

This is the author's version of a chapter accepted for publication in the *Handbook of Peer Production*. Changes resulting from the publishing process such as copy-editing, typesetting, and other quality control mechanisms may not be reflected in this document. This author manuscript version is available for personal, non-commercial and no derivative uses only.

Citation: O'Neil, M., Toupin, S., & Pentzold, C. (2021). What's next? Peer production studies? In: M. O'Neil, C. Pentzold & S. Toupin (Eds.), *The Handbook of Peer Production* (pp. 388-396). Malden, MA: Wiley-Blackwell.

ISBN 9781119537106 Available at: <https://www.wiley.com/en-au/The+Handbook+of+Peer+Production-p-9781119537090>

The Handbook of Peer Production

Chapter 29 – What's Next? Peer Production Studies?

Mathieu O'Neil, University of Canberra, Canberra, Australia; Sophie Toupin, McGill University, Montréal, Canada, & Christian Pentzold, Chemnitz University of Technology, Chemnitz, Germany

1. Introduction

Peer production is commons-based and commons-oriented voluntary labor with participatory and transparent coordination. It decentralizes both goal setting and execution to networks of individuals (Brabham, 2013). There is accordingly a tendency to think about it in terms of its revolutionary political potential: if everyone has access to the same resources and has the same rights, does the question of property becomes moot? Only if we pretend the rest of society does not count. For the moment at least peer production exists principally as a form of community-oriented volunteer labor, in the case of Wikipedia for example, and of volunteer labor co-opted by firms, as in the case of F/OSS. So how should we think about peer production? How are other people thinking about it? What is it good for, in analytical terms, exactly?

In this penultimate chapter of the *Handbook of Peer Production* we revisit the dual contribution of peer production to productive efficiency and to social justice which we identified in our Introduction. We first interrogate these two concepts’ potential for future research, and suggest where promising avenues of investigation might be found? We then reflexively evaluate peer production as an object of study by mapping an online network of peer production researchers and activists and consider whether a field of “peer production studies” has emerged, and should emerge.

2. Peer Production and Productivity

Peer production matters because it provides a uniquely creative contribution to the integrity of products and processes: projects start from personal needs and requirements. What usually evolves as an alternative to commercial offerings such as software or knowledge resources gradually outperforms established ventures. The shape of the products created by this voluntary labor is very much connected to the requirements of the producing

community. This means that the objectives and outcomes of a project primarily reflect the demands of their initial contributors, who are also prime beneficiaries. In peer production, this *integrity of product and process* also implies that the outcome and the means for continually improving products conform to similar normative conditions: free and open source software projects not only yield free software but also depend on free software. The same holds true for Wikipedia, which provides its content under a Creative Commons license and which also opens up its wiki software under connate provisos of the General Public License, published by the Free Software Foundation. The peer production process is not without flaws: modularity generates costs, for example. Designing rules, and securing agreements on them, takes considerable time and effort. The main cost of modularity resides in the tendency of modular systems to ossify, as each change requires “payment anew of the fixed costs of setting up visible design rules” (Langlois & Garzarelli, 2008, p. 133).

Nonetheless, Yochai Benkler (2002) posited that peer projects would outperform firms provided certain conditions were present. These included widespread access to networked communication technology, a multiplicity of motivations driving contributions, and non-rival information goods which are granular, modular, and easy to assemble. The efficiency and innovations deriving from the integrity of product and process and the economy deriving from the enrolment of volunteer community labor naturally led commercial firms to increasingly adopt peer production. Dahlander and Magnusson (2005) identified three types of relationships between firms and ethical-modular projects: symbiotic (both gain), commensalistic (the firm gains, the project is indifferent), and parasitic (the firm gains, the project loses). They outlined the conditions required for successful firm engagement with community-based projects, such as respecting norms and rules, obeying licenses, and resolving ambiguities over control and ownership. In his book on the incorporation of F/OSS by firms, Birkinbine (2020) revisited Deek and McHugh’s (2008) typology of five open

source business models.¹ More recently, Okoli and Nguyen (2016) identified eight existing business models which they then submitted to a group of 34 experts for comment.² The relationship between commercial and communal organizations is, and will continue to be, a key component of research in this area. In their summary of peer production research focusing on innovation and efficiency, Benkler et al. (2015) divide research on peer production into foundational work and new directions in the study of *governance*, *contributor motivation*, and *product quality*. New directions include examining the potential advantages of gate-keeping and comparative analyses of project success and failure. To this end, online archives of interactions do offer researchers unprecedented insights into the evolution of peer projects. Comparative analysis is of great value, and we are proud that this *Handbook* features a ground-breaking contribution from a foundational researcher in the innovation strand of peer production research, Siobhán O’Mahony. In the chapter, O’Mahony, together

