

DEMOCRATIC THEORY AND THE COMMONS: CONCEPTUALIZING THE RELATIONSHIP
BETWEEN DELIBERATION, PUBLICS, AND THE INTERNET

by

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Abstract

I aim to achieve two complementary goals in this paper. The first is to provide a corrective to the unfortunate tendency to insist that the internet's natural form is a public that underwrites democracy. Rather, the structure of the internet is contingent and any publicness should be understood as enabled by its structural features as a commons. The second goal is a step towards addressing the relative dearth of explicit theorizing about the commons in political science.

I adopt a critical approach to understanding technology to make clear that the internet may transform persons and institutions in ways that support democratic properties, but there is a need to challenge common assumptions that any democratic effects of the internet are inherent or directly caused. Many theories of online politics miss the fact that the internet's structural features suggest that it is better understood as a commons — that is, vulnerable to enclosure and spoilage — than as a public or a democracy. The technological developments of the internet upset the traditional allocative roles of states and markets in reference to physical goods, intangible goods, and the means of production. The internet enables an increase in the scope and scale of the commons paradigm such that the problem of democracy online seems not to be one of too much participation, but too little.

I argue that a commons only exists as such as a result of self-management practices and that these practices are only self-management inasmuch as they are democratic. Self-management requires that participants reflect and deliberate, consider others, and enhances the capacities of actors to exercise their autonomy. Furthermore, I clarify that commons and associations are necessary preconditions for the emergence of publics and thus the potential for deliberative democracy. So, democracy requires publics, which require common goods, which require commons self-management; that is, democracy and commons self-management are together always intertwined and democracy itself is an intangible commons.

Preface

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Dedication

For all my friends

Introduction

I aim to achieve two complementary goals in this paper. The first is to provide a corrective to the unfortunate tendency to insist that the internet's natural form is a public that underwrites democracy. Rather, the structure of the internet is contingent and any publicness should be understood as enabled by its structural features as a commons. The second goal is a step towards addressing the relative dearth of explicit theorizing about the commons in political science. Of course, while I argue that the commons is an effective and democratically legitimate way to manage a particular subset of goods, it cannot resolve all collective action problems nor all resource allocation problems, so there remains a need for both states and markets.

I begin by sketching out a broad conception of deliberative democracy where autonomy, deliberation, and civic responsibility are qualities of actors that allow them to overcome the collective action problems that arise in fundamentally political disputes. In so doing, I adopt a critical approach to understanding technology to make clear that the internet may transform persons and institutions in ways that support such democratic properties, there is a need to challenge common assumptions that any democratic effects of the internet are inherent or directly caused. Many theories of online politics to date are overly deterministic and miss the fact that the internet's structural features suggest that it is better understood as a commons — that is, vulnerable to enclosure and spoilage — than as a public or a democracy.

The fact that the internet resembles a commons is the result of conscious choices on the part of its architects. These choices highlight the importance of access over ownership and privilege collaboration. The technological developments of the internet upset the traditional allocative roles of states and markets in reference to physical goods, intangible goods, and the means of production. The internet enables an increase in the scope and scale of the commons paradigm, both online and offline, by making sharing convenient and eliminating the assumed rivalry of many goods through practices such as collaborative consumption. Commons initiatives thus provide working alternatives to ideological conceptions of private property that maintain status quo and oppressive power relations,

replacing them with inclusive spaces for participation for a theoretically limitless number of people. Such spaces rely on the continued practice of self-management that both democratically maintains a good as common and may produce commons regimes, associations that are both democratic and may have broader democratic effects.

The technological features of the internet make it possible to overcome problems of scale such that the problem of democracy online seems not to be one of too much participation, but too little. Indeed, non-rival goods benefit from a larger number of users and participants — both the civic knowledge that supports democratic practice as well as democracy itself is improved in this way. The internet then doesn't impose qualitatively significant changes on human interaction so much as it widens the range of activities that are possible. The final section of this paper seeks to identify how these activities ought to be situated in relation to democratic theory.

The commons presents a key way to thinking about democracy for those who, like Feenberg, wonder, "Can we conceive of an industrial society based on democratic participation in which individual freedom is not market freedom and in which social responsibility is not exercised through coercive regulation?"¹ I argue that a commons only exists as such as a result of self-management practices and that these practices are only self-management inasmuch as they maintain autonomy and diversity. That is, these practices and the associations that may emerge from them are democratic ones, otherwise the good which they ostensibly manage is not a commons. Self-management requires that participants reflect and deliberate, consider others, and enhances the capacities of actors to exercise their autonomy. These are indirect outcomes of the commons and the internet as commons that make democracy possible at lower levels thus improving democratic prospects at higher levels. Furthermore, I clarify that commons and associations are necessary preconditions for the emergence of publics and thus the potential for deliberative democracy. So, democracy requires publics, which require common goods, which require commons self-management; that is, democracy and commons self-management are together always intertwined and democracy itself is an intangible commons.

Defining the Commons

The commons is an institutional arrangement for allocating resources that stands in contrast to other property regimes, particularly those with roots in the liberal tradition.² Contemporary study of the commons seems to begin with Hardin's thought experiment that posits a field open to all, where all herdsmen seek to rationally maximize the number of their animals that can graze despite the finite limits of the common field.³ The tragedy of the commons illustrates the free-rider problem that arises when individuals do not contribute to a joint effort but also cannot be excluded from enjoying the collective benefit.⁴ Hardin thus asserts "the inherent logic of the commons remorselessly generates tragedy."⁵ The solution for Hardin is to give up the notion of the commons in favour of coercive regulation (for goods such as oceans) or privatization by individuals or by governments (for goods such as land).⁶ However, critical approaches reveal that there is no inherent logic to the commons as such. Rather, Hardin incorrectly uses the term 'commons' to refer to an anarchistic open-access regime,⁷ mistakenly presumes that avoiding tragedy requires institutional change imposed from outside rather than from within,⁸ assumes little or no communication between those using a resource,⁹ and relies too heavily on a reductionist conception of the rational-choice model that fails to accurately represent human behaviour.¹⁰

Commons self-management may not only be functional, but may be optimal where a good is non-excludable with various degrees of rivalry.¹¹ Ostrom and Hess define the commons broadly as "a resource shared by a group of people that is subject to social dilemmas."¹² Even things commonly thought of as private property are often common goods at a micro level (*e.g.* the family refrigerator) and the concept of private property itself is a kind of inherently public property.¹³ A shared good may be a commons by virtue of the fact that no successful action has taken place in order to prevent its common use. The commons is not an inherent feature of a good, but is an institution chosen — even if the choice is a *de facto* one — to regulate the use of several types of goods, such as public goods, common-pool resource (CPR), and club goods.¹⁴ Public goods are neither excludable

nor rivalrous in consumption, CPRs are non-excludable but rivalrous, and club goods are excludable but non-rivalrous.¹⁵ This is not to say that these goods could not be privatized, with CPRs like Hardin's field being the most vulnerable to enclosure, but that the commons provides an alternative governance mechanism to resolve the collective action problems that might lead to free-riding or privatization and coercion.

Throughout this paper I will use the term 'commons' to refer to any shared good, the term 'commons self-management' to refer to the practice by which collective action problems of allocation are solved without recourse to the state or market, and the term 'commons regime' to refer to the institutionalization and associations that surround practices of commons self-management. I will argue later that the internet broadens the range of goods that can be successfully allocated by a commons-regime and that this development makes possible a more fully democratic society. Now, I turn my attention to the question of democracy itself.

Democracy and Technology

I draw here upon a conception of democracy inspired heavily by critical theory for several reasons, including critical theory's concern with emancipation, its focus on transformation, and its longstanding interest in technology. Critical theory, in Benhabib's words, "is a social science with practical intent. This practical intent is the commitment to render humans the autonomous subjects of their actions".¹⁶ A concern with emancipation from top-down power in favour of the realization of a "process by which ordinary citizens exert a relatively high degree of control over leaders"¹⁷ seems to be essential to any conception of democracy that is meaningful rather than merely formal.

