Chapter Eight

The Assurance Commons

I. Introduction

This chapter examines how voluntary, networked associations would perform the function David Ronfeldt calls the "Assurance Commons." The Assurance Commons—the provision of safety, quality and other assurances in the goods and services we buy, protections against fraud, etc.—is probably the single function of existing states raised most frequently by those skeptical of the feasibility of a society built around voluntary, self-organized associations.

For me, thinking in terms of an assurance criterion leads to supposing that people at large in advanced societies seek to include the following: Assurances not only of fresh air and water, but also that food, medicine, and other products are made safe, free of dangers. Assurances that basic health, education, and welfare services are provided in equitable ways. Assurances that one's vote counts. Assurances, in America, that the U.S. Constitution, the Bill of Rights, and law more generally, not to mention many codes and regulations, are upheld and apply to all people (including corporations in their capacity as "persons")....

As I wonder about what else might be listed, it seems even clearer that the commons is no longer so much about resources. It is indeed increasingly about practices — including policies — that assure rights and responsibilities, as well as accountability; practices that assure open and abundant access and usage; practices that assure universal services and public utilities, broadly defined; practices that require strategic risk management and quality assurance for the benefit of people at large; practices that make a society more robust and resilient, on everyone's behalf....

An assurance-commons approach would not make governance issues any easier to deal with, but it might help illuminate them. As Elinor Ostrom's work has shown, people are learning to manage common-pool resources in polyarchic network-like ways, without having to turn to old hierarchy- and market-like ways. But assurance commons involve more than common-pool resources. They also involve some of the knottiest governance issues around — e.g., in the field of health — requiring extensive coordination among multiple public, private, and other actors.¹

In the networked age the assurance commons takes the form of what Andrea Saveri et al call "social accounting systems," which they define as

mechanisms for building trust among strangers and reducing the risk of transactions. They include formal rating systems, automatic referral systems, and collaborative filtering to establish the reputation of individuals and organizations as well as products and knowledge.

¹ David Ronfeldt, "Speculation: Is there an "assurance commons"? Do societies depend on it? Should there be a U.S. Chamber of Commons?" *Visions From Two Theories*, December 3, 2012 http://twotheories.blogspot.com/2012/12/speculation-is-there-assurance-commons.html>.

These accounting systems overcome the Prisoner's Dilemma by turning it into "an Assurance Game in which players win by building their reputation as trusted partners. Social accounting systems build this reputation in a variety of ways, from formal, centralized rating systems to distributed collaborative-filtering mechanisms."²

II. Legibility: Vertical and Horizontal

The technical basis, in network technology and the tools of individual super-empowerment, already exists for supplanting regulatory state functions (assuming the regulatory state actually *does* perform its ostensible functions). But getting from here to there will involve a fundamental paradigm shift in how most people think, overcoming centuries worth of ingrained habits of thought. This involves a shift from what James C. Scott, in *Seeing Like a State*, calls social organizations that are primarily "legible" to the state, to social organizations that are primary legible or transparent to the people of local communities organized horizontally and opaque to the state.³

The latter kind of architecture, as described by Pyotr Kropotkin, was what prevailed in the networked free towns of late medieval Europe. The primary pattern of social organization was horizontal (guilds, etc.), with quality certification and reputational functions aimed mainly at making individuals' reliability transparent to one another. To the state, such local formations were opaque.

With the rise of the absolute state, the primary focus became making society transparent (in Scott's terminology "legible") from above. Things like the systematic adoption of family surnames that persisted from one generation to the next (and the 20th century follow-up of Social Security Numbers and other citizen ID numbers), censuses, the systematic mapping of urban addresses for postal or 911 service, etc., were all for the purpose of making society legible to the state, keeping track of its people and resources.

Before this transformation, for example, surnames existed mainly for the convenience of people in local communities, so they could tell each other apart. Surnames were adopted on an ad hoc basis for clarification, when there was some danger of confusion, and rarely continued from one generation to the next. If there were multiple Johns in a village, they might be distinguished at any particular time by trade ("John the Miller"), location ("John on the Hill"), patronymic ("John Richard's Son"), etc. By contrast, everywhere there have been family surnames with cross-generational continuity, they have been imposed by centralized states as a way of cataloguing and tracking the population—making it legible to the state, in Scott's terminology.⁴

During the ascendancy of the modern state, the horizontal institutions of the free towns were at best barely tolerated—and usually not even that. Kropotkin wrote:

For the next three centuries the States, both on the Continent and in these islands, systematically weeded out all institutions in which the mutual-aid tendency had formerly found its expression. The village communities were bereft of their folkmotes, their courts and independent administration; their lands were confiscated. The guilds were spoliated of their possessions and liberties, and placed under the control... of the State's official.... It was taught in the Universities and from the pulpit that the institutions in which men formerly used to embody their needs of mutual support could not be tolerated in a properly organized State; that the State alone could represent the bonds of union between its subjects; that federalism and "particularism" were the enemies of progress,

² Andrea Saveri, Howard Rheingold, and Kathi Vian, *Technologies of Cooperation*. SR-897 (Palo Alto: Institute for the Future, January 2005), p. 24.