¹ The strategies identified by Deek and McHugh (2008) are: (1) Dual Licensing (e.g. MySQL): the owner of the copyrighted software provides a free and open distribution for non-profit users but requires for-profit customers to pay a fee to use the software; (2) Consulting (e.g. LQ Consulting): the firm assists other firms with planning, strategy, and implementing appropriate open source solutions within their business; (3) Distribution and services (e.g. Red Hat, Canonical): the firm provides services for non-expert computer users by handling the compilation of stable, updated, and prepackaged software suites that are distributed to clients); (4) Open/Proprietary Hybrid – Vertical Development (e.g., Google): the firm uses open source as a base upon which proprietary software can be built; and (5) Open/Proprietary Hybrid – Horizontal Arrangements (e.g. IBM, Microsoft): firms become directly involved in supporting open source projects to supplement their own business operations.

² The models identified by Okoli and Nguyen (2016) are: (1) Advertising: The software owner contracts ads displayed in software or manuals either directly or through an advertising network, perhaps using a provided software development kit; (2) Auxiliary services: Revenue is generated from paid professional services (e.g., implementation, support, maintenance, consultation, training) provided along with the software rather than the software itself; (3) Corporate development and distribution: Organizations pay full-time or part-time developers to customize and extend F/OSS for their own organizational needs; then they distribute some or all of their modifications at no charge to the community for the continued improvement of the original product; (4) Crowdfunding: The project owner or an individual developer proposes a defined amount of development work and a budget for implementation. Interested parties contribute any amount they want, and if the budget target is reached, then the developer commits to complete the defined work; (5) Dual-licensing/Selling exceptions: The software is available under a typical F/OSS license. Users (normally organizational) who want to modify the software and distribute it without adhering to F/OSS licensing terms pay to obtain such authorization; (6) Memberships and donations: This involves requesting financial contributions from individuals or organizations, where the organization that develops the F/OSS products retain control in deciding how to allocate the contributions towards the development and distribution of its products; (7) SaaS with distribution of server software: The core software is server-based. Customers subscribe to the online service often with freemium pricing, that is a gratis offering plus one or more paid offerings with added features. A generic F/OSS “community version” of the core server-side software is distributed with baseline features; (8) Update subscriptions: Users are required to subscribe (usually annually) in order to obtain updated versions, bug fixes and technical support. This model is often employed for niche products with small user bases (which limits widespread distribution by others at no charge) where frequent updates and rapid bug fixes are important.

with co-authors Rebecca Karp and Amisha Miller, explores the relationship between project governance and scope (or range of different activities engaged in) in twelve mature projects. Inaugurating a promising new direction for peer production research, they found that collectives that expanded their scope were more likely to distribute governance rights to contributing participants through a more collaborative mode of production (Karp et al., this volume).

It is worth noting that out of these twelve projects, only one (Wikipedia) is community-run, whilst the rest are sponsored or owned by private firms (InnoCentive, Eclipse, Reddit, Pinterest, etc.). This reminds us that a distinction must be made between “commons-based peer production” and “commons-based *and commons-oriented* peer production”. Another way of putting it would be to distinguish between “centralized” and “decentralized” peer production (Dulong de Rosnay & Musiani, 2016).

A side-product of the growing prevalence of more horizontal modes of work are the periodic appearances of Silicon Valley homilies to “holacracy” whereby the hierarchical organization of modern corporations is predicted to give way to networks, or communities, that make collaboration paramount. Even better, by giving employees a greater say in decision-making, “corporations will make choices that ensure the future of the planet and its inhabitants” (Hansen, 2016).³ These rosy scenarios forfeit terms such as capitalization, bottom line and profit margin: somehow, with Mondragon-inspired “holacracy,” employees will become their own bosses as shareholders gracefully relinquish control.

