1. **Dmytro Khutkyy**

Y. Benkler claims that peer production practices and functioning mutualistic associations offer a new dimension of available systems. (2013, p. 216). But *to what extent can they replace the dominant capitalist mode of production?*

Contemporary information technologies allow people share ideas and collaborate fast and almost for free, so there are objective grounds for transformation. Indeed, talented programmers create innovations that involve numerous counterparts. Moreover, people voluntarily create terabytes of content and eventually they become peer-to-peer newsmakers, attracting attention to certain things and events in a self-organized manner.

However, these small initiatives can be easily bought and incorporated by oligopolistic firms for commercial profit. If we consider Facebook, originally created for profit, it not only posts advertisements, but actually exploits people's real social networks and publicly announced preferences to draw attention to goods – literally for marketing. YouTube was originally an independent platform, but as soon as it became a leading video resource and reached top in searches it was bought, and now also posts advertisements.

On the other side, Wikipedia managed to avoid this destiny due to its creator's commitment and sufficient donation. Despite this, some persons and firms write entries intended for indirect advertisement. Fortunately, such cases remain marginal.

From my point of view, credit unions, kickstarters, and FOSS might be a more advanced emancipating option. As long as they take away a share from capitalist mode of production they actually change the system. Microsoft has lost its browser, programming, and server-side scripting dominance to FOSS (Benkler, 2013, p. 243).

Cheap high-quality digital video-capture, editing technologies, and p2p networks for efficient distribution can be a perspective alternative to the mainstream industry (Benkler, 2006, p. 428). Technologically, transformation to more non-capitalist economy is possible; everything else depends on people's values, choices, and resistance to state and corporate dominance.

> [EOW: Thee may be two somewhat different ways of framing the problem you address here: 1) to what degree can p2p processes *displace* capitalism, or 2) to what extent can p2p expand as a space in which people can opt out of capitalist practices? The second question does not imply a reduction of capitalism as such, but simply the expansion of alternatives. The system becomes more heterogeneous, and thus capitalism becomes less dominant in the system without capitalism being replaced.]

2. Yotaro Natani

Benkler claims the real utopian cases of peer mutualism are not perfect because what started out as purely voluntaristic and egalitarian enterprises could eventually develop hierarchies and power inequalities – as these practices scale up, they might become more bureaucratic in order to function or meet the challenges of existing as larger entities. I would have liked some more discussion about what is undesirable about hierarchy or power in peer mutualism. Does this have to do with a trade-off between values (for example, sacrificing equality or democracy for efficiency)? I am wondering whether it is possible to make this notion of hierarchy/power development more precise by distinguishing their origins. Is it fair to say, for example, that it is preferable to have bureaucratic regulation or power differences develop within a peer-mutualistic enterprise internally from within, rather than externally through state intervention or economic factors like the ability to pay? An internally-generated hierarchy, I would think, would still try to stay true to its original mission of providing a public good, just with the added challenge of managing it as a larger entity. Power or hierarchy imposed from the outside might indicate cooptation and/or changes to the basic principle of social production.

> **[EOW: The issue you raise has very broad ramifications, both for the specific p2p case and more generally. The pure anarchist vision has much hostility to hierarchy, I think because of a skepticism that hierarchy can ever really be held accountable, so that once in place it will have an internal dynamic towards greater insulation and autonomy – basically the iron law of oligarchy kind of process. As a result many anarchists insist on a kind of localism and decentralized participatory process in which as soon as something gets too big to be organized through nonhierarchical voluntary association, then it should stop growing. In the digital context it isn't so clear what this really means. And it also may be that some critical problems that really do need solutions cannot be managed at that scale and thus the problem of accountability of hierarchy rather than the dissolution of hierarchy cannot be avoided.]**

3. Kerem Morgul

Since the 1960s, an increasing number of scholars have stressed the emergence of an information society and underlined the growing importance of the production and control of knowledge for wealth creation. Benkler joins these scholars by arguing that the most advanced economies in the world today have shifted to an economy centered on information and cultural production. He contributes to this literature by noting that the material requirements for effective participation in this new knowledge economy are now much more broadly owned thanks to cheap processors with high computation capabilities and the Internet. This has made possible a new and potentially emancipatory mode of production that is distinct from both the market- and state-based modes of production: commons-based peer production.