³ James Scott, Seeing Like a State (New Haven and London: Yale University Press, 1998).

⁴ *Ibid.*, pp. 64-73.

and the State was the only proper initiator of further development. By the end of the last century, the [governments of Europe] agreed in asserting that no separate unions between citizens must exist within the State... "No state within the State!" The State alone... must take care of matters of general interest, while the subjects must represent loose aggregations of individuals, connected by no particular bonds, bound to appeal to the Government each time that they feel a common need....

The absorption of all social functions by the State necessarily favoured the development of an unbridled, narrow-minded individualism. In proportion as the obligations towards the state grew in numbers the citizens were evidently relieved from their obligations towards each other.⁵

Likewise, the preemption and absorption of all regulatory functions by the state favored the development of a mindset by which providers of goods and services were relieved of the obligation to provide reliable certifications of the quality of their wares to consumers, and consumers were relieved of their obligation to scrutinize their quality and the reputations of the vendors. It was the state's job to take care of that business for us.

But it's usually a false confidence that relies on the imprimatur of the state for the quality of goods and services; the average citizen consumes endless amounts of things like genetically modified organisms, pesticide and herbicide residues, and parabens, on the assumption that "they couldn't sell it if it was dangerous"—when the so-called regulatory standards are largely written by the regulated industries. And whatever minimal genuine quality and safety standards exist in the regulatory code become, in practice, more a ceiling than a floor; often corporations have successfully pressured the courts, when their competitors advertise a product quality or safety standard higher than the regulatory state requires, to treat such advertising as "product disparagement" on the grounds that it suggests products which merely meet the ordinary standard (which of course is based on "sound science") are inferior. For example, Monsanto frequently goes after grocers who label their milk rBGH free, and some federal district courts have argued that it's an "unfair competitive practice" to test one's beef cattle for Mad Cow Disease more frequently than the mandated industry standard. In short the regulatory state, by supplanting self-organized reputational and certifying mechanisms, has relieved the citizen of the burden of thinking for herself—and the corporation has rushed in to take advantage of the fact.

The reason we so closely identify hierarchy and bureaucracy with progress lies in recent history: namely, the suppression of the working class's self-organized social safety net and its replacement by a state-controlled alternative. The modern welfare state was not "created by benevolent democratic elites." Far from it.

In Europe, most of the key institutions of what later became the welfare state — everything from social insurance and pensions to public libraries and public health clinics — were not originally created by governments at all, but by trade unions, neighborhood associations, cooperatives, and working-class parties and organizations of one sort or another. Many of these were engaged in a self-conscious revolutionary project of "building a new society in the shell of the old," of gradually creating Socialist institutions from below.⁶

Bismarck's conservative agenda entailed first suppressing the socialist parties and trade unions, and then creating a comprehensive state-based safety net that was to become the model for the rest of Western Europe and then the United States. His welfare state was

a top-down alternative to the free schools, workers' associations, friendly societies, libraries, theaters, and the larger process of building socialism from below. This took the form of a program of social in-

⁵ Pyotr Kropotkin, Mutual Aid: A Factor of Evolution (New York: Doubleday, Page & Company, 1909), pp. 226-227.

⁶ David Graeber, *The Utopia of Rules: On Technology, Stupidity, and the Secret Joys of Bureaucracy* (Brooklyn and London: Melville House, 2015), p. 153.

surance (for unemployment, health, disability, etc.), free education, pensions, and so forth.... When left-wing regimes did later take power, the template had already been established, and almost invariably, they took the same top-down approach, incorporating locally organized clinics, libraries, mutual banking initiatives, workers' education centers, and the like into the administrative structure of the state.⁷

The model for all these new bureaucracies was the German Post Office, world-renowned for its efficiency. And Lenin heartily endorsed the postal service as a model of "the socialist economic system."

At present the postal service is a business organized on the lines of a state-*capitalist* monopoly. Imperialism is gradually transforming all trusts into organizations of a similar type....

To organize the *whole* national economy on the lines of the postal service, so that the technicians, foremen, bookkeepers, as well as *all* officials, shall receive salaries no higher than "a workman's wage," all under the control and leadership of the armed proletariat—this is our immediate aim.⁸

To accomplish a shift back to horizontal transparency, it will be necessary to overcome six hundred years or so of almost inbred habits of thought, among the general public, of thinking of such things through the mind's eye of the state: if "we" (i.e. "the authorities," presumed to act on our behalf) didn't have some way of verifying compliance with this regulation or that, some business somewhere might be able to get away with something or other.