³ In reality, the notion that decentralized systems of control are superior to bureaucratic confines and rules can be traced back to the 1940s (Follett, 1941; Lewin, 1948), but the rise of knowledge work and its questioning of traditional forms of social discipline (Hecksher & Adler, 2006) breathed new life into the idea that bureaucracy and hierarchy needed to be surpassed. Bureaucratic structures were found insufficiently responsive and adaptable to intensifying competitive pressures (Alvesson & Willmott, 1992). Post-bureaucratic management theories described labour as occurring in informal networks where involvement is spontaneous (Williams, 2007). An original organizational form, the “networked enterprise,” was said to be emerging in conjunction with informational capitalism (Castells, 1996). Networked enterprises comprised both new forms of individual involvement (flexible work) and new work practices (flexible production). Normative rhetoric framed administration in terms of trust, empowerment and autonomy over rationalist discourses of control (Barley & Kunda, 1992).

3. Peer Production and Social Justice

For all their incoherencies, such visions serve to remind us that individual self-fulfillment, together with increases in innovation, productivity, and product quality are but one side of the peer production coin. The production and protection of commons, mutual aid, trust, cooperation, transparency, direct democracy, as well as resistance to technocrats and oligarchs, also come into play. These qualities can be experienced implicitly by participants. For example, the swift emergence and effective hegemony of Wikipedia is a truly remarkable achievement. Granted, peer review by the multitude is less likely to result in correctness when it comes to text and ideas than computer code. Either code runs, or it doesn’t, and the difference is plain to see. In contrast just because a fix to an error on Wikipedia *can* be made, does not mean that it *will* be made, and there are other costs to collective text editing, such as deleterious conflicts (O’Neil, 2010). Wikipedia is far from perfect. Nonetheless its immense importance stems from its universal adoption: all over the world, millions of people understood and embraced qualities foreign to traditional encyclopedias, such as unlimited access to knowledge and the transparency of the editing process afforded by the wiki platform. In contrast to these implicit understandings, some theoreticians have teased out the explicit political potential of peer production. Christian Fuchs thus describes Wikipedians as “prototypical contemporary communists” (2017, p. 325), though it could be argued that his celebration of “info-communism” does not sufficiently take into account the way digital corporations co-opt peer production. For instance, Wikipedia contributes to generating web traffic, thus enhancing commercial search engine results, and a considerable number of contributors are unaware of any normative or ideological overtones being associated with their engagement (Pentzold, 2018). An early critical examination of the political potential of peer production was Johan Söderberg. In *Hacking Marxism* (2008), he adopted the Italian

Autonomia shift in Marxist thinking from the primacy of capital over labor to the primacy of “labor as subjectivity, as source, as potential of all wealth” (Negri, 1984, p. 69). Söderberg suggested that the increasing co-option of the F/OSS model by firms meant that resistance had to operate inside the capitalist system; that the system could only change from within. We have documented in this *Handbook* the process whereby capitalism thoroughly digested and co-opted the resistance to intellectual property which F/OSS once embodied (see O’Neil, Toupin, & Pentzold; O’Neil & Broca, both this volume), a development Söderberg himself acknowledged in later years (Delfanti & Söderberg, 2018). Recent monographs have further expanded the exploration of the political economy of peer production and the digital commons (Birkinbine, 2020; Lund & Zukerfeld, 2020), showing this is a dynamic research area

Critical organizational scholars have also begun to engage with the implications of commons theory and practice for the analysis of organizations (see Fournier, 2013; Meyer & Hudon, 2017; O’Neil, 2015). Korczynski and Wittel (2020) thus bring together research on the commons and research on work by proposing to investigate commons within firms, that is to say sites within capitalist environments that have resisted enclosure. For them, “commoning” is defined not as collective ownership and control, but as social relations informed by mutuality and reciprocation, “a sociality that does not merely exist because it is beneficial for productivity; it is built on care for each other” (p. 11). The mapping of commons is indeed very important, as we argue in our final chapter.

