2000, 7). Finally, the existence of a judicial system that is efficient in the enforcement of property rights allows increasing the number of employed managers as well as their specialization in the firm, so the risk of expropriation decreases.

In short, the text by Rajan y Zingales (2000) shows us perfectly the manner in which the logic of production of a firm model is based on an infrastructure —property rights, access to production resources and communication among workers— which, placed in

the competitive game of the market, prevents those who are not the owners of large firms from producing.

THE LOGIC OF COMMONS-BASED PEER CULTURAL PRODUCTION

Commons-based P2P cultural projects have appeared in the last years thanks to communication technologies and Web 2.0 development (Benkler & Nissenbaum 2006, 394). In the beginning, these projects were linked to the computing field –like the open source movement– and to the creation of decentralized "peer-to-peer" networks which allowed users to share archives freely (Menichinelli 2007, 19).

Free software and open source are born in the field of computer programming and both of them refer to software whose source code can be used, studied, modified, copied and redistributed without restrictions, or with the only restriction that none of those actions are restricted (GNU Operating System 2012). Open source involves a broad body of collaborators, typically volunteers, whose every contribution builds on those before. Another important aspect is the fact that in an open source project the product of this collaboration is freely available to all comers. Therefore, the ideal of an open source project is to share: to share the goal, to share the work and to share the result. To achieve this it is necessary to keep three spheres open to participation: knowledge, the working team and the conversation (Menichinelli 2007, 55).

The second phenomenon that has contributed to the development of commons-based peer production has been the improvements of peer-to-peer software. This software permits building decentralized communication and information exchange networks. The peer-to-peer network, also known as P2P network, has shifted focus away from the static architectures of client-server model that characterized the early Internet towards a decentralized model. A pure peer-to-peer network designates any type of network in which all devices have the same status, the same functions, and are free to associate with each other. Instead of relying on a base station to coordinate the flow of messages to each node in the network, the individual network nodes forward packets to and from each other (Schollmeier 2002).

In recent years, Web 2.0 improvements in social networks, open contents software and P2P networks applied to the field of communication (such as telephony, instant messaging, video streaming, etc.) has permitted the expansion of these projects to other spheres. In Web 2.0, many innovative projects have found the chance for self-management by getting material, human resources (crowdsourcing) and funding (crowdfunding) from different users and institutions to achieve their aim. A good example is the different crowdsourcing projects that have emerged in different fields in the last few years. For instance, in science, some biologists have embraced open source methods in genomics and informatics by building massive databases to complete the genome sequence of *Escherichia coli*¹. NASA has adopted open source principles as part of its Mars mission, calling on volunteer 'clickworkers' to identify millions of craters and help draw a map of the Red Planet². In the field of design some projects are

applying open source strategies to car manufacturing —such as $Oscar^3$ or $Fiatmio^4$ — or kitchen furniture —such as The Meta-territorial Kitchen $System-3^5$. Art is another sphere where these projects are mostly found. To name a few examples, $Communimage^6$ in photography; The Johnny Cash Project or The Elephant S Dream in animation; Man With A Movie Camera: A Blobal Remix or S or Star Star

In short, and following Bauwens' well-known text (2005) 'The Political Economy of Peer Production', we can state that the commons-based peer production model is based on a legal, physical and communicative infrastructure that enables open, egalitarian and volunteer participation of different users in a common project: an infrastructure that allows access to a 'fixed capital', available at low cost or free (that is, the physical infrastructure of communications, fixed and mobile terminals, etc.); a communication and information system that permits decentralized and autonomous interaction among cooperating agents without the intermediary of big mass media (that is, blogs, wikis and other Web 2.0 spaces); and a legal infrastructure that allows the creation of use values and protects private appropriation (for example, The General Public License (GPL), which forbids appropriation of the software code, the open source initiative, or certain versions of the Creative Commons license).