In place of this habit, we must think instead of *ourselves* creating mechanisms on a networked basis, to make us as transparent as possible to *each other* as providers of goods and services, to prevent businesses from getting away with poor behavior by informing *each other*, to prevent *each other* from selling defective merchandise, to protect *ourselves* from fraud, etc. The state has attempted to coopt the rhetoric of horizontality (e.g. "We are the government."). But in fact, the creation of such mechanisms—far from making us *transparent* to the regulatory state—may well require active measures to render us *opaque* to the state (e.g. encryption, darknets, etc.) for protection *against* attempts to suppress such local economic self-organization against the interests of corporate actors.

We need to lose the centuries-long habit of thinking of "society" as a hub-and-spoke mechanism and viewing the world vicariously from the imagined perspective of the hub, and instead think of it as a horizontal network and visualize things from the perspective of the individual nodes which we occupy. We need to lose the habit of thought by which transparency from above even became perceived as an issue in the first place. Because the people who are seeing things "from above," in reality, do not represent us or have anything in common with us.

As Charles Johnson—aka "Rad Geek"—argued, "the market" is nothing more than a series of choices made by human beings as to how to interact with one another⁹:

Q. In a freed market, who will stop markets from running riot and doing crazy things? And who will stop the rich and powerful from running roughshod over everyone else?

A. We will....

...It's convenient to talk about "market forces," but you need to remember that remember that those "market forces" are not supernatural entities that act on people from the outside. "Market forces" are a conveniently abstracted way of talking about the systematic patterns that emerge from people's economic choices. So if the question is, who will stop markets from running riot, the answer is: We will; by

⁷ Ibid. pp. 154-155.

⁸ State and Revolution, cited in Ibid. p. 157.

^{9 &}quot;In a freed market, who will stop markets from running riot and doing crazy things? And who will stop the rich and powerful from running roughshod over everyone else?" *Rad Geek People's Daily*, June 12, 2009 http://radgeek.com/gt/2009/06/12/freed-market-regulation/>.

peacefully choosing what to buy and what not to buy, where to work and where not to work, what to accept and what not to accept, we inevitably shape and order the market that surrounds us....

...[This includes] achieving harmony and order through a conscious process of voluntary organizing and activism.... In a freed market, if someone in the market exploits workers or chisels costumers, if she produces things that are degrading or dangerous or uses methods that are environmentally destructive, it's vital to remember that you do not have to just "let the market take its course" — because the market is not something outside of us; we are market forces. And so a freed market includes not only individual buyers and sellers, looking to increase a bottom line, but also our shared projects, when people choose to work together, by means of conscious but non-coercive activism, alongside, indeed as a part of, the undesigned forms of spontaneous self-organization that emerge. We are "market forces," and the regulating in a self-regulating market is done not only by us equilibrating our prices and bids, but also by deliberately working to shift the equilibrium point, by means of conscious entrepreneurial action — and one thing that libertarian principles clearly imply, even though actually-existing libertarians may not stress it often enough, is that entrepreneurship includes social entrepreneurship, working to achieve non-monetary social goals.

So when self-regulating workers rely on themselves and not on the state, abusive or exploitative or irresponsible bosses can be checked or plain run out of the market, by the threat or the practice of strikes, of boycotts, of divestiture, and of competition — competition from humane and sustainable alternatives, promoted by means of Fair Trade certifications, social investing, or other positive "pro-cott" measures. As long as the means are voluntary, based on free association and dissociation, the right to organize, the right to quit, and the right to put your money where your mouth is, these are all part of a freed market, no less than apple-carts or corporations. When liberals or "Progressives" wonder who will check the power of the capitalists and the bureaucratic corporations, their answer is — a politically-appointed, even less accountable bureaucracy. The libertarian answer is — the power of the people, organized with our fellow workers into fighting unions, strikes and slow-downs, organized boycotts, and working to develop alternative institutions like union hiring halls, grassroots mutual aid associations, free clinics, or worker and consumer co-ops. In other words, if you want regulations that check destructive corporate power, that put a stop to abuse or exploitation or the trashing of the environment, don't lobby—organize!

...When I say that the libertarian Left is the real Left, I mean that, and it's not because I'm revising the meaning of the term "Left" to suit my own predilections or some obsolete French seating chart. It's because libertarianism, rightly understood, calls on the workers of the world to unite, and to solve the problems of social and economic regulation not by appealing to any external authority or privileged managerial planner, but rather by taking matters into their own hands and working together through grassroots community organizing to build the kind of world that we want to live in.

It's not important that we can't answer every question about "who will prevent this or that without a state?" "How will we do the other thing without the state?" We need, as David de Ugarte argues, to think of social problem solving as something that *we* will do, by responding to the situation and using our judgment as we go along.

And what happens if we don't have an alternative to every "solution," at every moment? Nothing. It's like free software, it doesn't matter if it's good or bad, we'll improve it; it doesn't matter if there's support or not, we'll organize it. Freedom is fundamental to what is truly alive and human. It's the starting point for all ethical thinking, not a distant objective....¹⁰

Such a shift in perspective will require, in particular, overcoming the hostility of conventional liberals who are in the habit of reacting viscerally and negatively, and on principle, to anything not being done by "qualified professionals" or "the proper authorities."