My first question is about the generalizability of this model in the overall knowledge economy. Benker draws his examples mainly from the digital world or from online service industries: free and open source software movement, Wikipedia, The Internet Engineering Task Force, Kickstarter etc. What is the extent to which this new mode of production can be replicated in knowledge-intensive sectors that also produce physical things, like seeds, drugs, and high-technology machines?

Secondly, what is the viability of the model without a simultaneous struggle in the political field, i.e., the state? Benker tends to argue that the success and viability of what he calls "practical anarchism" are largely independent of the support of an affirmative state. However, the battle between the "industrial knowledge economy" and the "networked knowledge economy," in which intellectual property rights play a key role, suggests the opposite. If the networked knowledge economy and the intellectual commons on which it depends are to be protected from IPR-led enclosures, then downplaying the importance of struggles within and through the state does not seem so wise to me.

> **[EOW: In your first question it might be useful to break down the total production process into separate phases or aspects. Thus, for example, around high technology machines, the actual production of the machine takes place in a factory and requires substantial capital inputs. But the software used in the designs that are deployed by the high-tech numerically controlled machine tool or 3-D printer could be developed through open-source p2p. The actual machines could be produced by firms like Isthmus engineering, but the software deployed in the machines could also have a p2p aspect. I don't know about the open-source phrama movement or seeds movement, exactly. This seems more like the creative commons – the production of the knowledge of the seeds is done in labs, but the knowledge then made freely available.**
>
> **On the second question I think you are right that the state is needed to enforce open-source intellectual property rights, otherwise they would become privately appropriated. An intellectual commons is not self-perpetuating in a world in which there also exists copyright and patents.**

4. **Emanuel Ubert**

Is an institutional design that systematically introduces greater uncertainty into the existing capitalist process of social reproduction viable?

In daily life, boundedly rational actors employ sets of habitual (i.e. low cost) strategies that are circumscribed by established implicit or explicit rules. Imperfections in those rules by definition create uncertainty in individual decision-making. Many sociologists argue that decision making under heightened uncertainty is characterized by the (irrational) adherence to existing rules (March&Olson, 2009 working paper; Beckert, 1996) rather than by the creation of completely new/ alternative strategies.

Benkler argues that "no single system can be perfected to avoid the accumulation and application of illegitimate power; but no system is also a perfect technology of control" (p. 247). Consequently, there is no inexorable path to greater freedom through voluntary open collaboration. Instead, "there is a good deal of uncertainty and muddling through" (p.1). Accordingly, the institutional design target should therefore be to identify systems that "exploit, rather than necessarily seek to eliminate, imperfections; that produce counter forces that cancel each other out, and obtain a series of temporary victories on behalf of some class of dominated subjects as available under the circumstances. This, in turn, will likely expose some other class to domination, and the cycle repeats" (p. 247).

It seems to me that an institutional design that seeks to exploit imperfections in existing rules institutionalizes the continuous production of uncertainty (like Mao's "perpetual

revolution"?) and only adds to the already existing uncertainties that capitalist dynamics produce (technological disruption, etc.). I would - abstractly speaking - argue, however, that people prefer certainty over uncertainty. All other things constant, above social design should therefore be expected to lead to concentrated efforts to restore certainty relative to the status quo, even at the cost of potentially more freedom. By systematically creating uncertainty, Benkler's institutional target would undermine itself and instead of blocking, encourage the creation of stable power patterns.

> [EOW: One might want to distinguish *uncertainty* from *heterogeneity*. If I have a free choice of publishing a book either (a) on-line with a copy-left or creative commons license, or (b) with a commercial publisher with standard copyright, the system of book publication and distribution becomes more heterogeneous. In one sense, then, there is greater uncertainty – less predictability – in the system as a whole, but this is not the kind of uncertainty which enhances fear and anxiety among writers. It is just an expansion of the options for the kind of life one wants to live as a writer. Now if this is a threat to profits, then of course there will be countermoves. But this is not so much because of uncertainty but because of conflicts of interests.]