CONCLUSION

At this point we can justify why commons-based peer cultural production is one of the best alternatives to the contemporary crisis. At the beginning of this text we described the situation as the one in which the dominant model of cultural production restricts cultural creation and innovation to the firm model of organization and market laws. We also argued how the logic of production of a firm model prevents someone who does not own a firm from competing in the cultural market. So, any workers' attempt to produce regardless the productive structure of the company to which they belong is less competitive, so it is doomed to failure.

It followed that only an autonomous cultural production independent of the firm infrastructure could take the risk required to compete with big entrepreneurs in the development of cultural and artistic projects.

Commons-based peer cultural production proposes a model of production that is perfect to face the dominant trend that characterizes the contemporary cultural scene. As seen before, in a time in which cultural production is motivated by the market interests and structured according to the model of private business organization, the commons-based peer production model develops as a result of a great number of individuals sharing their own resources and motivations in a volunteer way with the objective of achieving a common goal.

The success of commons-based peer production lies in favoring volunteer, open and global participation under the only principle of sharing resources for a common objective. The participants of these projects share three kinds of resources: human — knowledge, creativity and other specific abilities— material —tools, software, technological devices— and economic resources.

The access to the resources that form these projects together with a decentralized communicative structure and the laws that forbid the private appropriation of resources favour cohesion among its members on the basis of personal motivation as opposed to motivation from a superior: the collective motivation based on the particular will of participants to take part in that project.

Finally, the decentralized and open nature of this project does not renounce effectiveness, so there must be a self-control system of contents that allows it to distinguish between malicious and beneficial contents according to the objectives of the project. This characteristic allows us to think of cultural products derived from commons-based peer projects as an alternative that can compete with cultural products derived from large firms.

Besides this, P2P production processes are not only interesting because they are an efficient alternative to contemporary cultural production, but also because they allow people to experiment and develop certain virtues that are valuable by themselves. Benkler and Nissenbaum divide them into individual and social virtues (Himanem 2001; Benkler & Nissenbaum 2006, 405-9).

Regarding individual virtues associated with participation in commons-based peer projects, autonomy, independence, liberation, creativity and productivity stand out. In these projects individuals choose to participate, continue or abandon the project freely. The development of these virtues can be carried out with difficulty through processes of production linked to hierarchical structures, since they always depend on an authority that tells them what to do. However, a non-hierarchical and decentralized nature prevents the existence of a subjective authority that forces to perform a task. As volunteers, participants show independent will, initiative, self-reliance, discretion and free-spiritedness (Benkler & Nissenbaum 2006, 405-6). Besides, while market laws make cultural production conditional on economic efficiency and on the consumption by most citizens, the self-managed nature of P2P production enables the emergence of new cultural practice that ranges from writing novels, making audio-visuals, exhibitions, etc. This characteristic also forces its participants to play an active role in the background of contemporary production and to not be mere consumers (Benkler & Nissenbaum 2006, 406; Oram 2001, ix).

With regard to social virtues, generosity, kindness, benevolence, sociability, camaraderie, friendship, cooperation and civil virtue stand out. People who take part in P2P production processes develop virtues that are produced by means of small shared contributions that become extremely valuable for the people who are involved in the project. Besides, some theorists state that, given the fact that in most cases they make

these contributions freely and do not ask for compensation, these projects favour generosity, kindness and benevolence more that the pleasure or satisfaction of giving (Benkler & Nissenbaum 2006, 407; Raymond 1999, 81). On the other hand, although the last virtues regarding participation in P2P projects are linked to the individuals' participation in collectivities that they need to achieve their own interests, this does not involve eliminating their own autonomy and independence in the decision-making process. This apparent contradiction is solved thanks to self-reliance, that is, the confidence in the fact that the inability to do something yourself will be replaced by the ability of someone else to do it (Stallman 2011). Therefore, participating in these collective projects involves the development of extremely important values for the citizens' development and concern about the public affairs that are present in the place where they live, such as sociability, camaraderie, friendship or cooperation. Moreover, they do not need to appeal to collective, excluding and closed identities of belonging (Benkler & Nissenbaum 2006, 409; Sandel 1996, 126; Reagle 2004).