¹⁰ David de Uguarte, "Ethics and the State is like Freedom and Tony Soprano," *Las Indias in English*, March 4, 2013 http://english.lasindias.com/ethics-and-the-state-is-like-freedom-and-tony-soprano/.

Arguably conventional liberals, with their thought system originating as it did as the ideology of the managers and engineers who ran the corporations, government agencies, and other giant organizations of the late 19th and early 20th century, have played the same role for the corporate-state nexus that the *politiques* did for the absolute states of the early modern period.

This is reflected in a common thread, running through thinkers like Thomas Frank and Michael Moore, of nostalgia for the "consensus capitalism" of the early postwar period, in which the gatekeepers of the Big Three networks controlled what we were allowed to see and it was just fine for GM to own the whole damned economy—just so long as everyone had a lifetime employment guarantee and a UAW contract. ¹¹ We also see it in places like Andrew Keen's *Cult of the Amateur*, where the idea of anything being done by other than "properly qualified professionals" is ridiculed without mercy.

On his old MSNBC program, Keith Olbermann routinely mocked exhortations to charity and self-help, reaching for shitkicking imagery of the nineteenth century barn-raiser for want of any other comparision sufficient to get across just how backward and ridiculous that kind of thing really was. In Olbermann's world, of course, such ideas come only from conservatives. The only ideological choice is between plain, vanilla flavored managerialist liberalism and the Right. In Olbermann's world, the decentralist Left of Ivan Illich, Paul Goodman, and Colin Ward—the recessive Left that emerges when the dominant strain of Lenin and Harold Wilson is occupied elsewhere, as one of the editors of *Radical Technology* put it—doesn't even exist.

Helping your neighbor out directly, or participating in a local self-organized friendly society or mutual, is all right in its own way, of course—if nothing else is available. But it carries the inescapable air, not only of the quaint, but of the provincial and the picayune—very much like the stigmatization of homemade bread and home-grown veggies in corporate advertising in the early twentieth century. People who help each other out, or organize voluntarily to pool risks and costs, are to be praised—with just the slightest hint of condescension—for heroically doing the best they can in an era of relentlessly downscaled social services. But that people are forced to resort to such expedients, rather than meeting all their social safety net needs through one-stop shopping at the Ministry of Central Services office in a giant monumental building with a statue of winged victory in the lobby, a la *Brazil*, is a damning indictment of any civilized society. The progressive society is one of comfortable and well-fed citizens, competently managed by properly credentialed authorities, contentedly milling about like ants in the shadows of miles-high buildings that look like they were designed by Albert Speer. And that kind of H.G. Wells utopia simply has no room for atavisms like the barn-raiser or the sick benefit society.

Aesthetic sensibilities aside, such critics are no doubt motivated to some extent by genuine concern that networked reputational and certifying mechanisms just won't take up the slack left by the disappearance of the regulatory state. Things like *Consumer Reports*, Angie's List and Yelp are all well and good, for educated people like themselves who have the sense and know-how to check around. But Joe Sixpack, God love him, will just go out and buy magic beans from the first disreputable salesman he encounters—and then likely put them right up his nose.

Seriously, snark aside, such reputational systems really *are* underused, and most people really *do* take inadequate precautions in the marketplace on the assumption that the regulatory state guarantees some minimum acceptable level of quality. But liberal criticism based on this state of affairs reflects a remarkably static view of society. It ignores the whole idea of crowding out (the extent to which the state actively suppressed self-organized mechanisms for horizontal legibility, as recounted by Kropotkin), as well as the pos-

¹¹ For more on the ideological inclinations of the managerial-professional classes, and their hostility to decentralist ideas, see Carson, "The Thermidor of the Progressives: Managerialist Liberalism's Hostility to Decentralized Organization" Center for a Stateless Society Paper No. 9 (Second Quarter 2010) https://c4ss.org/wp-content/uploads/2010/06/Thermidor-of-the-Progressives.pdf>.

sibility that even the Great Unwashed may be capable of changing their habits quite rapidly in the face of necessity—and that given enough time they might even figure out how to wipe their own bottoms without supervision by state-licensed shit-removal professionals. Because people are not currently in the habit of automatically consulting such reputational networks to check up on people they're considering doing business with, and *are* in the habit of unconsciously assuming the government will protect them, conventional liberals assume that people will not shift from one to the other in the face of changing incentives, and scoff at the idea of a society that relies primarily on networked rating systems.

But the simple fact of the matter—as we saw described by Kropotkin above—is that there *was* a society in which the certification of quality and enforcement of commercial standards was achieved by horizontal legibility: the society of the free towns in the late middle ages, where such functions were performed by local, self-managed institutions like the guilds. These local institutions had their origins in necessity, as the new towns filled up with runaway serfs who, in continuation of the village tradition, united in guilds for mutual protection and support—and as merchants of necessity worked out mechanisms for tracking their reliability as trading partners. And it's also a simple fact—again, as recounted by Kropotkin—that this society of horizontally legible regulatory bodies was stamped out by the state.