Peer production principles have also cross-pollinated with collective action, contributing to the renovation of participation in social movements. It would be unthinkable for contemporary social movements to be structured as traditional hierarchical parties, with the rejection of fixed representation now the norm everywhere from the Arab Spring, to Occupy, Gezi, the *Gilets Jaunes*, etc. The leaderless quality of social movements raises issues

about movement effectiveness and sustainability, as does the reliance of activists on proprietary social media platforms (Milan, this volume). In general, contradictions represent fruitful avenues for researchers to explore. As we have shown in our inaugural chapter, peer production is both hybridizing with the market, thus helping to renew and justify capitalism afresh, as well as reproducing traditional forms of social domination: new participants from Brazil, India, Russia, etc., are joining in and challenging the middle-class, English-speaking, white hegemony – but they are still predominantly men, and socially privileged.

Yet this is not the entire picture either. Peer production has evoked, as punk and zine subcultures did previously, an affinity for DIY for somewhat privileged social actors – whether technology enthusiasts in shared machines shops or people who want to interact autonomously with objects through making; but it also reconnects to bricolage and tinkering, to the regaining of control over one’s immediate environment in the bazaars of the Global South (see Deka, this volume) as well as to the tradition of industrial democracy, whether in cooperatives and kibbutzim, or in radical experiments in factory-making (see Braybrooke & Smith, this volume). As we know, the point is not to interpret the world, but change it. But when it comes to evaluating social change, it is important to be clear-eyed and pragmatic. One must avoid the perils of boosterism and cynicism. Can peer production principles of transparency, cooperation and do-ocracy expand their ambit from localized sectors and have a broader social impact on values, laws, and fabrication processes? Such multifaceted change can only happen if allies are found outside the activist and academic spheres, and our final chapter explores these possibilities.

4. Do We Need Peer Production Studies?

Before addressing its concrete potential to change the world, we consider “peer production” as an object of research worthy of the attention of researchers, under the guise of

a network and of a field. Social network analysis quantitatively measures and tests the behavior of actors in networks as nodes connected by ties in more or less dense or centralized clusters (Wasserman & Faust, 1994) but does not provide hypotheses as to why this behavior occurs. Field theory holds that there are persistent mechanisms determining how social actors behave (Fligstein & McAdam, 2012).⁴ In field theory social relations are made of both *social structures*, that is to say objective differential possession of capital (in the academic field “everyone knows” that university A is more well-endowed and prestigious than university B) and *social interactions* (researchers from those two institutions may decide to collaborate and write papers together). Social network analysis measures social relations, not social structures. Yet objective relations of power “exist even if there is no interaction and this fact escapes the attention of symbolic interactionists or social network analysts” (de Nooy, 2003, p. 317).⁵

To what extent does “peer production” constitute a research field, and if it does, what oppositions structure it? To answer, we start with the network of hyperlinks between activist and academic nodes involved in researching peer production, collected using the VOSON online research platform.⁶ The initial list of websites was provided by colleagues at the *Long Now of the Commons* research workshop held at the IT University of Copenhagen in October 2019, and enriched by other colleagues (see Table 1).

Table 1. Seed set of websites

Name	URL	Activity
------	-----	----------

⁴ Pierre Bourdieu famously characterised society as composed of overlapping fields where actors are both structured by, and seek out, diverse forms of power, defined as cultural, economic, social and symbolic ‘capital’ (Bourdieu, 1985). More recently Fligstein and McAdam (2012) have defined “strategic action fields” as constructed meso-level social orders in which individual or collective actors interact on the basis of shared understandings about the purpose of the field, of relationships to others (including who has power and why), and of the rules governing legitimate action.

⁵ For an elaboration of the distinction between fields and networks, see O’Neil and Ackland (2019).