5. Jake Carlson

How do the challenges of capital-intensive production create obstacles for peer production?

Benkler shows how the history capital intensification of some industries like music have led to a centralization of ownership and intellectual property. Music used to be only performed live, until the invention of the phonograph, which allowed for a new recording industry to develop. This then created high entry costs for new musicians if they wanted to get recorded, because only the recording industry held access to the means of knowledge production (the recording studios). Now recording technologies are becoming more accessible through personal computers, creating more opportunities for decentralized music production.

However, some industries require a higher degree of capital intensity in order to produce the knowledge, which may not be amenable to decentralization. How does peer production work when the creation of new knowledge is dependent on high-intensity capital? My understanding of pharmaceutical development and other high-level hard-science knowledge production is dependent on big, expensive, fancy machines that can run all of these tests. The capital costs to run these tests are very high, and are required for the pharmaceutical knowledge to be produced. Even if we could create open-source pharmaceuticals, how would we cover the necessary capital investment in order to create new knowledge? Is this where the state comes in? How are other factors of production interdependent in such a way that creates obstacles for peer production?

> [EOW: States usually have played the pivotal role in basic research, both because of the costs of production and because of the relatively low-yield of immediately commericalizable results, even though basic research is pivotal to commercial development. States also play a more direct role in product develop in some spheres, like military technologies, which then subsequently have commercial spin-offs. Part of the open-source movement in drugs and seeds and the like is a call for state funded knowledge in these areas to be part of the commons rather than patented. This is distinct from the narrower issue of the problem of capital intensity in the actual production of the products themselves

(i.e. the capital-intensity of knowledge production vs capital intensity of the use of that knowledge). If all knowledge was in the commons – no patents for anything – there would still be some lines of production in which high capital intensity would be an obstacle to collaborative production of the actual products – eg airplanes, automobiles, construction cranes, etc. -- although for some such lines of production increasing returns to scale may be declining.]

6. Michael Blix

In his article "Practical Anarchism," Benkler refers to the Free Open Source Software movement (FOSS), Wikipedia, and the Internet Engineering Task Force (IETF) as examples of "working anarchy," defined as voluntary associations that "do not depend on direct and delegated power from the state (p. 217)." In addition, he views the internet itself as a phenomenon that allows for "an increasing role in non-market production in the information and cultural production sector, organized in a radically more decentralized pattern than was true of this sector in the twentieth century" (Wealth of Networks, 3). Finally, when speaking of public broadband initiatives, he states "connectivity has strong positive externalities. It makes the city's residents more available for the information economy and the city itself a more attractive locale for businesses" (WON, 406). The web, in other words, offers an unparalleled space in which peer-to-peer collaborative and collective action may take place, free from the market-driven constraints of patent and copyright laws. I am weary of these claims on two fronts.

My Questions: Is Benkler too dismissive of the rights of the laborer in cultural production? If we collectively shifted to a system in which information is produced and freely shared, would that be unfair to those that worked to produce said information in the first place? In addition, is peer-to-peer collaboration as emancipating as suggested, since wealthy people would be equally able to consume such output? There do not seem to be any redistributive properties within such a system, so it seems as though current inequalities could potentially remain in place.

My second concern has to do with the idea that the internet is a democratizing force. Many people, and it seems Benkler is included, seem to completely ignore the disciplinary mechanisms contained in online space. While it is certainly true that the internet can be a tool in creating positive social change, Is Benkler too optimistic in its democratizing properties? Keep in mind, the Iranian government used Facebook, Twitter, and Youtube to identify and persecute protesters in the 2009 revolution. Likewise, the Mubarak regime ordered a 5 day internet blackout to quell revolutionaries during the 2011 uprising. In other words, Authoritarians are online (this is not to mention the fact that marketers are pathological in their efforts to get in consumers' pockets through social media). It seems that when discussing the internet as a democratizing force, it should be given equal weight as an insidious form of surveillance and control.