A Theory of Deliberative Democracy

My goal here is to outline a conception of deliberative democracy that incorporates a robust understanding of both technology and the commons, study of the latter being curiously absent from most literature on democratic theory. In the face of the recognition that no set of values is inherently correct, but only obtains validity when justified,¹⁸ Dewey contends that democracy is a choice that "appears to promise the most good with the least attendant evil."¹⁹ Benjamin Barber advocates 'strong democracy', where a self-governing community maintains heterogeneous interests yet resolves conflict through institutionalized participation by civically educated citizens.²⁰ According to Mansbridge et al. "*deliberative democracy* involves a decision binding on the participants or those for whom the participants are authorized to speak."²¹

These radical conceptions of democracy rely on communication in publics that constitutes individuals as political actors²² who can generate normative democratic legitimacy²³ for power and law where adequate procedures exist.²⁴ Habermas's approach is an attempt to restore a critical and thoughtful substance to democracy without taking up a radical individualism that's incompatible with the social, intersubjective fact of social life.²⁵ Social goods and self-interest often conflict, or appear to conflict, so that "the theory of collective action is *the* central subject of political science."²⁶ Communicative interaction – "when the participants coordinate their plans of action consensually, with the agreement reached at any point being evaluated in terms of the intersubjective recognition of validity

claims”²⁷ – may be one way of solving these problems. It suggests that the rightness of norms is cognitive as they are “*analogous to truth claims*,” and legitimacy is determined only through open, non-coerced communication between affected persons.²⁸

One problem is that political matters are essentially contested and groundless.²⁹ Thus it may be difficult to convince people to devote their time and energy to deliberation that may negatively affect their interpersonal lives rather than pursuing their own self-interest.³⁰ But at levels nearer to everyday activities “the opportunity directly to participate in decision making,” people may be more interested in political activity.³¹ A robust democratic theory is political as it must maintain diversity and freedom by accepting the possibility of genuine differences in values irreducible to a conflict of interest.³² This seems antithetical to communicative action that “depends on the use of language oriented to mutual understanding,”³³ but communicative power doesn’t require surrendering the concept of self-interest, properly understood.³⁴ This is because the very act of redeeming validity claims already sets communicative rationality against merely instrumental rationality so long as it remains oriented towards possible consensus rather than success.³⁵ Alternatively, through deliberation, people can understand their preconceived interests as mistaken³⁶ and reorient their actions in pursuit of revealed preferences.³⁷ Where this fails, deliberation is still valuable, although not for building consensus, but to “[set] the stage for a decision by non-deliberative methods.”³⁸

Transformation, Democracy, and Critical Theory

In Dewey’s words, the fundamental obstacle to democracy is “the search for conditions under which the Great Society may become the Great Community.”³⁹ Transforming a society to more closely adhere to the ideals of democracy advocated here relies heavily on the self-transformation of individuals within the population into involved, civic-minded persons who understand democracy as a “way of living.”⁴⁰ The emergence of such a public is necessary for meaningful deliberation at the heart of this conception of democracy incompatible with “powerful sets of social relations and organizations which can [...] systematically distort democratic arguments and outcomes.”⁴¹ While systematic distortions inherently involve relations of power, they are often regularized to the extent

that they are not seen as political, although they may “contain within them potentials for contestability.”⁴²

Overcoming systematic distortion requires the development of a more substantive equality within publics, which I argue is facilitated by the pre-existence of goods managed by a commons (although not only in this way). This more substantive equality makes possible reasoned critical debate amongst persons that would aid in bringing about a nascent radical democracy since “of the variety of possible democratic experiences, deliberation is most central to these generative and transformative effects.”⁴³ To bring about democracy would be to realize a process of civilizational change; critical theory remains of importance here since “only critical thought can understand the obstacles to social change and thus make possible the transformation desired.”⁴⁴ The question then is how to best understand the relationship between technology, ideology, and the realization of democracy through transformation of both institutions and citizens.

A Critical Theory of Technology

Addressing the question of the implications of the internet for democratic theory may be improved by situating it within critical theory, which has always been interested in the relationship of technology to society. Marx considered technology as a driver of worker alienation that also produces a state of affairs where “the entire production process appears [...] as the technological application of science”⁴⁵. That is, the interests that led to the creation of an alienating technology rather than a liberating one are hidden under the veil of rationality. This position is more explicitly taken up by theorists like Marcuse who argues that technology can proceed “in different directions of progress” but that the “choice is primarily (but only primarily!) the privilege of those groups which have attained control over the productive process.”⁴⁶

Feenberg contends that a proper critical theory recognizes that while technology may often be used as a tool of domination, legitimated in its guise as a mere ‘technological application,’ this is the product of a contingent social situation and while not neutral, technology is always ambivalent.⁴⁷ The choice of a technological means is also the choice of a normative end, of a particular future civilization.⁴⁸

The problem then, is understanding how technology can be understood and used by agents to overcome the pervasiveness of technological rationality as a method of control “at the intersection between ideology and technique.”⁴⁹ This means providing a counterweight to the pessimism of Marcuse and Kellner, who argues that the ‘techno-capitalism’ characteristic of capitalist post-industrial society “*increases* the power and hegemony of capital over social and individual life.”⁵⁰ Rather, there is a need to look to democratic spaces that might be opened by the democratization of technologies themselves to relocate power from bureaucracies and markets to people at large.⁵¹ A critical theory of technology suggests that since no technology can be inherently oriented toward emancipatory, democratic ends, agents must employ technologies in this way while also working to undermine the capitalist, non-democratic context within which technologies and agents are situated.⁵² Unfortunately, most online political action does not appear to be profoundly democratic or transformative.

A Structural Understanding of Online Politics

To understand the nature of the political online, it's worth examining several identified types of explicitly online political action. These modes of action do not seem to exhaust the political character of the internet and while they may improve contemporary democratic practice, it seems clear that they fall short of the democratic ideals explicated in the first section.⁵³ Rather, there is a need to better understand how internet use is itself embedded in practices — such as how agents designed the internet and its applications — and how these practices generate structural features of the internet that constitute it as a commons. The internet demonstrates clearly how almost all commons goods, with the exception of true public goods, are constituted as such through practices and are thus always contingent and never necessary.

The Digitization of Offline Models

I suggest that there are two models of online activity that use the internet merely as one additional form of technological mediation. Both 'digital activism' and 'eGovernment' use the unique qualities of the internet to achieve qualitatively similar goals that could be facilitated, perhaps less efficiently, by pre-web means that have previously been used to accomplish the same goals (*e.g.* campaigning and fundraising door-to-door or by telephone).⁵⁴

Digital activism is merely the use of digital tools to achieve a political goal. This might simply mean the use of a website to host a petition, making a donation to a political candidate or NGO through an online payment processor, organizing a boycott through social media, or using a blog to raise awareness of an issue.⁵⁵ These activities are relatively unchanged by their online execution.

The second model presented here is the notion of eGovernment, which is comprised of open government initiatives, online voting, and digital participation. Open government is the idea that, as technology becomes more widespread, it becomes easier and more affordable for representative governments to make a comprehensive database of information available to citizens in the name of transparency.⁵⁶ Online public information about the operations of government theoretically makes accountability possible by

rendering information accessible that could be used by “people to challenge supposed relations of trust.”⁵⁷

Online voting simply provides eligible voters with a more convenient way to cast a ballot by logging into a secure, anonymous web application. Digital participation takes surveys, town hall meetings, citizen juries, and other fora online. These activities vary in their democratic potential, but most of them remain firmly grounded in the representative model of democracy with their online character differing little from the offline versions of said activities.⁵⁸

Uniquely Digital Political Action

There appear to be two other modes of online political activity that are possible only with the advent of the internet. The first is hacktivism, which Samuel defines as “the nonviolent use of illegal or legally ambiguous digital tools in pursuit of political ends.”⁵⁹ The difference between this and digital activism is not its legality — organizing a black block protest via social media also results in illegal action — but the fact that the digital tools being used are illegal in themselves. So hacktivists are politically motivated persons who, for example, launch denial of service attacks or pick the digital locks protecting information.⁶⁰

Anonymous seems to have shifted from mischief to hacktivism in 2011, defending human rights, combatting censorship, and exposing exploitation by governments and corporations.⁶¹ Yet, Anonymous is undemocratic as its very dedication to anonymity precludes the external accountability that is made possible by transparency.⁶² Some hacktivists choose to claim responsibility by using their real names or pseudonyms⁶³, although this is insufficient on its own for their actions to be democratic, even if carried out in the name of democracy.⁶⁴

Disembodied deliberation, which turns out to be an impossible type of political activity, postulates that difference is detrimental to collective decision-making and judgment. On this view, claims of universality are revived via the internet where true identities are shielded from prejudice in “a democracy founded upon disembodiment and

uncontaminated by physical difference.”⁶⁵ John Perry Barlow’s *A Declaration of the Independence of Cyberspace* echoes such claims. It begins:

Governments of the Industrial World, you weary giants of flesh and steel, I come from Cyberspace, the new home of Mind. [...] We are creating a world that all may enter without privilege or prejudice accorded by race, economic power, military force, or station of birth. [...] Our identities have no bodies, so, unlike you, we cannot obtain order by physical coercion.⁶⁶

Barlow’s “Declaration” is representative of many who thought that the internet could “unite those of disparate backgrounds” and improve the quality of discourse by eliminating conflicts that arise from a “lack of familiarity.”⁶⁷ Such an approach neglects the increasing visibility of bodies, verifiability of identity, geographically-based parochialism,⁶⁸ and the fact that “Even when trying to be deceptive, people reproduce their embodied experiences online.”⁶⁹ Some groups, such as the elderly or the impoverished, may continue to feel excluded or unqualified to participate online, limiting the scope and possibility of democracy.⁷⁰ This suggests that coercion is not the only generative mechanism of “silence and conformity” but rather that structural factors still play a role online; so unless there are mitigating institutions online, it appears that this picture of online democracy is insufficiently inclusive.⁷¹ This could explain, at least partially, why online deliberation seems unsuccessful at meeting the standards of democratic theorists, even if such a process does seem to improve perceived legitimacy amongst participants.⁷²

The Structure of the Internet as Commons

Many investigations into the political character of the internet⁷³ have focused on how closely the internet approximates Habermas’s communicative ideals.⁷⁴ However, there seems to be a more fundamental need to examine how the internet might be shifted from a commons to a series of publics that could improve democratic characteristics offline. Lessig, following Benkler, argues that cyberspace, as a communications system, must be understood as being comprised of three distinct layers: physical, code, and content.⁷⁵

At the physical layer is the need for computers, wires, modems and other hardware that can be connected to one another via designated protocols, such as TCP/IP. Excludability and rivalry remain pertinent at the physical layer since digital divides such as access to devices persist and bandwidth is a hard limit on the efficiency and amount of data that can be transferred via an open-protocol.⁷⁶