⁶ <http://vosonlab.net/>

Journal of Peer Production	http://peerproduction.net/	Research
P2P Foundation	https://p2pfoundation.net/	Activism
David Bollier	http://www.bollier.org/	Activism
Das Commons-Institut	https://commons-institut.org/	Activism
Samer Hasan	https://samer.hassan.name/	Research
David Rozas	https://davidrozas.cc/	Research
P2P Models / Hasan	http://p2pmodels.eu	Research
Effimera	Effimera.org	Activism
Torange Khonsari	https://www.publicworksgroup.net/	Research
Heteropolitics	https://heteropolitics.net/	Research
Peer to Peer. The Commons Manifesto	https://www.uwestminsterpress.co.uk/site/books/10.16997/book33/	Activism
Peer to peer university - MIT	https://www.media.mit.edu/projects/peer-2-peer-university/overview/	Research
Cosmolocalism	https://www.cosmolocalism.eu/	Research
Ford & Sloan Foundations	https://www.fordfoundation.org/ideas/equals-change-blog/posts/announcing-13m-in-funding-for-digital-infrastructure-research/	Funding
Benjamin Mako Hill	https://mako.cc/	Research
Yochai Benkler	https://cyber.harvard.edu/people/ybenkler	Research
Commons – Böll Stiftung	https://www.boell.de/de/commons	Activism
Commons-based peer production	https://rcc.harvard.edu/commons-based-peer-production	Research
Commons-Based Peer Production directory	http://directory.p2pvalue.eu/	Activism
Dimmons Research Group	http://dimmons.net/	Research
P2P Lab	http://www.p2plab.gr/en/	Research
Creative Commons	https://creativecommons.org/	Development
Commonstransition	https://primer.commonstransition.org/	Activism
Oekonux	http://www.oekonux.org/	Activism
Github	https://github.com/	Development
P2Pvalue	https://p2pvalue.eu/	Research

These websites were entered into the VOSON Webcrawler, which collected the hyperlink network data by following the links from the seed set sites. VOSON collects both inbound and outbound links (Ackland, 2010). To reduce the number of websites, only those with a minimum indegree (inbound links) of 5 are featured in our network map. Node size is determined by indegree and the better-connected nodes are placed centrally on the graph: the P2P Foundation website is the most central, for example. Figure 1 shows that the crawler

picked up websites in related areas such as scientific document archiving (SSRN), social networking (Facebook, Instagram), and generalist media (Medium).