[EOW: The issue of "fairness" to intellectual or cultural producers is a difficult one. In the commercialized world of copyright for literature and capitalist-controlled royalties for music, only a tiny proportion of people manage to make a living from the income stream generated by their work. The result is what is called a winner-take-all market – polarization between celebrity artists and starving

artists (so to speak). So, while there are issues of fairness, I think this more acutely concerns how to generate income for the rank-and-file cultural producers than how to protect the income of the celebrity artists. One question, then, is whether the internet can facilitate alternative mechanisms of income generation for such cultural producers. Benkler has experimented with gift-=exchange mechanisms – free downloads + pay what you like – which cut out the middlemen and copyright and seem to generate more income for those musicians who also perform a lot in local venues.]

7. Madi Pape

I found Benkler's work this week to be fascinating to read, particularly in his conceptualising of the power triangle that could potentially develop between the market, the state, and commons-based peer production. In some ways I did find this analysis to be somewhat one-dimensional, in that it was focused on relations of production, and in my view didn't consider the relationship between peer-to-peer mutualism and other aspects of social and human life. From this perspective, I wonder whether Benkler's conceptualisation of the state is too limited.

I'm not convinced, for example, that commons-based peer production needs to be positioned 'orthogonally' to the state. In fact, Benkler also gives some evidence that commons-based peer production is not necessarily orthogonal to capitalist firms, although my concern is mainly with the role of the state in this picture.   While Benkler claims that he is in no way opposing the possibility of an effective, liberal state, he nonetheless positions the state as quite removed from the anarchic phenomenon of peer-to-peer mutualism that he is interested in. Benkler anticipates co-existence of the state, the market, and commons-based peer production, but considers them to nonetheless be engaged in a triangular power contest, in which the presence of the mutualism domain serves to add a degree of freedom to individuals that the market and the state cannot deliver.

My question is about why the state should be considered 'inevitably fallible', and what are the aspects of the state that position it orthogonally to commons-based peer production? Could there potentially be more of an alliance and shared ground between the state and peer-to-peer mutualism than Benkler suggests? Furthermore, does peer-to-peer mutualism have a role to play in realms aside from that of production?

[EOW: I wonder, exactly, what is really entailed by the geometric metaphor of "orthogonality". It cannot really mean that these different domains of practice don't interact, engage in various kinds of "exchanges" , or affect each other. I think the idea must have something to do with the distinctness of the forms of power or "logics of practice" connected to each (although this is all pretty elusive). For example: States engage in subcontracting with capitalist firms, but it is much rare that a full-blown state agency engages in direct profit-maximizing market production in which it competes with private firms – and when this happens it is generally regarded as "unfair competition" (since the state agency has access to coercively extracted resources). I wonder what the analogous forms of interaction are between state power and mutualism? And there is also the issue of the ways in which the state can itself provide certain kinds of resources – and rules – that enhance the effectiveness and robust sustainability of commons-production.]

8. Alisa Pykett

Both in the article and the excerpts from the *Wealth of Networks*, Benkler refers to the possibilities of new technology to transform the way people apply their excess capacity, or scarce resources of creativity, time and energy, towards social production in a web-based commons. In *Wealth of Networks*, Benkler claims, "the promise of networked information economy is to bring rich diversity of social life smack in the middle of our economy and our productive lives" (p 53).

I see the possibilities for enhanced autonomy and increased degrees of freedom in these technology-based experiments, but wonder how dependent their sustainability are on quasi-anonymous, limited online engagement (as opposed to on-going face-to-face engagement). Are there ways that participating or contributing to these experiments substantially increase the capacity of people to cooperate or reach rough consensus in the face-to-face commons? Could people's experiences in networked information economy transfer to other public goods, like education or natural spaces, or do the required technical mechanisms diminish the possibility transferability?

> [EOW: This is a very intriguing and important issue – the connection between cyber-networking commons activities/creativity/production and the face-to-face commons. I have always been a little skeptical about the substitutability for dialogue in cyber-space for dialogue between people in a room together, but this may be somewhat of a generational issue, since I was fully socialized into adult communication before cyber-space dialogue became possible.]