In a society where people are aware that most licensing and safety/quality codes are no longer enforceable, and "caveat emptor" is no longer just a cliche, it would be remarkable if horizontal reputational mechanisms *didn't* rapidly grow in importance for most people. They were, after all, at one time as ingrained a part of ordinary economic behavior as reliance on the regulatory state is today.

People's habits change rapidly. Fifteen years ago, when even the most basic survey of a research topic began with an obligatory painful crawl through the card catalog, Reader's Guide and Social Science Index —and when the average person's investigations were limited to the contents of her \$1000 set of Britannica —who could have foreseen how quickly Google and SSRN searches would become second nature?

Self-styled enemies of Keen's "cult of the amateur" are fond of throwing the example of the amateur brain surgeon in our faces. Oddly enough, though, as Clay Shirky points out: "The stock figure of the amateur brain surgeon comes up only in conversations that *aren't* about brain surgery. The real assertion is that every time amateurs and professionals differ, we should prefer the professionals, and brain surgery is just one illustrative example." When virtually *any* kind of licensing or professional regime comes up for debate, in contexts ranging from homeschooling to unlicensed cab services, the hoary amateur brain surgeon is dragged out and dusted off. The more extreme cases, like Keen, apply it to amateur restaurant critics and books published without the benefit of a publishing house gatekeeper.

More importantly, no one—not even free market anarchists—would choose someone to perform a high-risk procedure of any kind without some form of licensing or other certification to attest to their capability. The real question at issue is whether a licensing or certification regime need be provided by the state.

Even now, where state licensing regimes exist as a barrier to entry, protects licensed practitioners from competion and thus increases the bargaining power of closed professional priesthoods relative to the consumer, the desktop regulatory state acts as a control on the authority granted to licensed professionals and holds them accountable. The rise of network technology is having a revolutionary effect on the possibilities of keeping professionals honest where the licensing system doesn't do so.

Previously—to take medicine as an example—a patient usually felt pressured by time constraints not to ask a doctor all the things she really wanted to know, not to question the purpose or possible side-effects of medications, and to take terse answers as final rather than asking follow-up. Even when the doctor encouraged questions and the seeking of second opinions, the culture of professionalism resulted in an asymmetric power relationship in which many perceived a doctor's advice as "doctor's orders." Of necessity, even with a

¹² Clay Shirky, Cognitive Surplus (New York: The Penguin Press, 2010), pp. 152-153.

doctor willing to answer questions, the doctor was the main chokepoint controlling information available to the patient—and wittingly or not, her professional culture and tacit background assumptions filtered the kinds of information she provided.

Thanks to the Internet, however, there are websites—ranging from the most mainstream like WebMD to a variety of alternative medicine sites and even information-sharing sites like Erowid for recreational drug users—providing an embarrassment of information riches to the patient. There are large online communities of people suffering from an almost infinite variety of ailments, in which it's possible to ask questions and exchange information. The patient can arm herself with better questions for the doctor, and compare the doctor's advice to a universe of independently accessible information. Even when state-mandated licensing regimes are still in effect, the balance of power between physician and patient is far less asymmetric than fifteen years ago. The layperson is empowered to question and evaluate the judgment of the professional from a more equal position.

The rise of network communications—first the Internet and then social media—has, as Willow Brugh observes, simultaneously made us less legible to the state, and *more* legible to each other. In response to a Scientific American article claiming that social media makes crowds less predictable, she argued "social media makes crowds more predictable *to themselves*."

Crowds are only less predictable to the outside. They are becoming more predictable to themselves.... This, to me, is related to the core disconnection in disaster response between official response's view on social media/The Crowd as a resource to be tapped for situational awareness, and the mutual aid of The Crowd as self-organization. Formal organizations tend to think of The Crowd as an input function to their workflows. Their concerns therefore revolve around verifiability, bad actors, and predictability. A manifestation of this are the self-mapped roads in remote places via Open Street Map being grumbled over for not fitting into the data hierarchies of official responders. *That is not the point of the maps being built*.

...These are people using a tool to their own ends, to support themselves, to gain better understanding of their world, not as a resource to be tapped. It is a group of people talking to itself. If institutions exist to serve collective purpose, their role here is to provide institutional knowledge (with awareness and self-reflection of bias), guiding frameworks (possibly), and response at scale (upon request). In this way, we can benefit from history and iterative learnings while escaping paternalistic ends....