For example, the TCP/IP protocol itself rests at the code level and was designed to be open to any device, to place a minimal burden on the user, and to be neutral by treating all packets of data sent over the network in the same manner.⁷⁷ To make the internet universally accessible requires control — modulation, distribution, and flexibility — to take precedence over power — confinement, discipline, and normativity.⁷⁸ The code that serves as architecture for computer applications, and thus cyberspace, represents choices about ordering the digital world.⁷⁹ The code layer is materially different from the “fundamentally controlled” physical layer in the sense that code could be largely free and open, although this is by no means necessary.⁸⁰ That is, continued democratic control of the protocols at the code layer itself is essential to maintaining the internet as a distributed system with democratic potential.⁸¹

While early design choices may have privileged users over owners, this cannot be understood as merely technical as technology is “not often politically neutral.”⁸² Offline choices about ordering the world would be considered political but online the fact that “Code codifies values” is obscured by a veneer that makes code visible merely as a feat of engineering.⁸³ The decisions that outlined the internet as we know it were political, although they came about not through the edicts of experts or through an institutional hierarchy.⁸⁴ Rather, the wide adoption of open standards serves as a *de facto* consensus, made possible by a relatively decentralized, transparent, and democratic process of deliberation that produces a theoretical “rough consensus.”⁸⁵

The underlying process stands in contrast to the reality of the physical and code levels. Online activity is always already being regulated by the very requirements, such as protocols, that make online activity possible.⁸⁶ So while states and capital may find it difficult to regulate online behaviour of users, given the architecture of the internet, there is no need for them to find regulating the architecture of the internet difficult by controlling users in physical space or by persuading or coercing programmers.⁸⁷ There are obvious benefits for both commercial and governmental actors to upset the protocol commons in favour of proprietary or restricted standards since the current environment is viewed as “distressingly unpredictable.”⁸⁸

At the content level, the internet makes the non-rivalrous and non-excludable character of certain types of goods (*i.e.* intellectual property) more clear by easing the physical restraints that enabled rivalry and exclusion. The internet is a commons at both the code and content layers that rests on a controlled physical layer,⁸⁹ and despite Duff's worthwhile contention that infrastructure should be public even if individual devices are not, this is no contradiction.⁹⁰ A book released under a Creative Commons license still relies on the use of privately held goods — food, water, ink — by an author who still exercises control over the authorship of the book. After publication the book may be altered, quoted, and copied, but these common uses are only made possible by private control at another level. At the code layer (although perhaps increasingly less so) and at the content level (perhaps increasingly more so), the internet is a commons. While bureaucracies, markets, and individuals ought to encourage the expansion of the commons, coercing its growth would be antithetical to the non-state, non-market method of organization that underlies the self-management of commons.⁹¹

The internet's openness remains possible due to a concerted effort to uphold a certain political vision of a commons where a high level of control is exerted by end users, rather than centralized authorities.⁹² The internet, as a network of networks, did not emerge as one commons. Instead, it would be more correct to understand it as many commons nested within each other.⁹³ Whereas most tech enables capture of the commons⁹⁴ — and thus reinforces the institution of private property — the internet's success has reinvigorated an understanding of the commons as a desirable and viable method of resource allocation, thus undermining the ideological necessity of private property.

From Property and Isolation to Access and Association

Understanding Property

The institution of property is a human creation that grants individuals designated rights to certain objects.⁹⁵ The rights to use goods, transfer goods, and exclude others from accessing said goods are considered constitutive rules of the concept of ownership institutionalized as property.⁹⁶ On Snare's view, goods shared via a commons mechanism may not be considered property, properly understood.⁹⁷ So the political question is whether or not things that are shared ought to be "possible objects of private ownership," with a determination of 'no' to presumably preclude capture or enclosure.⁹⁸ On Macpherson's view, shared goods are made common property by "the guarantee to each individual that he will not be excluded from the use or benefit of something."⁹⁹ The question of whether commons goods ought to be understood as property will not be resolved here as it turns out to be somewhat irrelevant in itself.¹⁰⁰ Rather, the resurgence of the commons is important for how it upsets established understandings of use and exclusion in property as the revision of the institution of property is essential for a more robust democracy. But first, it's necessary to examine how access is gaining primacy over ownership and how this enables commons self-management.

Access to the Means of Production

The notions of sharing and cooperation were overshadowed in the 20th century by self-actualization through competition and conspicuous consumption that coincided with diminishing capacity for thoughtful action, particularly in regard to civic matters.¹⁰¹ This obscured further the historically social aspect of property rights — the right not to be excluded¹⁰²— that had been cast aside with the Lockean conception of property. Exclusion from the means of production, initially by force or fraud and eventually upheld by law,¹⁰³ made possible the Marxist theory of surplus value as the extracted power of individual workers transferred to those who controlled the necessary access to the means of production.¹⁰⁴ However, information and communications technologies, including the internet, have also been used as a means of production that reshapes work as play and

prevents the deskilling of workers,¹⁰⁵ allowing for non-alienated labour and workplace democracy.¹⁰⁶

One example is readily apparent in the free software movement¹⁰⁷ where it's acknowledged that collaborative programming, even if it did not produce the best designs — which it often does — would remain important by virtue of its open process.¹⁰⁸ As such, free software is a practice that reorients knowledge and power by producing actually existing alternatives to capitalist understandings of property.¹⁰⁹ Coleman suggests that these practices serve as a critique of neoliberalism that saves liberalism by realizing “productive freedom.”¹¹⁰ The relative affordability of technology that overturns rivalry and excludability of many goods within post-industrial societies — with the digital divide between the global north and south also narrowing, although not unproblematically¹¹¹ — challenges the assumptions of scarcity and desire that compel the transfer of powers under capitalism.¹¹² While it's still unclear to what extent or how directly workplace democracy is a boon to democracy writ large, there seems to be a strong theoretical case that it is more beneficial than harmful.¹¹³ Increased access restores worker autonomy by replacing the strict division of labour with modular, distributed, self-directed work.¹¹⁴

Despite the grounds for optimism, these activities need to be supported by democratic foundations, lest entertainment platforms be mistaken for communities and the free labour of co-creation be extracted for the benefit of others. Corporations such as Google and Youtube rely on user-generated content, be it correcting online maps or uploading videos, to generate advertising profits.¹¹⁵ In some cases, users are compensated but the logic of surplus value remains at play as corporations extract value from producers. Projects coordinated via ICTs thus need not be democratic, but as workers re-conceive labour in terms of shared work it advances civic learning, leading to the adoption of various democratic mechanisms.¹¹⁶ The example of free and open source software communities illustrate that costs of exit, forking one project into two, are high for both parties and socially sanctioned whereas voice is made possible by a large number of technological processes that have become adopted as social norms within software communities.¹¹⁷ This type of labour doesn't require ownership of the means of production, as running a business

or programming an application can be done with a personal computer or one made available at a public library, but it does illustrate the importance of access.

Access to Physical Goods

Owners themselves rarely use the means of production in capitalist society while the right to exclusion is constantly exercised, but we expect that consumer goods are to be used primarily by owners. It's not clear that this latter tendency arose from a reluctance to share, but as impediments to sharing emerged in the forms of possessive individualism and materialism, sharing became stigmatized as uncommon.¹¹⁸ The idea that property breeds independence, considered a valuable quality, led to a myth of self-sufficiency in which a lack of ownership represented a lack of status.¹¹⁹ This myth is an ideological construction that makes possible a process of domination that replaces the desire for democratic liberation with the desire to possess.¹²⁰ Owners of the means of production only accumulate more capital when they can sell goods so the desire to possess operates in tandem with the creation of new wants¹²¹ to fuel a process of consumption by users and production by manufacturers.

Yet, the continued development of the internet weakens what is perhaps the most substantial defence of ownership of certain goods: convenience.¹²² Technology has been adopted by users in order to enable collaborative consumption, a process which demonstrates how access to goods, rather than ownership, is often sufficient. In this way, it becomes apparent that not only is the internet itself a commons¹²³ but it realizes the possibility of broader access to other goods available through commons regimes. The success of collaborative consumption challenges the heretofore apparently natural need to own everything that one might be needed or useful.¹²⁴

Botsman and Rogers lay out four principles of collaborative consumption: critical mass, belief in the commons, trust between strangers, and idling capacity.¹²⁵ It appears that, as a framework for enabling access to goods without ownership, these principles largely apply to the general concept of the commons as well. Critical mass is the idea that enough people need to buy-in to participate for an institution to become self-sustaining. Critical mass ensures that there are enough people to maintain choice and diversity while

also demonstrating the viability of a novel concept.¹²⁶ Belief in the commons essentially requires that actors willingly choose to self-organize, rather than rely on the state or markets, to create value, realize shared interests, and manage important goods.¹²⁷ Interactions between strangers suggest that reciprocity can effectively build trust,¹²⁸ that there is a need to maintain a reputation,¹²⁹ and community sanctions are sufficient to address violations of trust without the need for strong central authority.¹³⁰

The internet, of course, is not the only factor behind the implementation of these principles. Again, the fact that property regimes are always contingent and dependent on the acquiescence of most people and the support of the powerful means that they are inherently changeable.¹³¹ The status quo view of property that garners continued support is increasingly undermined by a value-shift in post-industrial societies where “making a difference” is important for those “coming of age in an increasingly collaborative world.”¹³² This isn’t to suggest that people must be (or are!) entirely motivated by altruistic tendencies. Rather, gains in status and reputation are seen as benefits enabling indirect reciprocity that also explain the significance of attribution as a vital norm in collaborative communities.¹³³ People living in increasingly post-materialist societies see ownership as less valuable compared to access leading Rifkin to predict that “the very idea of ownership will seem limited, even old-fashioned, twenty-five years from now.”¹³⁴ The fourth principle, idling capacity, is only truly relevant once the first three principles of collaborative consumption take hold.