NOTES

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<sup>1</sup> <http://www.echromi.com/>
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REFERENCES

Badiou, Alain. 2008. "Only one world." In *The Meaning of Sarkozy*, trans. David Fernbach. Verso: London and New York, 53-70.

Bauwens, Michel. 2005. "The Political Economy of Peer Production." *1000 Days of Theory*. Accessed 21 January 2013. <<u>www.ctheory.net/articles.aspx?id=499</u>>.

² <http://open.nasa.gov/plan/clickworkers/>

³ http://www.theoscarproject.org/

⁴<http://www.fiatmio.cc/>

⁵ < http://www.guixe.com/exhibitions/2003 mtks-lisboa/index.html>

⁶ http://www.communimage.ch/engl/

⁷ < http://www.thejohnnycashproject.com/>

⁸ http://www.elephantsdream.org/

⁹ http://dziga.perrybard.net/

^{10 &}lt;a href="http://www.starwarsuncut.com/">http://www.starwarsuncut.com/

^{11 &}lt;a href="http://www.thesheepmarket.com/">http://www.thesheepmarket.com/

¹² <http://www.e-flux.com/projects/do_it/homepage/do_it_home.html>

Benkler, Yochai. 2002. "Coase's Penguin, or, Linux and the Nature of the Firm." *The Yale Law Journal* 112(3): 1-73.

Benkler, Yochai and Nissenbaum, Helen. 2006. "Commons-based Peer Production and Virtue." *The Journal of Political Philosophy* 14(4): 394-419.

Davies, Anthony and Ford, Simon. 1999. "Art Futures". Art Monthly, 223

GNU Operating System. 2012. "What is free software?" Accessed 29 November 2012. http://www.gnu.org/philosophy/free-sw.en.html>.

Himanem, Pekka. 2001. *The Hacker Ethic, and the Spirit of the Information Age*. Random House: New York.

Logopress. 2012. "Mas recortes en Cultura en los Presupuestos para 2013." Revista de Arte, 1 Oct. 2012, Accessed 23 January 2013.

http://www.revistadearte.com/2012/10/01/mas-recortes-en-cultura-en-los-presupuestos-para-2013/>

Martínez, Ruben. 2008. "Cultura y crisis económica (¡Tú la llevas!)". *Blogs&docs*, Accessed 8 february 2013. http://www.blogsandocs.com/?p=313.

Menichinelli, Massimo. 2007. *Reti collaborative. Il design per una auto-organizzazione Open Peer-to-Peer*. Doctoral Thesis, Facoltà del Design in Poliecnico di Milano. Accessed 29 November 2012. http://www.openp2pdesign.org>.

Oram, Andy. 2001. *Peer-to-Peer: Harnessing the Power of Disruptive Technologies*. O'Reilly & Associates: Sebastopol.

Rajan, G. Raghuram, and Zingales, Luigi. 2000. *The Firm as a Dedicated Hierarchy: A Theory of the Origin and Growth of Firms*. National Bureau of Economic Research: Cambridge, Mass. Accessed 8 february 2013. http://papers.nber.org/papers/w7546.pdf>

Raymond, Eric Steven. 1999. *The Cathedral and the Bazaar: Musings on Linux and Open Source by Accidental Revolutionary*. O'Reilly Associates: Cambridge, Mass.

Reagle, Joseph. 2004. "A case of mutual aid: Wikipedia, politeness, and perspective taking." Accessed 23 January 2013 < http://reagle.org/joseph/2004/agree/wikip-agree.html>.

Sandel, Michael. 1996. *Democracy's Discontent: America in Search of a Public Philosophy*. Harvard University Press: Cambridge, Mass.

Schollmeier, Rüdiger. 2002. "A Definition of *Peer-to-Peer* Networking for the Classification of *Peer-to-Peer* Architectures and Applications." In *Proceedings of the First International Conference on Peer-to-Peer Computing (P2Pi01)*. Accessed 1 December 2012

http://csdl.computer.org/comp/proceedings/p2p/2001/1503/00/15030101.pdf.

Stallman, Richard. 2011. "Philosophy of the GNU project." Accessed 21 January 2013. http://www.gnu.org/philosophy/>