As a crowd comes to know itself better, the intelligence can becomes an embedded, rather than external, component. We start to see many eyes on the bugs of society. 13

And networked, p2p reputational systems are rapidly becoming more effective than corporate branding or mass advertising campaigns at securing consumer attention. In a world where our attention is increasingly scarce and expensive to acquire, our peers are much better at getting our attention than are corporate advertisers. The reason is that, unlike corporations, our peers can interact with us; they can reciprocate our attention. As William Gillis argues, the more effective networked, p2p reputational systems become at providing the information we desire, the harder our attention will be for corporate advertisers to get hold of:

... *Their whole empire* [i.e. of corporations like Google and Facebook that attempt to monetize attention through advertising revenue] *is predicated on the assumption that advertising dollars are even a thing.*

But openness is antithetical to a core presupposition of advertising: people are susceptible to suggestion and anecdote because they don't have enough information—or time to process that information—when it comes to purchasing choices. Forget everything you've learned about madison avenue manipulations. Those manipulations are only possible when people have any reason to pay attention. Build a box that delivers all the relevant information and perfectly sorts through it in an easily manageable way

¹³ Willow Brugh, "Mutual Aid and The Crowd," *willowbl00*, April 22, 2014 http://blog.bl00cyb.org/2014/04/mutual-aid-and-the-crowd/.

and any form of advertising starts to look like laughable shucksterism. Who are you trying to fool? Why aren't you content to let your product speak for itself?

In this sense much of the fertile territory being seized by Google is detrimental in the long run to one of its core income sources. As search improves and our instincts adapt to it there's simply no reason to click on the 'featured product' getting in the way of our actual results. The more intuitive, streamlined and efficient our product comparison the less need there is to pay any attention to anything else. And if the app providing our results is tampered with then we can swap to another app. Walk into any given store with its inventory already listed and analyzed on our phone. Of course advertising covers more than just price comparisons between laundry detergents, but there's no end to what can be made immediately transparent. "How cool is this product with a certain subculture or circle of my friends?" "Give me a weighted aggregate of consumer reports highlighting the ups and downs." "List common unforeseen complexities and consequences." "How would I go about navigating the experience of changing checking accounts?" Et cetera. Every conceivable variable. With ease of interface and sufficient algorithmic rigor one can easily recognize a tipping point.

Algorithms trawling for greater targeting power on the part of advertisers are jumping at comparatively trivial increases in efficiency with serious diminishing returns. (And insofar as new understandings might inform actual development/policy wouldn't that a good thing?) Further, taken in a broad view, the issues of complexity to such datatrawling and analysis leans to the favor of consumers because there's simply far more of us than there are sellers. Relatively simple advances in consumer analysis of sellers would drastically turn the tables against advertisers and corporate bargaining advantage in general. In such light their current golden age of analysis is but one last rich gasp.

In no way do I mean to underplay the threat posed by governments themselves, who surely have a huge investment in the establishment of institutions like Facebook and or projects like that of Palantir. At the end of the day they will remain a threat and continue working on these kinds of projects. But the context they're operating in makes a big difference. The NSA isn't going to cut Facebook a check to keep it afloat. The government simply doesn't have the kind of money that the private sector is putting in to distort the development of norms in social networking / communications in the first place. Those are slippery cultural / user-interface issues that are far too complex for the state to navigate with requisite nuance.

The sooner we take it upon ourselves to kill the advertising industry the less time it'll have to build weapons for the state.

Sure, like our current struggle to kill the IP Industry, it'll be a fight that'll last a while and involve complex cultural/political campaigns alongside purely technical ones. But at core it'll be a downhill battle for us. Easier to spread information—both technologically and culturally—than to contain it.¹⁴

III. Networked Certification, Reputational and Verification Mechanisms.

Without the current role of the state and other centralized institutions in overcoming the transaction costs of certifying quality and credit-worthiness, what is called "goodwill," or reputational effects, would likely take on much greater importance, with the patterns of exchange coalescing around social ties. This, too, would be a beneficial social effect of economic decentralization. Adem Kupi remarks on the role of the state in artificially lowering the transaction costs involved in establishing trust, underwriting risk, etc., in the anonymous transactions that occur in large markets:

...The Security State makes it too easy for people to stop thinking.... They've done the thinking for us and pre-limited our options....

¹⁴ William Gillis, "Let's Just Kill The Advertising Industry," *Human Iterations*, December 31, 2011 http://humaniterations.wordpress.com/2011/12/31/lets-just-kill-the-advertising-industry/.

In the skeptical society, on the other hand, trust has to be earned, and people will rely on their local social networks to provide them with accurate information....

The current growing ratio of noise to signal is putting pressure on the world to become more skeptical, which will put pressure on societies to shift away from guaranteeing security. They just won't be able to do it effectively. The idea of managing anything larger than a local area will become preposterous.¹⁵

This applies to networked platforms as well as local economies—see below for more on "communities" based on networked platforms.