Inasmuch as commons are shareable goods, it is worth noting that many rivalrous market goods “are produced in discrete sizes and represent varying capacities. Typically, available capacity is fully utilized only in specific time intervals”¹³⁵ — all other time is considered idling time. Harnessing excess capacity of other devices over the internet makes certain types of automated peer-production, such as distributed computing, possible.¹³⁶ The internet also provides “an instant platform sharing excess capacity among many people” that makes it possible to share cars, tools, toys, rides, bicycles, gardens, and more with others who might not own such goods, for whatever reason, but who still have a legitimate need to access said goods.

It is perhaps at this point worth briefly returning to the question of whether or not resources in a commons are property or not. As far as rivalrous objects are concerned, it seems to make sense that privately owned objects may be collaboratively consumed; they remain property and could theoretically be re-enclosed, although they are shared.¹³⁷ Public goods, such as the ocean, ought not to be considered property due to the inherent difficulties in upholding property rights, primarily that of excludability.¹³⁸ Common-pool resources and club goods both remain commons that are vulnerable to enclosure. Thus, collaborative consumption demonstrates that the commons can be thought of as a way to manage both property and non-property to varying degrees. Yet, recent scrutiny around the concept of intellectual property suggests that a conception of private property nested in the commons is less convincing in regards to intangible goods.

Access to Intangible Goods

The desire for access, rather than ownership, is even more apparent in reference to the rights associated with patents, trademarks, copyrights, trade secrets, referred to here under the umbrella term intellectual property.¹³⁹ There has been plenty of recent criticism of intellectual property, much of it centered around laws¹⁴⁰ that extended the term of copyright,¹⁴¹ the automatic copyright of materials,¹⁴² the possibility for authors to control derivative works,¹⁴³ copyrighting the works of others to extract value,¹⁴⁴ the impossibility of proprietary software to meaningfully enter the public domain,¹⁴⁵ and the loss of an explicit path for copyrighted materials to enter the public domain.¹⁴⁶

Of course, no one can claim ownership of goods in the public domain but, as it turns out, what we want often is not to own or use physical media but access to the content it carries — the ideas in a book, rather than the set of bound pages itself.¹⁴⁷ This understanding is increasingly prevalent as the internet enables the distribution of content unconstrained by physical media such that the concept of ownership becomes further removed from heterodox understandings of property.¹⁴⁸ That is, technological advances have diminished the divide between producer and consumer to reveal intellectual goods to be always unfinished and continuously co-produced at multiple points, whereas the previously necessary physical existence of media suggested otherwise.¹⁴⁹ What is crucial

for democratic potential online is to ensure that protocol and code can “maintain a space of collective interaction” where engagement with content and other people remains possible despite attempts to commodify participation or prevent it through strong exclusionary property rights.¹⁵⁰

In short, intellectual property imposes conditions of scarcity that would not exist otherwise, preventing ideas from becoming publicly available.¹⁵¹ Coleman argues that intellectual property amounts to a “second enclosure movement” that ignores the structure of IP as speech, which ought to be free.¹⁵² This runs contrary to copyright’s intent as a “limited proprietary entitlement that underwrites democratic culture and citizenship” by promoting the creation of a store of public knowledge, encouraging participation by incentivizing creation, and enabling autonomy by freeing communication from patronage and hierarchy.¹⁵³ Yet, such underwriting requires that exclusive rights be well-defined and limited in order to serve, first and foremost, a democratic purpose.¹⁵⁴ Such limits are eminently reasonable especially in light of findings that the majority of people are cooperative and altruistic rather than selfish¹⁵⁵ and there are “few if any domains of human creativity where intellectual property rights are the main reason for inventiveness.”¹⁵⁶ In fact, it even appears to be the case that there are circumstances in which protection of intellectual property can prevent an increase in human knowledge, either directly by restricted access¹⁵⁷ or indirectly through a ‘chilling effect’. A recent opinion piece by Nobel Prize winner Joseph Stiglitz argued that the economic value of intellectual property often triumphs over moral values and reinforces inequality.¹⁵⁸

The Anticommons and Scaling

The thread that runs through these notions is the importance of access to intellectual goods; access that can, in some cases, be more successfully facilitated through an information commons than the commodification of information. What makes intellectual property distinct is that such goods are “easily replicated and that enjoyment of them by one person does not prevent enjoyment of them by other persons.”¹⁵⁹ Although there are compelling arguments for the revision or abolition of intellectual property laws, this doesn’t mean that their provision of incentives is worthless.¹⁶⁰ Non-rivalrous goods are

vulnerable to the tragedy of the anticommons, where underuse creates a sub-optimal commons.¹⁶¹ The anticommons is a novel problem in which “multiple owners each have a right to exclude others from a scarce resource,”¹⁶² yet where the quality of the resource is positively correlated with the amount and diversity of contributions. In the case of intellectual property, there is a need to be able to use previous discoveries as a basis for future innovation.

The commons appears as an increasingly viable control mechanism as “the Internet and other new electronic media have an unusual capacity to overcome collective-action problems.”¹⁶³ Yet, as a greater number of goods are brought under the management of commons regimes due to technological development,¹⁶⁴ the political significance of self-management of the commons increases. This is because a greater number of commons goods increases the costs of exit from commons regimes, thus making voice, rather than exit, a more viable mechanism for political action.¹⁶⁵ This also fundamentally alters the extent to which embeddedness in a commons regime is voluntary as the more necessary the good, the less voluntary one’s relation to commons self-management, rendering democratic practice desirable on moral grounds.¹⁶⁶

This parallels the case of democracy. The anticommons illustrates the need for more participants, emphasizing the continued need to bridge the various digital divides, but even those with skills and access often free-ride on the code and content goods of the internet. The concept of democracy as government by the people relies on the participation and involvement of people as autonomous, informed, self-governing agents. While individuals may have no choice but to reside within a state, they may empower themselves through processes of deliberation which provide them with voice. Yet, while it seems that democracies are anticommons as legitimacy depends on a relatively high degree of popular support, critics maintain that large-scale participatory democracy remains a utopian fiction as it would be untenable to incorporate such a multitude of diverse voices.¹⁶⁷

It seems possible that these criticisms might also apply to commons self-management, especially in the non-face-to-face online environment, due to an increase in social distance that prompts recourse to law and coercion.¹⁶⁸ Yet, the number of successful,

online, commons in recent years suggests either that the amount of social distance has been reduced by technological advance, increased familiarity with ICTs, or both; that social proximity is less necessary for a successful commons than was thought;¹⁶⁹ or that the social distance does not lead to coercion.

It seems entirely possible that a combination of these three factors is at play. That is, the problem of social distance actually serves as a proxy for poor communication that would impede meaningful deliberation. Technological advance has permitted a greater degree of nuance to be transmitted over networks that enables ‘cheap talk’ and body language, improving the quality of communicative action directed towards consensus.¹⁷⁰ As communication was determined to be crucial for overcoming the tragedy of the commons through self-governance,¹⁷¹ the internet, much like all technologies, has required time to gain acceptance as a legitimate method of mediating contact between persons.¹⁷²

The growth of new technologies appears to have increased in tandem with the commons paradigm, although verification through empirical research would be useful in evaluating this claim. As the internet expands, it makes possible an ever-wider range of communication to potentially solve increasingly large social dilemmas both offline and online. This seems to be the point that Botsman and Rogers highlight when they state “Sharing has always depended on a network — but now we have one that is redefining its scope, meaning and possibility.”¹⁷³ The case of the commons suggests that, if it is indeed possible for the commons to overcome problems of scale, then deliberative democracy might be able to do so in the same way. The point is to recognize that institutions and resources are also affected by temporality so “the most efficient scale at which to use a given resource may change over time.”¹⁷⁴ In other words, criticisms of deliberative democracy due to scale may be increasingly irrelevant, in part due to technological improvements and in part due to the increasing popularity of the commons, which also has democratic effects. This is not to suggest that all matters must be agreed upon by all persons but rather that diverse publics may address different issues, but that there need not be artificial limits imposed upon the size of these publics.

The Commons and Democratic Theory

It is worth addressing briefly what appears to be a contradiction here by emphasizing again the difference between the commons as a shared good and commons self-management. Common goods are necessary for democratic societies,¹⁷⁵ but commons self-management must be a democratic process. The goods of the commons are temporally prior to democratic organization thereof and so the democratic nature of commons self-management relies fundamentally on structural conditions that permit sharing of a good. That is, the importance of the commons for democracy is on the continued existence of a common good itself. Of course, the continued existence of common goods is facilitated by commons self-management.