9. Jiaqi Lu

The idea of "commons-based peer production" is the central characteristics of the networked production. It is opposite to the concept of "property," decentralized, collaborative product that based on sharing resources and outputs among widely distributed, loosely connective individuals who cooperate with each other without relying on market signal or managerial commend. The utopian characteristic of this form of economy is that no single person has exclusive control over the use and disposition of any particular resources in the commons. However, part of this production has to back up with capitalist economy. For example, the Wikipedia need donation from its users, who are inherently involved in the capitalist economy. Also, in terms of the efficiency, the peer production might not necessary generate maximum efficiency, but market-based production with the profit maximizing incentive, can somehow approach to best efficiency.

So, my question, while market is absent from this model, how does commons-based peer production achieve effective allocation? The market-based production can adjust itself based on economic performance, how does peer production adjust itself?

In addition, this idea of decentralized networked economy seems contradict to another utopian idea – the centralized economy, although both try to eliminate markets. How do you comment on this?

[EOW: (1) It is very important to be clear about the meaning of "efficiency". Efficiency should not be equated with profit-maximizing outcomes, since profit-maximizing necessarily ignores externalities, and if these are large, than the profit-maximizing allocation will definitely not be efficient. (2) In terms of p2p commons production vs market production, there are plenty of examples in which p2p out performs the market – open-source programs like Linux and apache, for example, are clearly better than their market rivals and have been widely adopted. You are right that there is an issue of how to get funding for p2p projects given that they are not sold, but that is a distinct issue from their comparative efficiency or effectiveness with their market alternatives.]

10. Taylor Laemmli

Benkler expounds upon the idea that information and cultural production have become much cheaper, stating that that it is individual human capacities often liberated "from the constraints of physical capital" that become the force behind a significant level of this production (Ch 2:13). I question the extent to which production can really occur independent of physical capital in the context of the dominance of capitalism—can what is produced maintain independence? I see a possible eventuality of the reincorporation of that which is produced through this method being reincorporated into the sphere of the market, the result of which possibly being the harvest of surplus value by actors in the market from a product of labor produced in a context independent of the market.

Secondly, it is not a trivial matter that an individual can produce and widely disseminate music or film outside of capitalist institutions, however the extent to which this truly represents a new form of production—with staying power—is unclear to me. Is it possible to understand information and culture produced in the larger context of a dominant capitalist ideology— regardless of the context of the institution in which it is produced, such as a real utopic organization defined by peer-to-peer collaborative production like Wikipedia—absent the significations of the dominant ideology?

[EOW: The first issue you raise concerns the possibility of retaining independence of "physical" capital so long as capitalism is dominant in an economy. You are absolutely right that capitalist firms do incorporate the products of p2p production into their own production systems. Linux, Firefox/Mozilla, Apache and other open-source software have been adopted by big corporations as, basically, free inputs. Indeed some corporations, like IBM, even pay some of their own programmers to work on the development of the open-source platforms knowing that the results cannot be patented, but *given that the product is better than the market rivals*, they want the program to develop in ways more suited to their needs. IBM has an interest in eliminating bugs in Linux and so pays its own staff to work on the program, even though other corporations will benefit as well. So, for sure, capitalist firms appropriate these resources. But is this simply the absorption of p2p into capitalist hegemony, or is it also a corrosive hybridization of capitalism by noncapitalist practices? To compete within capitalism capitalist firms are forced to engage in noncapitalist relations, thus making those noncapitalist relations more robust?

I wasn't so clear on what was in play in your second question. Are you asking the very general question about the ability to produce cultural products in <u>noncapitalist ways</u> – i.e. the process of production of culture is a noncapitalist process – given the dominance of capitalist ideology? Or are you talking about the <u>content</u> of the cultural products – i.e. regar4dles sof how cultural products are produced, they will be infused with capitalist ideological content so long as capitalist ideology is dominant? There is a view about ideological domination – especially ideological <u>hegemony</u> – in which all possibilities of counter-hegemonic production are blocks, both as process and as content. I think this is never really the situation, but the issue you raise here is important.]