Even in the present economy, organization theory blogger quasibill writes of the benefits of fraternal organizations in facilitating exchange between their members. Newsletters contain ads "from members who market their small businesses to each other (contracting, printing, landscaping, etc.)" Quasibill asked a friend in a fraternal organization whether such ads paid off. The answer was "yes":

He noted that most members preferred doing business within the organization because there was a social peer enforcement mechanism at work. Specifically, he noted that while a vendor might be willing to "work to rule" with many customers, or even be willing to file bankruptcy against general creditors, the social peer pressure that could be exerted through the organization made dealings within the organization more fair and certain. You could win your case in court on a legal technicality, but if the members of the organization determined that you weren't acting fairly, you were going to be ostracized from the organization before you could turn your head.¹⁶

The same was true, to a large extent, in the old Main Street business culture, when local merchants and tradesmen depended on repeat business from people they knew. Eric Frank Russell's story of Idle Jack, in "And Then There Were None"—set in the universe of Russell's "Great Explosion" series—is relevant here. The world in which the story takes place was founded by Gandhian refuges from the Terran Empire centuries before, and is organized more or less along the lines of market anarchy suggested by Josiah Warren. Land ownership is based on occupancy and use—no landlords—and the economy is based on a sort of labor exchange system ("obligations" or "obs"). A visitor wondered what the penalties were for running up obligations and then refusing to meet them. The answer took the form of a traditional morality lesson, the tale of Idle Jack, a "scratcher" ('One who lives by accepting obs but does nothing about wiping them out or planting any of his own.').

'Up to age sixteen Jack got away with it all along the line. He was only a kid, see? All kids tend to scratch to a certain extent. We expect it and allow for it. But after sixteen he was soon in the soup....

'He loafed around the town gathering obs by the armful. Meals, clothes and all sorts for the mere asking. It wasn't a big town. There are no big ones on this planet. They are just small enough for everybody to know everybody—and everyone does plenty of gabbing. Within a few months the entire town knew that Jack was a determined and incorrigible scratcher....

'Everything dried up.... Wherever Jack went people gave him the, "I won't." He got no meals, no clothes, no company, no entertainment, nothing. He was avoided like a leper. Soon be became terribly hungry, busted into someone's larder one night, treated himself to the first square meal in a week.'

'What did they do about that?'

'Nothing, not a thing.'

¹⁵ Adem Kupi, "The Security State vs. the Skeptical Society," *A Pox on All Their Houses*, July 12, 2005 http://poxyhouses.blogspot.com/2005/07/security-state-vs-skeptical-society.html>.

¹⁶ Quasibill, "Function Follows Form, or Vice Versa (except if either one contradicts your pre-determined outcomes)," *The Bell Tower*, June 10, 2008 http://the-bell-tower.blogspot.com/2008/06/function-follows-form-or-vice-versa.html.

'That must have encouraged him some, mustn't it?'

'How could it?' asked Seth with a thin smile. 'It did him no good. Next day his belly was empty again. He was forced to repeat the performance. And the next day. And the next. People then became leery, locked up their stuff and kept watch on it. Circumstances grew harder and harder. They grew so unbearably hard that soon it was a lot easier to leave the town and try another one....'

'To do the same again,' Harrison prompted.

'With the same results for the same reasons,' Seth threw back at him. 'On he went to a third town, a fourth, a fifth, a twentieth. He was stubborn enough to be witless.'

'But he was getting by,' Harrison insisted. 'Taking all for nothing at the cost of moving around.'

'Oh, no he wasn't. Our towns are small, as I said. And people do plenty of visiting from one to another. In the second town Jack had to risk being seen and talked about by visitors from the first town. In the third town he had to cope with talkers from both the first and second ones. As he went on it became a whole lot worse. In the twentieth he had to chance being condemned by anyone coming from any of the previous nineteen.... He never reached town number twenty-eight. ¹⁷

Social guarantees of trust become especially important if we reject the role of the state in enforcing debts on borrowers, under bankruptcy law. Dean Baker points out, in rather colorful language, the nature of strict bankruptcy laws as a form of welfare for the rich:

The nanny state conservatives think that it is the role of the government to act as a strong-arm debt collector for businesses that did not accurately assess the risks associated with their loans.... They want the government to chase after individual debtors, following them throughout their lives, to wring out every possible cent of debt repayment....

...[I]nstead of having the incompetent lenders go out of business... the conservative nanny state stepped in to bail them out with the 2005 bankruptcy law, using the force of the government to squeeze every last cent from debtors. Under the new bankruptcy laws, the government will monitor debtors for many years after they have declared bankruptcy, seizing assets or garnishing wages for debts that may have been incurred 20 or 30 years in the past....

...Historically, most loans required little involvement from the government because they were attached to physical property such as land, a house, or a car. If a debtor had fallen behind on his payments, then the role of the court in the debt collection process was essentially a one-time proposition: the court would simply require the debtor to turn over ownership of the relevant asset to the creditor, and the case would be over....

However, in the last two decades there has been an explosion of debt, mostly credit card debt, that is not secured by a physical asset.... 18

More importantly, from the perspective of any potential malfeasant, is the consideration that one's livelihood—as illustrated by Russell's story of Idle Jack—depends on a good reputation. In a world where consumers turn to networked reputational mechanisms to avoid the risks of one-off transactions, and repeat business depends on one's reputation in the network, screwing over your customers amounts to shitting where you eat.

In a genuinely free market, all the licensing and certification regimes presently in place would be replaced by voluntary alternatives. Morris and Linda Tannehill write:

¹⁷ Eric Frank Russell, "And Then There Were None," *Astounding Science Fiction*, vol. XLVII, no.4 (June 1951) http://www.abelard.org/e-f-russell.php.