The choice of commons self-management rarely leads to the 'neatest' outcomes, but often to outcomes with a high degree of legitimacy amongst users as the decision-making power regarding the use of a resource remains vested in the users, the people itself.¹⁷⁶ Any non-democratic management of the commons would not be self-management of all persons as selves, the success of which relies on a shared conception of democracy. This shared conception cannot be based on an objective sense of commonality between persons that might impinge upon diversity and autonomy (*e.g.* skin colour), but rather an intersubjective conception generated by individuals in conjunction with one another.¹⁷⁷ Online, these agreements became embedded in the protocols at the code layer that dictate what is and is not possible. Generating agreement on these protocols was made possible by the emergence of a process called the Request for Comments that allowed participants to work through technical and moral disagreements to come to an acceptable framework. The notion of democracy need not be explicitly named as such, but participants need to agree upon the framework for deliberating and taking decisions. So, the commons regime is one of democratic control, as even private property being shared becomes a *de facto* commons, and produces democratic effects in a broader context. The end result is that goods that are managed as commons as well as the process of self-management have democratic effects.

Inclusion and the Commons

While self-governance might be used to coordinate participation in the anticommons of online, intellectual goods, self-governance might also be used to solve collective action problems of rival and/or excludable, yet shareable, physical goods. Shared access to goods is key to the formation of publics and democratic society at large and, while some property held by states or individuals might be made accessible to others, commons self-management ensures that access to a good is not altered capriciously. Theoretically, exclusion from a private good treated as a commons good may occur due to decision of the owner, although in practice even this may be determined illegitimate as, for example, “property used for political speech has come to be viewed as inherently public.”¹⁷⁸ Commons self-management is inherently democratic since barring legitimate users of a self-managed commons from participating in processes of commons governance would signal a private claim by an individual or group to control of the commons, an attempt at enclosure. Yet, this raises the question of how to determine who is eligible to take part in the management and enjoyment of the commons in the first place. Essentially, who is in and who is out?

The all-affected principle of deliberative democracy suggests that for truly public goods and goods that are vulnerable to the tragedy of the anticommons, anyone should be able to enjoy and take part due to the non-rival and non-excludable structure of such resources. Club goods are excludable but non-rival and normally embedded in associational contexts that determine eligibility for membership and participation. For common-pool resources, Ostrom notes that the definition “of a set of appropriators who are authorized to use a CPR” is the first design principle of robust commons self-management.¹⁷⁹ Ostrom presents several other principles of institutional design, although considerations such as equity, inclusivity, and the all-affected principle seem to be ignored in favour of functional considerations. It becomes clear at this point that while some types of goods are inclusive, other types necessitate the formation of out-groups.

This appears to illustrate a divide between commons regimes and democracy. It's important to remember that the commons is not a panacea for many of democracy's

problems and that for issues like whether or not segregation of individuals from certain types of commons and their management are legitimate, “democratic citizens should look to law and public policy.”¹⁸⁰ Commons self-management overcomes the ruinous tendencies of self-interest as actualized by private property by revealing the possible reconciliation of self-interest with collective interest.¹⁸¹ In so doing, it demonstrates that there was “no logic which rendered necessary the appeal to the individual as an independent and isolated being.”¹⁸² In circumstances where intractable conflicts between values persist, such an identification of interests is impossible and democratic procedures provide legitimacy for decisions that are backed by coercion, if necessary. Carrying capacity and geographic proximity may be functional considerations used to determine who can use a certain commons and such considerations permit the eventual combination, nesting, or coordination between various commons. Such actions are precluded if a commons reproduces broader inequalities through exclusionary practices, provoking a challenge to the notion that there are legitimate grounds for exclusion.¹⁸³ Despite the fact that successful commons self-management requires relative autonomy from state interference,¹⁸⁴ the possibility of explicitly political engagement through states is essential to maintain the legitimacy of commons self-management as inclusively democratic and preventing the commons from lapsing into private group property.¹⁸⁵ This coincides with the associative ideal that “democracies ought to distribute power in ways that multiply public spaces.”¹⁸⁶

I suggest that these problems of exclusion would arise less frequently and less severely where commons regimes are embedded in a broadly democratic context. That is, these problems are minimized in situations where commons regimes are already less likely to coalesce around pre-established identity categories that inherently prevent the inclusion of difference. Furthermore, the fact that technological developments have made possible truly non-rival and non-excludable goods suggests that the commons can increase in size and scope such that there may be few, if any, legitimate limits on participation regarding certain categories of commons goods.

The Commons and the Enlightened Citizen

One thing Hardin got right about the commons is that the social dilemmas that arise in regards to shared goods cannot be solved by technical means.¹⁸⁷ This assertion resonates with radical democrats who contend that technical or instrumental rationality is unable to subsume all political matters as administrative ones.¹⁸⁸ Goods that are not private property pose a unique challenge so individuals in a possessive market society tend to retreat into the familiar embrace of property relations.¹⁸⁹ However, the continued consequences of resolving social dilemmas from above,¹⁹⁰ since private property benefits the wealthy most, to the detriment of those most affected demonstrates a democratic deficit that can be addressed if “the non-political forces organize themselves to transform existing political structures.”¹⁹¹ Commons self-governance explicitly seeks to solve this problem by “[enhancing] the capabilities of those involved to change the constraining rules of the game to lead to outcomes other than remorseless tragedies.”¹⁹² This is not to say that commons self-management seeks specifically to challenge the institution of property or improve and widen democratic practice. Rather, these types of social change are effected by the fact that the commons is an example of a working alternative that provides people involved with political skills, the widespread adoption of which may be beneficial for society as a whole, even if this is not a foundational goal of commons self-management.¹⁹³

In the transition towards broader commons “frustrated private owners may overreact in trying to protect their property”¹⁹⁴ as they see the extant institution of private property to align with their interests — making property a commons appears to some as expropriation or theft. Thus, changing the rules of the game is a non-trivial undertaking that requires a transformation not only of institutions and rules, but of individuals as well.¹⁹⁵ As Ferguson puts it “things are common only when we experience them as shared with other subjects.”¹⁹⁶ Doing so requires that individuals reassess and appropriately recognize the difference between material interests and properly political interests. Then they might conceive of their material interest as being compatible with experiencing a good as shared.¹⁹⁷ Incorporating early and increased exposure to the commons — perhaps even through radical pedagogy that conceives of education as a commons — may be one way in which civic education could bolster democracy by shaping

“more rational, reflective, and compassionate citizens.”¹⁹⁸ The success of websites such as Couchsurfing or modo car co-op demonstrate ways in which the internet enables people to see examples of alternatives which might cause them to reflect upon their previous notions.

Collective action problems that seemed intractable without external intervention may be solved by a change in the consciousness of the actors involved provoked by dialogue, social interaction, and association. Of course, the degree to which this is effective varies as the low need for management of a pure public good requires little to no self-transformation as access to such a good is not dependent on collective action whereas common-pool resources or club goods have continued value only as a result of collective action.¹⁹⁹ It seems to follow that agreeing to re-conceptualize a certain object of one’s own private property as a commons requires a considerably larger degree of self-transformation. This should serve as a reminder that it remains important that people are generally not coerced into surrendering private property, and where coercion is necessary it must be democratically legitimate, lest it jeopardize the autonomy and diversity of the individual.²⁰⁰

The Commons and Association

Two necessary conditions for democracy are a rich associative life and technological, institutional, and communicative infrastructure that permit public opinions.²⁰¹ I seek to provide a sketch of how the commons plays a part in meeting these conditions in these final two sections.

Transformation of the individual goes hand in hand with the transformation of institutions for guiding collective action²⁰² and so democracy at lower levels transforms the context of political activities above.²⁰³ Democratic practice at these lower levels debunks Weber’s claim that self-management leads to a coordination vacuum that leads to bureaucracy²⁰⁴ and instead hints at the possibility that these “small examples of working interdependence can also serve as the collateral for larger cooperative enterprises.”²⁰⁵ A similar notion is posited in theoretical work on democracy and association. Associative democrats seek to examine various alternatives to the dichotomies of markets and bureaucracies by emphasizing that there are three media to co-ordinate action: money,

authorized power, and communicative interaction (or influence).²⁰⁶ Internally, commons self-management explicitly ignores the coordinating force of money²⁰⁷ and also relies on a general independence from institutions of organized power that threaten self-management.²⁰⁸ Where a commons good is self-managed, the primary — but not only — medium of coordination is communicative or social such that the emergent commons regime is associational.²⁰⁹ There are two notable consequences of commons regimes as associations. First, they may produce democratic effects themselves. Second, associational relations, like commons goods, are necessary to make publics possible and publics remain essential for democratic practice.