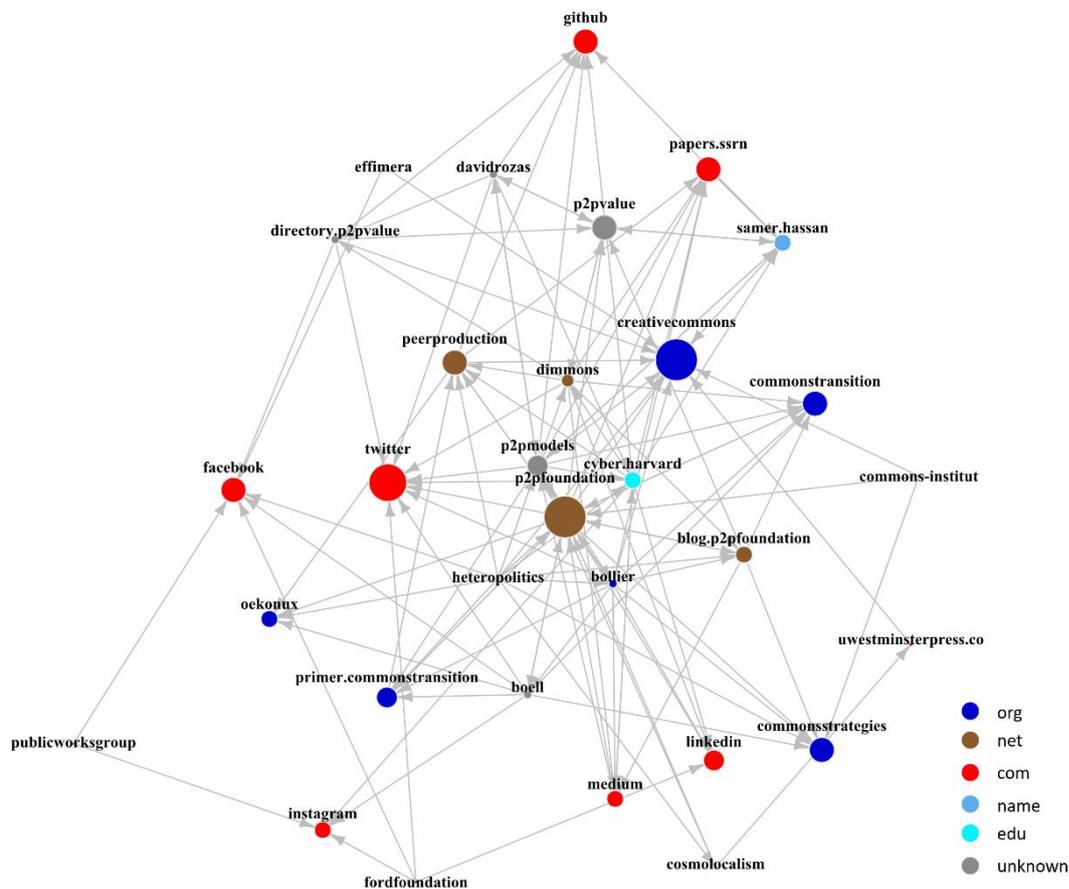


Figure 1. Peer production studies nodes – activist sector, minimum indegree 5.

What is perhaps most striking about this map is what is absent: organizational and management researchers. The chief characteristic of a field of peer production studies, if it exists, is that it is highly polarized, with little to no connection – with the possible exception of this *Handbook* – between the activist-oriented cluster represented in our network graph, and a management-oriented cluster of academics which sees peer production as the means to improve business efficiency and boost innovation.

Like any academic specialization, peer production comprises so-called “academic entrepreneurs” who are active in promoting this concept. Since it might be considered controversial to attach such a label to colleagues, we present our own cases as examples. One of the editors of this *Handbook* founded the *Journal of Peer Production* and is still actively involved; another is a member of this *Journal*’s editorial collective; and the third is currently writing a book on peer production for MIT Press. There is nothing wrong with being interested in a field of research and seeking to expand its understanding through various means such as journals, conferences and other publications. What distinguishes peer production from other academic areas is that this field also comprises “activist entrepreneurs” such as the P2P Foundation’s Michel Bauwens. The P2P Foundation has created a wealth of specialized vocabulary and led to the creation of new institutions such as the P2P Lab (see Dafermos; Kostakis & Bauwens, both this volume).

The activist sector of the field of peer production also features heterogenous clusters of peer production practitioners: software hackers, hardware hackers, biohackers, data justice activists, makers, Wikipedians, or feminist activists who are discussed in the *Handbook*. Someone adopting a field-theoretic framework might say something like: the lack of awareness of (or resistance to) traditional academic measures of success such as inclusion in learned societies, in established conferences and journals, etc., by some of these actors would mean this sector has a relatively low status in the overall academic field, and would explain why more established business and management researchers are not connecting to it. In short, the field of peer production studies would be described as reproducing the contradiction at the heart of commons-based peer production: digital public goods such as F/OSS enable firms to reduce costs by outsourcing labor, yet numerous theoreticians and activists see digital commons as connected to the resistance against the commercialization of the lifeworld – natural resources, seeds, knowledge, etc. – and as representing an alternative to the market

(Broca, 2013). To understand why this is occurring, we draw in the next paragraph on Söderberg and O’Neil (2014).