11. Laura Hanson Schlachter

What kinds of emancipatory possibilities would open up in the networked information economy if programming stopped being a niche skill and became one that is widely shared, like reading and writing?

Yochai Benkler (2006; 2013) makes a compelling case that the emergence of peer mutualism creates new spaces to meaningfully enhance autonomy, democracy, justice and human development. I am interested in how we can expand the breadth and depth of the networked information economy, in particular by making the skills necessary for participation more widely shared.

For example, Benkler finds that the Free and Open Source Software (FOSS) community has created a large-scale, non-state, voluntary, nonproprietary production model in a way that sustains its ethos of nonhierarchical relations and diffuse power. Nonetheless, FOSS developers still represent a relatively small subset of the overall population, and they understandably tend to write code for projects they care about and use in their daily lives (servers, web browsers, etc.). I think that we should not only be asking how to "expand the domains of application of peer mutualism," but also how to expand the range of people who are able to participate in the domains that already exist (2013, 245). I expect that the more people who know how to code, the greater the range of projects the FOSS community would be likely to take up.

Another way to think of this idea is that developers are like the scribes of our society before literacy was widespread. Reading and writing, like coding today, was seen as a niche occupational skill. As such, scribes placed a kind of limit on the number and kinds of books that were translated to the broader population. Once literacy became widespread, it unleashed tremendous new creative, cultural, and political power. Could we think about coding as a new kind of literacy? What kinds of projects might be possible if software development became a widely shared skill?

[EOW: I wonder if the analogy is quite right here – about writing code being analogous to basic literacy. Basic computer literacy is needed in the sense of knowing how to navigate the internet and computers, how to use apps and programs, how to use Wikis and comment spaces, etc. But that is all very different from using code to develop the underlying software. I'm not so sure it is important that that specific skill be generalized to the population in the way basic literacy was critical for accessing information through print.]

12. Elsa Noterman

Benkler's concept of "commons-based peer production" is useful when considering the networked environment – and the ways that Internet governance, FOSS and Wikipedia operate largely independent of the state and the market. However, one question I have is about the use of "anarchism" and "anarchic" in his work. While he sees peer production as offering vital services outside the market and state, Benkler argues that peer production and mutualism are "aimed at improving and completing the imperfection of these systems, rather than replacing them" (2013:245). For this reason, he sees that common-based peer production is the only "species of practical anarchic response" that is "even plausibly utopian" (2013:247). Generally though, many anarchist utopias envision dissolving a centralized state. Is Benkler's concept not actually an articulation of an idea of (global) civil society – as a third space, operating outside of, but in conjunction with the state and the market? Relatedly, if these modes of commons-based peer production are serving functions that the state is not doing successfully (detached from any political critique), are they not simply reinforcing, rather than challenging, the status quo? Also, are they allowing the state to simultaneously abdicate responsibility for public services (as in Prime Minister Cameron's promotion of the "Big Society" which is critiqued as a means of relying on voluntary associations to provide the public services that the government cut)?

> **[EOW: A couple of comments: (1) I agree that Benkler is not really talking about Anarchism as a comprehensive system alternative, but rather anarchism as a specific sphere or space for social practices that are organized through collaborative mutualism. I think that there is implicitly the idea that the larger this space is, the better, but this is still not capital-A full-blown Anarchism. It should be noted, however, that some famous Anarchists like Colin Ward (*Anarchy in Action)* pretty much say the same thing: Ward says that an entire social system based on anarchist principles is impossible, not just because you cannot get there but because it wouldn't work, but that nevertheless we should act as if it were possible so that we push the limits of collaborative mutualist practices as far as we can since we cannot know in advance where the boundaries lie. (2) I don't think the fact that a practice "serves functions that the state is not doing successfully" means that these practices are "simply reinforcing rather than challenging the status quo." This is really a fundamental issue in emancipatory theory and practice: can something simultaneously be functional for capitalism and constitute a challenge to the logic of the system? Or does functionality necessarily neutralize the anti-system character of a practice or institution? My idea of symbiotic transformation is anchored in the idea – the hope? the fantasy? – that an institutional solution to a problem can both benefit and undermine capitalism.**