Democratic effects may include improvement of institutions, an increase in individual autonomy, or an increase in the possibility of political autonomy regarding collective judgments.²¹⁰ Getting the institutions right is “a difficult, time-consuming, conflict-invoking process”²¹¹ but it is made possible by the fact that individuals in the commons regime represent themselves. Resisting external pressures and addressing unique problems at the lowest relevant level maintains cooperative control of the commons. The successful shaping of these institutions is also a process of civic learning that produces legitimate substantive outcomes, but which also legitimates a procedure for determining substantive questions, both at this level and higher ones.²¹²

Norms take precedence in coordinating activities within commons regimes, which regulate themselves by the fact that self-interest motivates effective enforcement of norms and gradual sanctioning.²¹³ That being said, sanctions and self-interest cannot be the only qualities of a self-governed commons as this would do little to distinguish it from state or market solutions. Rather, the success of commons regimes depends on trust established through reciprocity and increased critical reflection on self-interest and property.²¹⁴ Solving collective action problems through self-management engages people in participatory practices that demonstrate how self-governing a “commons can be beneficial for civil society and democracy, mainly because it permits people to be creative as citizens.”²¹⁵

While the internet has made the commons appear more viable, it has also introduced the possibility of non-face-to-face instances of commons self-management that ostensibly make trust risky, limit recognition, and make cooperation difficult. Whereas Tocqueville insisted that associations be composed of face-to-face relationships, it seems safe to reject this requirement as it “injects an unnecessary parochialism into the concept.”²¹⁶ Whereas previous technological developments, such as those of the industrial revolution, led to communities having “their affairs conditioned by remote and invisible organizations,”²¹⁷ modern technologies enable large, diverse communities and associations to shape themselves²¹⁸ and it’s naive to suggest that these groups remain limited to an online existence.²¹⁹

Civil Society, Commons, and Publics

The third set of effects are ones that enhance the public sphere capacities of agents to form opinions and agendas independently of the state and markets, that is, to exercise communicative freedom.²²⁰ This is in contrast to the fact that commons self-management can be, and often looks, merely instrumental. Yet, as associations, commons regimes do not lead to an erasure of internal difference, instead allowing for the improved individual autonomy noted earlier to be recognized by others and flourish in accordance with the collectively agreed to norms.²²¹ The establishment, validation, and rationalization or legitimation of the democratic procedure and its resulting norms that make institutions more democratic and increase personal autonomy is achieved through communicative power.

The decision of a commons instead of private property is successful and efficient only when all affected are represented, have all relevant information, and are not coerced.²²² These are essential procedural preconditions for deliberation. For Habermas,

the success of deliberative politics depends not on a collectively acting citizenry but on the institutionalization of the corresponding procedures and conditions of communication, as well as on the interplay of institutionalized deliberative processes with informally developed public opinions.²²³

These informally developed public opinions are made possible by the emergence of publics and, while the commons regime improves the skills of those acting in publics, publics themselves emerge with the pre-institutional associational relations of commons self-management.

Shared goods are a prerequisite to the notion of a public. The criterion for a commons is that it is always usable by an undefined entity of persons.²²⁴ This indefinite openness is also a fundamental feature of a public sphere.²²⁵ While public discourse has always relied on shared space (physical or otherwise),²²⁶ the actions of those in a public simultaneously constitute the space as shared. The “gap between public spheres and institutions creates the open question for citizens as to whether the authority of their institutions has been legitimately exercised,”²²⁷ demonstrating that the emergence of public spheres via self-management questions the institution of property and its surrounding complexes of state and market activities. Publics coalesce around goods where contemporary institutions are likely to or have failed, and by doing so they also maintain that space as the foundation of a public sphere. All public spheres are at some level practices of commons self-management that rationalize norms for the governance of the commons and the emergent public such that these norms are not merely legal propositions but laws in the formal sense.²²⁸

Conclusion

I recognize that this account of publics may appear circular, like a theoretical ouroboros, although it seems to me that, with sufficient understanding, these concepts should be thought of less controversially as reflexively constituted. In theorizing about the relevance of the commons for democratic theory, I have found it necessary to make a conceptual distinction between the commons as goods, commons self-management as practice, and commons regimes as associational institutions. These distinctions make it possible to pursue more substantive theorizing about the commons within the field of political science. Such a revision appears necessary in reference to thinking about the politics of the internet. Whereas many missed the internet's status as commons entirely in search of a utopian democracy, insightful commentators like James Bohman realized that the internet could be made democratic or that it could "simply be a marketplace or a commons,"²²⁹ missing the fundamental connection between public spheres, democracy and the commons.

This is not to say that the wealth of theory on the internet as a public sphere is lacking value. Rather, it should be updated to explicitly incorporate the importance of the commons, especially in regards to those who note that publicity needs to be defended from states and markets in order that public spheres can be maintained. This is the intermediary space that has traditionally been considered the realm of civil society, although now it becomes clear that civil society itself is not possible without a commons. The internet is not and cannot be a separate political sphere; however, the internet can be seen as an aspect of civil society or a way of expanding it.²³⁰ And, like civil society, the internet is not inherently democratic and is always open to co-optation by outside forces if stewardship is lacking.

Democratic theory should admit the notion of the commons as a fundamental aspect of democracy as it is tied up with practices that reinvigorate the study of trust, reciprocity and reputation amongst radical democrats. It also provides a new avenue to explore the 'how' of the relationship between the privatization of goods and the decline of democracy. Yet, it also suggests grounds for optimism as people increasingly use the internet to find novel ways to collaborate and share, generating commons and publics where they did not

previously exist and thus laying the framework for a resurgence of democracy as a way of living.

Notes

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- ²² Antje Gimmler. "Deliberative Democracy, the Public Sphere and the Internet," *Philosophy and Social Criticism*, 27:21 (2001): 22.
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- ⁴⁸ Feenberg, "Transforming," 15-16, 52-53.
- ⁴⁹ Ibid., "Transforming," 15.
- ⁵⁰ Kellner, *Marxism*, 187.
- ⁵¹ Hands, *Activism*, 41.
- ⁵² Hands, *Activism*, 81.
- ⁵³ Cf. Witschge who argues that we should compare online deliberation to offline deliberation, rather than to the ideals of democratic theory. (See "Possibilities," 114.)
- ⁵⁴ Lee Siegel. *Against the Machine: Being Human in the Age of the Electronic Mob*. (New York: Spiegel & Grau, 2008), 4; Mark Poster. *What's the Matter With the Internet?* (Minneapolis: University of Minnesota Press, 2001), 176-177.
- ⁵⁵ Alexandra Whitney Samuel. "Hacktivism and the Future of Political Participation" (PhD diss., Harvard University, 2004), 6.
- ⁵⁶ Alistair S. Duff, *A Normative Theory of the Information Society*, (New York: Routledge, 2012), 62-67.
- ⁵⁷ Dewey, *Public*, 91.; Mark Warren. "Introduction," in *Democracy and Trust*, ed. Mark Warren. (Cambridge, UK: Cambridge University Press, 1999), 2.
- ⁵⁸ One potentially noteworthy difference is that some modes of participation, such as townhalls, may be qualitatively different in that face-to-face interaction is replaced by non-face-to-face interaction. This may be significant, although potentially less so as digitally mediated communication increasingly becomes the norm.
- ⁵⁹ Samuel, "Hacktivism," 2
- ⁶⁰ Ibid., 4.
- ⁶¹ Gabriella Coleman. "Our Weirdness is Free," *triplecanopy* 15 (2012). <http://gabriellacoleman.org/wp-content/uploads/2012/08/Coleman-Weirdness-Free-May-Magazine.pdf> (accessed June 22, 2013): 89, 94.
- ⁶² Coleman, "Weirdness," 95

- ⁶³ Pseudonymity does not necessarily suffer from the the problems of collective anonymity in the same way. If a positive virtual reputation has already been developed, then the costs of losing it weigh against behaving inappropriately, although perhaps still illegally. See Geoffrey Brennan and Philip Petit. "Esteem, Identifiability, and the Internet," in *Information Technology and Moral Philosophy*, ed. Jeroen van den Hoven and John Weckert (Cambridge: Cambridge University Press, 2008), 191-192.
- ⁶⁴ Mark E. Warren. *Democracy and Association*. (Princeton, NJ: Princeton University Press, 2001), 27.
- ⁶⁵ Lisa Nakamura. "Where Do You Want to Go Today? Cybernetic Tourism, the Internet, and Transnationality," in *Race in Cyberspace*, ed. Beth E. Kolko, Lisa Nakamura, and Gilbert B. Rodman.. (New York: Routledge, 2000), 16.
- ⁶⁶ John Perry Barlow. "A Declaration of the Independence of Cyberspace." projects.eff.org. <https://projects.eff.org/~barlow/Declaration-Final.html> (accessed June 22, 2013).
- ⁶⁷ Richard Holt. *Dialogue on the Internet: Language, Civic Identity, and Computer-Mediated Communication*. (Westport, Conn.: Praeger, 2004), 14.
- ⁶⁸ Jack Goldsmith and Tim Wu. *Who Controls the Internet: Illusions of a Borderless World*. (New York: Oxford University Press, 2006), 57
- ⁶⁹ danah boyd. "Taken Out of Context: American Teen Sociality in Networked Publics" (PhD diss., University of California, Berkeley, 2008), 124; Manuel Castells. *The Internet Galaxy: Reflections on the Internet, Business, and Society*. (New York: Oxford University Press, 2001), 118.
- ⁷⁰ James C. Witte and Susan E. Mannon. *The Internet and Social Inequalities*. (New York: Routledge, 2010), 2-5, 78.
- ⁷¹ Ibid., 2-5; Bryan Pfaffenberger. "'If I Want It, It's OK': Usenet and the (Outer) Limits of Free Speech," in *The Information Society: An International Journal*. 12:4 (2006): 381-384; E. Gabriella Coleman. *Coding Freedom: The Ethics and Aesthetics of Hacking*. (Princeton, NJ: Princeton University Press, 2013), 140-151; Wu & Goldsmith, *Controls*, 15
- ⁷² Thomas C. Beierle. "Digital Deliberation: Engaging the Public Through Online Policy Dialogues," in *Democracy Online: The Prospects for Political Renewal Through the Internet*. ed. Peter M. Shane. (New York: Routledge, 2004), 155-166.
- ⁷³ See Freelon 2010, Warf 2011, Cimini and Burr 2012, Gerhards and Schäfer 2010, Gerwin 2011, Hansen et al. 2009, Ruiz et al. 2011, Wikilund 2005.
- ⁷⁴ Fenton ("Misunderstanding," 130) notes that online communities remain largely homogenous, the internet facilitates a 'daily me,' and that much online activity serves to communicate and reinforce status. Siegel (p.102-103) goes farther by arguing that the internet actual homogenizes societies, rather than empowering diversity. Kelty (p.22) notes the very different contexts of Habermas's 18th century public sphere and contemporary life online.
- ⁷⁵ Lawrence Lessig. *The Future of Ideas: The Fate of the Commons in a Connected World*. (New York: Random House, 2001.), 23.
- ⁷⁶ Ibid., 46; Goldsmith and Wu, *Controls*, 54; Witte and Mannon, 2-6.
- ⁷⁷ Goldsmith and Wu, *Controls*, 54; Christopher Kelty. *Two Bits: The Cultural Significance of Free Software*. (Durham, NC: Duke University Press, 2008), 167.
- ⁷⁸ Hands, *Activism*, 82.
- ⁷⁹ Yochai Benkler and Helen Nissenbaum. "Commons-based Peer Production and Virtue," *The Journal of Political Philosophy*, 14:4 (2006), 399.
- ⁸⁰ Lessig, *Future*, 25.
- ⁸¹ Hands, *Activism*, 82.
- ⁸² James N. Rosenau and Miles D. Townes. "People on the Internet as Agents of Change," in *Governance, Regulations and Powers on the Internet*, ed. Eric Brosseau et al. (New York: Cambridge University Press, 2012), 114.
- ⁸³ Lawrence Lessig. *Code: Version 2.0*. (New York: Basic Books, 2006.), 78; Samir Chopra and Scott D. Dexter. *Decoding Liberation*. (New York: Routledge, 2008), 71.
- ⁸⁴ Thomas Streeter. *The Net Effect: Romanticism, Capitalism, and the Internet*. (New York: New York University Press, 2011), 110-112.