The stark difference between peer production’s ambiguous economic position and its radical conceptual framing leads to a larger and thornier question: the state of the contemporary intellectual landscape. This landscape was mapped by a French sociologist, Razmig Keucheyan, in his book *Hémisphère gauche. Une cartographie des nouvelles pensées critiques* (2010). Leaning on Perry Anderson’s diagnosis of global politics, Keucheyan made two key points: first, it must be recognized that the (non-Stalinist) New Left was defeated by the neoliberal counter-offensive, and that its ideas and tactics are a roadmap for continued failures. Second, it is illuminating to compare leading critical intellectuals of the early 20th century with their contemporary counterparts. Rosa Luxemburg, Trotsky, Lenin, Lukàcs, Korsch, and Gramsci combined incisive political analysis with the leadership of political organizations. There are still a handful of intellectuals closely associated with far-left micro-parties; in present-day Europe we have the late Daniel Bensaïd in France and Alex Callinicos in the United Kingdom; in Latin America, one may think of Álvaro García Linera, vice-president of Bolivia from 2006 until his resignation following the 2019 *golpe*, and of Subcomandante Marcos of the Mexican Zapatista Army of National Liberation (Ejército Zapatista de Liberación Nacional or EZLN). Yet the overwhelming majority of present-day intellectuals with a critical bent (the editors of this *Handbook* included), are employees in the service of the university system. From this, Keucheyan concludes: this does not mean that contemporary critical intellectuals are not engaged, or that they are less radical than classical Marxists. But, aside from their engagement, they are academics, which cannot fail to influence the kind of theories they produce. In contrast, the claims about an ascendant mode of peer production point in the opposite direction. Advocacy groups such as the Free Software Foundation, the P2P Foundation, Derechos Digitales and the Association for

Progressive Communications (APC) continuously and independently produce ideas, manifestos, forecasts, and strategic plans which are, for the most part, based in practice. Further, the numerous alternative forums and meeting places where practitioners and activists reflect over their practice and its wider, societal implications, serve as a counterpoint to the academization of debates and politics, and help to all at once gloss over the ambiguous embedding of peer production in dominant economic circuits, and boost its “authentic” appeal for intellectuals.

This brings us to the political economy of academic publishing, to which the *Handbook of Peer Production* belongs. The *Handbook* is published by a large commercial publisher and as such incorporates business practice and regulations which are clearly at odds with the principles of peer production. In line with international divisions of labor in contemporary academic publishing, the editing, proofreading, and indexing for this work have been performed by workers in the Global South (namely, India). Further, the terms of the contract governing the intellectual property of this work are restrictive. We made the case that prohibiting free public access behind a paywall was inopportune in the case of a topic such as peer production. Our entreaties were in vain; perhaps we should have pushed harder. In the end this is not surprising: in a capitalist society, it is not unusual for people to access material that is partly or wholly anti-capitalist through capitalist means of distribution (starting with Marx’s *Capital*). In addition, the contract does allow authors of individual chapters to make preprints available on their institutional repositories, but it forbids setting up a “table of contents” webpage that would aggregate links to these individual chapters and repositories. We are not going to create such a page ourselves, as this would violate the terms of our contract. However, there can be little doubt that the nature of this work and the contradiction inherent in paywalling it will impel other people to set up one, or several, such aggregated tables of content.

We asked at the outset: “Should there be a field of peer production studies?” The answer is: why not, but also: who cares? Ultimately when it comes to one’s personal interest in peer production, considering it analytically, as an object of study, is perhaps less important than getting involved as a participant. We have accordingly decided to use the knowledge and imaginaries we encountered whilst studying peer production to list the benefits commons-based and commons-oriented peer production could contribute to humanity and the biosphere. To this end, the next and final chapter of the *Handbook of Peer Production* outlines guiding strategic principles and concrete policy proposals for progressive social change. Though we hope others will find these useful, this is not our main concern: the primary audience for this final chapter, as implied by its title (“Be Your Own Peer!”), is ourselves. It is meant as a resource that we can, with as much success as events will afford us, put into practice.

References

- Alvesson, M. & Willmott, H. (2002). Identity regulation as organizational control: Producing the appropriate individual. *Journal of Management Studies*, 39, 619–644.
- Barley, S.R. & Kunda, G. (1992). Design and devotion: Surges of rational and normative ideologies of control in managerial discourse. *Administrative Science Quarterly*, 37, 363-399.
- Bauwens, M. & Kostakis, V. (2015). Towards a new reconfiguration among the state, civil society and the market. *Journal of Peer Production*, 7.
- Benkler, Y., Hill, B.M., & Shaw, A. &. (2015). “Peer Production: A Form of Collective Intelligence.” In Malone, T. & Bernstein, M. (Eds), *Handbook of Collective Intelligence* (pp.175-204). Cambridge, Massachusetts: MIT Press.
- Birkinbine, B. (2020). *Incorporating the Digital Commons. Corporate Involvement in Free and Open Source Software*. London: University of Westminster Press.
- Brabham, D. C. (2013). *Crowdsourcing*. Cambridge, MA: The MIT Press.
- Broca, S. (2013). *Utopie du logiciel libre. Du bricolage technologique à la réinvention sociale*. Neuvy-en-Champagne: Le passager clandestin.
- Castells, M. (1996). *The rise of the network society*, London, UK: Blackwell.
- Dahlander, L. & Magnusson, M. (2005). Relationships between Open Source software companies and communities: Observations from Nordic firms. *Research Policy*, 34, 481-493.
- Deek, F., & McHugh, J. (2008). *Open Source: Technology and policy*. New York, NY: Cambridge University Press.
- de Nooy, W. (2003). Fields and networks: correspondence analysis and social network analysis in the framework of field theory. *Poetics* 31(5–6), 305–327.
- Dulong de Rosnay, M., & Musiani, F. (2016). Towards a (De)centralization-based typology of peer production. *TripleC* 14(1): 189–207.

- Follett, M.P. (1941). *Dynamic administration: The collected papers of Mary Parker Follett*. H.C. Metcalf & L. Urwick (Eds.). London, UK: Pitman.
- Fournier, V. (2013). Commoning: on the social organisation of the commons. *M@n@gement*, 16(4), 433-453.
- Fuchs, C. (2017). *Social media: A critical introduction*, 2nd ed. London: Sage.
- Hansen, D. (2016). Unless it changes, capitalism will starve humanity by 2050. *Forbes*.
- Hecksher, C. & Adler, P.S. (2006). *The firm as a collaborative community*. Oxford, UK: Oxford University Press.
- Keucheyan, R. (2010). *Hémisphère gauche. Une cartographie des nouvelles pensées critiques*. Paris: La Découverte.
- Korczynski, M. & Wittel, A. (2020). The workplace commons: Towards understanding commoning within work relations, *Sociology*.
- Lewin, K. (1948). *Resolving social conflicts: Selected papers on group dynamics*. New York: Harper & Row.
- Langlois, R. N. & Garzarelli, G. (2008). Of hackers and hairdressers: Modularity and the organizational economics of open-source collaboration. *Industry & Innovation*, 15, 125-143.
- Lund, A. & Zukerfeld, M. (2020). *Corporate capitalism's use of openness*. Basingstoke: Palgrave Macmillan.
- Meyer, C., & Hudon, M. (2017). Alternative organizations in finance: Commoning in complementary currencies. *Organization*, 24(5), 629-647.
- Okoli, C., & Nguyen, J. (2016). Business Models for Free and Open Source Software, SSRN Working Paper Series. <http://ssrn.com/abstract=2568185>.
- O'Neil, M. (2010). Shirky and Sanger, or the costs of crowdsourcing. *Journal of Science Communication*, 9(1), pp. 16.

- O'Neil, M. (2015). Labour out of control. The political economy of capitalist and ethical organizations. *Organization Studies*, 36(12): 1627-1647.
- O'Neil, M., & Ackland, R. (2019). Online field theory. In J. Hunsinger, L. Klastrup, & M. Allen (Eds.), *Second International Handbook of Internet Research*. Amsterdam: Springer.
- Pentzold, C. (2018). Grounding peer production in practice: Editorial routines and everyday engagement in the 'free encyclopedia anyone can edit'. *Communication, Culture and Critique*, 11(3), 455-474.
- Saïd Vieira, M. & de Filippi, P. (2014). Between Copyleft and Copyfarleft: Advance reciprocity for the Commons, *Journal of Peer Production*, 4.
<http://peerproduction.net/issues/issue-4-value-and-currency/invited-comments/between-copyleft-and-copyfarleft-advance-reciprocity-for-thecommons/>
- Soderberg, J. & O'Neil, M. (2014). Introduction to Book of Peer Production. In Soderberg, J. & Maxigas (Eds), *Book of Peer Production*. Gothenburg: NSU Press.
- Wasserman, S. & Faust, K. (1994). *Social Network Analysis: Methods and Applications*. New York: Cambridge University Press
- Williams. C. (2007). *Re-thinking the future of work: Directions and visions*. London: Palgrave Macmillan.