- ⁸⁵ Kelty, *Two*, 170-175.
- ⁸⁶ Des Freedman. "Outsourcing Internet Regulation," in *Misunderstanding the Internet*, ed. James Curran et al. (New York: Routledge, 2012), 105-106.
- ⁸⁷ Lessig, *Code*, 62; Goldsmith and Wu, *Controls*, 71-75, 84, 124; Castells, *Galaxy*, 184.
- ⁸⁸ David Bollier and Tim Watts. *Saving the Information Commons: A Public Interest Agenda in Digital Media*. (Washington, DC: New America Foundation & Public Knowledge, 2002), 27.
- ⁸⁹ Lessig, *Future*, 48.
- ⁹⁰ Duff, *Normative*, 94.; Lessig, *Future*, 241-247
- ⁹¹ David Bollier. "The Growth of the Commons Paradigm," in *Understanding Knowledge as a Commons: From Theory to Practice*, ed. Charlotte Hess and Elinor Ostrom. (Cambridge, Mass.: MIT Press, 2007), 14; Lessig, *Future*, 246.
- ⁹² Lessig, *Future*, 34-41.
- ⁹³ Ostrom, *Governing*,
- ⁹⁴ Hess and Ostrom, "Introduction," 14.
- ⁹⁵ Frank Snare. "The Concept of Property," *American Philosophical Quarterly*, 9:2 (1972): 203-205.
- ⁹⁶ Ibid., 203.; C.B. Macpherson, "A Political Theory of Property," in *Democratic Theory* (London: Oxford University Press, 1973), 121-123; Jeremy Rifkin. *The Age of Access*. (New York: Jeremy P. Tarcher/Putnam, 2000), 81.
- ⁹⁷ Snare, "Property," 203.
- ⁹⁸ Ibid., 205.
- ⁹⁹ Macpherson, "Property," 124.
- ¹⁰⁰ This is not to suggest that this is an unimportant question
- ¹⁰¹ Marcuse, *One-Dimensional*, 123-203; Rachel Botsman and Roo Rogers. *What's Mine is Yours: The Rise of Collaborative Consumption*. (Toronto: HarperCollins e-books, 2010) 44-50, 108.
- ¹⁰² Macpherson, "Property," 124; Rifkin, *Access*, 237.
- ¹⁰³ Karl Marx. "The Secret of Primitive Accumulation," in *The Marx-Engels Reader*. (New York: W.W. Norton & Company, 1972), 431-434; Jean-Jacques Rousseau. "Discourse on the Origin of Inequality," in *The Basic Political Writings*. (Indianapolis, IN: Hackett, 1987), 60.
- ¹⁰⁴ Karl Marx. "Production of Relative Surplus-Value," in *The Marx-Engels Reader*. (New York: W.W. Norton & Company, 1972), 376-431.; C.B. Macpherson. "The Maximization of Democracy," in *Democratic Theory* (London: Oxford University Press, 1973), 9-10
- ¹⁰⁵ Johan Söderberg. *Hacking Capitalism: The Free and Open Source Software Movement*. (New York: Routledge), 46,49; Coleman, *Coding*, 216.
- ¹⁰⁶ Coleman, *Coding*, 147.
- ¹⁰⁷ This example is not without problems of its own as an emphasis on performance threatens to obscure underlying structural inequalities. Perhaps most notable is the near total absence of women — 1.5% of participants, according to Söderberg — in the free software movement. This is despite the fact that use of information communications technologies does not seem to be significantly affected otherwise by gender. (See Soderberg, *Hacking*, 28-29).
- ¹⁰⁸ Streeter, *Net*, 93.
- ¹⁰⁹ Kelty, *Two*, 2-10, 66-100, 180-200.
- ¹¹⁰ Coleman, *Coding*, 4.
- ¹¹¹ A. Michael Froomkin. "Technologies for Democracy," in *Democracy Online: The Prospects for Political Renewal Through the Internet*. ed. Peter M. Shane. (New York: Routledge, 2004), 10.; Söderberg, *Hacking*, 4-5,18, 27,
- ¹¹² Macpherson, "Maximization," 16-19.
- ¹¹³ Pateman, *Participation*, 45-112.; Barber, *Strong*, 305.; Held, *Models*, 212-213.
- ¹¹⁴ Yochai Benkler. *The Penguin and the Leviathan*. (New York: Crown Publishing Group, 2011), 29-33.; Hands, *Activism*, 181.; Benkler and Nissenbaum, "Production," 398.
- ¹¹⁵ José Van Dijck and David Nieborg. "Wikinomics and its Discontents: A Critical Analysis of Web 2.0 Business Manifestos," *New Media & Society*, 11:5 (2009): 855-874.

- ¹¹⁶ Harry C. Boyte. "Reframing Democracy: Governance, Civic Agency, and Politics," *Public Administration Review*, 65:5 (2005): 544.
- ¹¹⁷ Kelty, *Two*, 226-233.
- ¹¹⁸ Russell Belk, "Why Not Share Rather than Own?" *Annals of the American Academy of Political and Social Science*. 611 (2007): 136.
- ¹¹⁹ Rifkin, *Access*, 130; Douglas Rushkoff, *Life, Inc.: How the World Became a Corporation and How to Take it Back*, (New York: Random House, 2009), 41-43.
- ¹²⁰ Marcuse, *One-Dimensional*, 6-7
- ¹²¹ Karl Marx and Frederick Engels. "Manifesto of the Communist Party." *Marxists Internet Archive*. Marxists.org, 2004. Web. <http://www.marxists.org/archive/marx/works/download/pdf/Manifesto.pdf> (accessed July 25, 2013), 16.
- ¹²² Shirkey, *Cognitive*, 23.
- ¹²³ Cf. Hofmohl, "Eclectic," 226-250.
- ¹²⁴ Marcuse, *One-Dimensional*, 10-12, 144-146; Dewey, *Public*, 99.
- ¹²⁵ Botsman and Rogers, *Mine*, 119
- ¹²⁶ *Ibid.*, 119-125.
- ¹²⁷ *Ibid.*, *Mine*, 137-139.
- ¹²⁸ Warren, *Association*, 74.
- ¹²⁹ Cf. Rousseau, who sees "public esteem" as the first step toward inequality, later manifested in the institution of property. "Discourse," 64, 78.
- ¹³⁰ Manfred Milinski et al. "Reputation Helps Solve the 'Tragedy of the Commons.'" *Nature*, 415:24 (2002):424-426.; John Whitfield, "The Biology of Reputation," in *The Reputation Society*, ed. Hassan Masum and Mark Tovey (Cambridge, MA: The MIT Press, 2011), 44-46; Botsman and Rogers, *Mine*, 139-141.
- ¹³¹ Macpherson, "Property," 121; Marx and Engels, "Manifesto," 16; Rousseau, "Discourse," 60.
- ¹³² Botsman and Rogers, *Mine*, 144
- ¹³³ Whitfield, "Biology," 44-46; Coleman, *Coding*, 117.
- ¹³⁴ Rifkin, *Access*, 6.
- ¹³⁵ Hofmohl, "Eclectic," 243.; Botsman and Rogers, *Mine*, 128-130.
- ¹³⁶ Homokly, "Eclectic," 243; Benkler and Nissenbaum, "Production," 397-399.
- ¹³⁷ Dewey, *Public*, 100. Dewey insightfully notes that private property could never persist as an institution if property didn't function socially in some small part.
- ¹³⁸ Fennell, "Ostrom," 13.
- ¹³⁹ Shubha Ghosh, "How to Build a Commons," in *Understanding Knowledge as a Commons: From Theory to Practice*, ed. Charlotte Hess and Elinor Ostrom. (Cambridge, Mass.: MIT Press, 2007), 211.
- ¹⁴⁰ While many of the specific laws criticized are U.S. laws, the U.S. has used its influence and capabilities to ensure adoption of similar laws worldwide. This process echoes Rousseau's account of the origin of the state, in which the wealthy suggest "institut[ing] rules of justice and peace" for all, despite the fact that the primary purpose of said rules is to maintain the advantage of the wealthy. See Rousseau, "Discourse," 69-70; Peter Drahos with John Braithwaite, *Information Feudalism: Who Owns the Knowledge Economy*. (London: Earthscan Publications, 2002), particularly p.121-130 and 193-203.
- ¹⁴¹ Streeeter, *Net*, 147.
- ¹⁴² Lessig, *Future*, 250
- ¹⁴³ Lessig, *Future*, 250
- ¹⁴⁴ Söderberg, *Hacking*, 19.
- ¹⁴⁵ Due to the rate at which software becomes obsolete, the length of the copyright term ensures that by the time software is made public, there is likely no machine capable of running it, except perhaps for one on display at a museum. See Lessig, *Future*, 251-254.
- ¹⁴⁶ Kelty, *Two*, 261.
- ¹⁴⁷ Botsman and Rogers, *Mine*, 144.
- ¹⁴⁸ Lawrence Lessig. "Creativity in Real Space," in *Censoring Culture: Contemporary Threats to Free Expression*. ed. Robert Atkins and Svetlana Mintcheva (New York: The New Press, 2006), 100; Peter Levine, "Collective

- Action, Civic Engagement, and the Knowledge Commons,” in *Understanding Knowledge as a Commons: From Theory to Practice*, ed. Charlotte Hess and Elinor Ostrom. (Cambridge, Mass.: MIT Press, 2007), 250.
- ¹⁴⁹ Söderberg, *Hacking*, 58-66, 72; Chopra and Dexter, *Decoding*, 29.
- ¹⁵⁰ Hands, *Activism*, 97.
- ¹⁵¹ Chopra and Dexter, *Decoding*, 31.
- ¹⁵² Coleman, *Coding*, 9-10.
- ¹⁵³ Neil Weinstock Netanel. “Copyright and a Democratic Civil Society.” *The Yale Law Journal*. 106:2. (1996): 347-364.
- ¹⁵⁴ *Ibid.*, 362-364.
- ¹⁵⁵ Benkler, *Leviathan*, 35-36; Whitfield, “Biology,” 44-45
- ¹⁵⁶ Drahos and Braithwaite, *Feudalism*, 210.
- ¹⁵⁷ Michael A. Heller and Rebecca S. Eisenberg. “Can Patents Deter Innovation? The Anticommons in Biomedical Research,” *Science*, New Series, 280:5364 (1998): 698-701.
- ¹⁵⁸ Joseph E. Stiglitz. “How Intellectual Property Reinforces Inequality,” *New York Times*, July 14, 2013, http://opinionator.blogs.nytimes.com/2013/07/14/how-intellectual-property-reinforces-inequality/?_r=0 (accessed July 15, 2013).
- ¹⁵⁹ William Fisher, “Theories of Intellectual Property,” www.cyber.law.harvard.edu/people/tfisher/iptheory.pdf (accessed June 28, 2013), 2.
- ¹⁶⁰ Fennell, “Ostrom,” 22.
- ¹⁶¹ Heller and Eisenberg, “Patents,” 698.
- ¹⁶² *Ibid.*, 698.
- ¹⁶³ Peter Levine, “Can the Internet Rescue Democracy? Toward an Online Commons,” in *Democracy’s Moment: Reforming the American Political System for the 21st Century*. ed. Ronald Hayduk and Kevin Mattson. (Lanham, MD: Rowman & Littlefield, 2002): 131.
- ¹⁶⁴ Benkler and Nissenbaum, “Production,” 400.
- ¹⁶⁵ Warren, *Association*, 96-97.
- ¹⁶⁶ *Ibid.*, 107.
- ¹⁶⁷ Held, *Models*, 142-144
- ¹⁶⁸ Neil Weinstock Netanel. “Cyberspace Self-Governance: A Skeptical View from Liberal Democratic Theory,” *California Law Review*, 88:2 (2000): 429-430.
- ¹⁶⁹ Iris Marion Young. *Inclusion and Democracy*. (New York: Oxford University Press, 2000), 168.
- ¹⁷⁰ Fennell, “Ostrom,” 12.
- ¹⁷¹ Ostrom, *Governing*, 168.
- ¹⁷² Castells, *Galaxy*, 122.
- ¹⁷³ Botsman and Rogers, *Mine*, 93-94.
- ¹⁷⁴ Fennell, “Ostrom,” 21.
- ¹⁷⁵ Rose, “Comedy,” 781; Young, *Inclusion*, 169.
- ¹⁷⁶ “Big Think Interview With Elinor Ostrom.” Big Think. <http://bigthink.com/videos/big-think-interview-with-elinor-ostrom> (accessed July 4, 2013).
- ¹⁷⁷ Michaele L. Ferguson. *Sharing Democracy*. (New York: Oxford University Press, 2012): 45-59, 137-138.
- ¹⁷⁸ Rose, “Comedy,” 778.
- ¹⁷⁹ Ostrom, *Governing*, 217.
- ¹⁸⁰ Young, *Inclusion*, 188.
- ¹⁸¹ Dewey, *Public*, 85.
- ¹⁸² *Ibid.*, 88.
- ¹⁸³ Somewhat paradoxically, such a challenge relies on the availability to make claims heard; that is, access to a public. Publics rely on commons, so an objection to exclusion from a particular commons can only be successful if the objector has access to another commons.
- ¹⁸⁴ Ostrom, *Governing*, 233.
- ¹⁸⁵ Young, *Inclusion*, 157.
- ¹⁸⁶ Warren, “Self-Transformation,” 12.

- 187 Hardin, "Tragedy," 1243.
- 188 Dewey, *Public*, 108-112; Marcuse, *One-Dimensional*, 104-120.
- 189 C.B. Macpherson. *The Political Theory of Possessive Individualism*. (Oxford: Clarendon Press, 1962), 53-60.
- 190 Excepting, of course, the situations identified earlier in which state intervention is necessary.
- 191 Dewey, *Public*, 111.
- 192 Ostrom, *Governing*, 7.
- 193 Young, *Inclusion*, 179; Kelty, *Two Bits*.
- 194 Rose, "Comedy," 715.
- 195 Ostrom, *Governing*, 64.
- 196 Ferguson, *Sharing*, 47.
- 197 Warren, "Self-Transformation," 20.
- 198 Stanley, "Mystery," 882-883.
- 199 Warren, "Self-Transformation," 21.
- 200 Ibid., 17; Mansbridge et al., "Self-Interest," 64, 80-82.
- 201 James Bohman. "The Transformation of the Public Sphere: Political Authority, Communicative Freedom, and Internet Publics," in *Information Technology and Moral Philosophy*, ed. Jeroen van den Hoven and John Weckert (Cambridge: Cambridge University Press, 2008), 66.
- 202 Ostrom, *Governing*, 221-222.
- 203 Held, *Models*, 213.
- 204 Held, *Models*, 211.
- 205 Jane Mansbridge, "Democracy and Common Interests," *Social Alternatives*, 8:4 (1990): 23; Ostrom, *Governing*, 27-28.
- 206 Paul Hirst. *Associative Democracy: New Forms of Economic and Social Governance*. (Oxford: Polity Press, 1994); Young, *Inclusion*, 159-161; Warren, *Association*, 54-55.
- 207 Benkler and Nissenbaum, "Production," 402.
- 208 Ostrom, *Governing*, ##
- 209 Levine, "Collective," 250.
- 210 Warren, *Association*, 61.
- 211 Ostrom, *Governing*, 14.
- 212 Warren, *Association*, 82-91.
- 213 Ostrom, *Governing*, 17.
- 214 Warren, *Association*, 70-77.
- 215 Levine, "Collective," 267.
- 216 Warren, *Association*, 40.
- 217 Dewey, *Public*, 94.
- 218 Castells, *Galaxy*, 126-132.
- 219 Unfortunately, these communities are not free of parochialism. Beyond the problems of access to technology itself, language still serves as a boundary as do the social mores of particular communities with criticism and exclusion serving as mechanisms for those who do not conform.
- 220 Warren, *Association*, 77; Young, *Inclusion*, 159-161.
- 221 Benkler and Nissenbaum, "Production," 403,405.
- 222 Drahos and Braithwaite, *Feudalism*, 190.
- 223 Habermas, *Between*, 298.
- 224 Rose, "Comedy," 762.
- 225 Bohman, "Transformation," 74.
- 226 Rose, "Comedy," 781; Young, *Inclusion*, 169.
- 227 Bohman, "Transformation," 71.
- 228 Jürgen Habermas. *The Structural Transformation of the Public Sphere*. (Cambridge: MIT Press, 1989), 180.
- 229 Bohman, "Transformation," 74.
- 230 Netanel, "Self-Governance," 451; Bohman, "Transformation," 74.

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