¹⁸ Dean Baker, *The Conservative Nanny State: How the Wealthy Use the Government to Stay Rich and Get Richer* (Washington, D.C.: Center for Economic and Policy Research, 2000), pp. 59-61.

One such market protection would be consumer rating services which would test and rate various products according to safety, effectiveness, cost, etc. Since the whole existence of these rating services would depend on their being right in their product evaluations, they would be extremely thorough in their tests, scrupulously honest in their reports, and nearly impossible to bribe....

Businesses whose products were potentially dangerous to consumers would be especially dependent on a good reputation. Drug manufacturers, for example, would know that if their products caused any illness or death through poor quality, insufficient research and preparation, or inadequate warnings on the labels they would lose customers by the thousands. The good reputation of a manufacturer's brand name would be its most precious asset.... Besides this, drug stores would strive for a reputation of stocking only products which were high quality, safe when properly used, and adequately labeled....

A good reputation would also be important to doctors in the absence of government-required licensing.... [R]eputable physicians would probably form medical organizations which would only sanction competent doctors, thereby providing consumers with a guide....¹⁹

Sam Kazman, in a 1998 article written fairly early in the move toward federal standards for organic labeling, described the success of voluntary certification in the past:

As demand for organic food has grown, private organic-certifying agencies have arisen. Some have stricter standards than others, and some may have standards and enforcement practices so lenient that they are practically meaningless. But to the extent that differences between them really mean something to consumers, those consumers are fully capable of distinguishing between them (or of choosing retailers who do the job for them)....

The lack of any pressing necessity for [government] involvement is clear. The large organic-foodstore chains already have established connections with suppliers and certifying agencies; the same is true of conventional supermarket chains that carry organic products....

Organic growers themselves are also capable of doing without a cumbersome federal definition. According to one organic-farming newsletter, "many growers say that if certified organic becomes too difficult, or meaningless, they will just use another word to market their produce."…

Consumers who care about such issues don't need the force of law in order to obtain the information they want about food products. USDA has already announced that its eventual definition will not allow genetically modified foods, but suppose it had ruled otherwise. Producers of organic foods that were *not* genetically modified could still communicate that fact to interested consumers—through labeling, through advertising, and even through private organic-certification systems that make a point of prohibiting bioengineered products. Information that groups of consumers want will make its way to them without legal compulsion.

In fact, legal compulsion is used more often to *suppress* free commercial speech, in the interest of those whose products include bioengineered food, by prohibiting the labeling of GMO-free products. Kazman goes on to describe the free market certification regime for kosher foods:

For [those concerned about the strictness of the standard met by the product] there are competing rabbinical inspection boards, each with a different logo. With the possible exception of guarding against outright fraud, there is little need for government involvement.... Consumers seem capable of sorting things out peacefully.²⁰

There have since been attempts to establish self-organized, DIY alternatives to organic certification that clearly identify produce as organic (with a wink and a nudge) without actually using the words "certified or-

¹⁹ Morris and Linda Tannehill, *The Market for Liberty* (New York: Laissez Faire Books, 1984), pp. 49-50.

²⁰ Sam Kazman, "The Mother of All Food Fights," *The Freeman: Ideas on Liberty* 48:11 (November 1998)

http://www.fee.org/Publications/the-Freeman/article.asp?aid=3699.

ganic." Your grocer or natural foods cooperative may have some produce that's labeled as "no-spray" without actually being certified organic. Organic certification typically results in a 50% markup over no-spray produce. The organic certifying bodies amount to a cartel whose real function is to erect an entry barrier and protect greenwashed capitalist agribusiness from small producers.

In the UK, organic growers have established an I Can't Believe It's Not Organic label in competition with official organic certification.

In July 2011, Jyoti Fernandes and Simon Fairlie were hauled up before the Soil Association tribunal for giving a few wheelbarrows of grass cuttings from a nearby vegetable garden (which is farmed 100 per cent organically but not certified) to their cows; and feeding stale bread to pigs from a bakery that had recently pulled out of organic registration. As a result they have taken the cows and pigs out of the organic certification system. Simon and Jyoti are not alone in quitting the Soil Association. Many small farmers and smallholders have discovered (either before applying or after) that the way the organic certification system is structured is both too impractical and too expensive for small-scale local producers — particularly those who own limited amounts of land, and hence have to rely on rented land, imported hay or waste products.

...[T]e entire organic registration system... is topsy turvy — enforcing additional bureaucracy and labelling on those who farm organically, whilst farmers who resort to chemicals and poisons to increase their yields are defined as "conventional".

There are many smaller-scale alternative organisations and labelling systems in existence, supporting and promoting organic agriculture both nationally and locally, and working responsively with their members. We believe this choice makes for a healthy network amongst small producers and growers....

ICBINO will be informal. The labelling system will involve no bureaucracy, relying on trust, peer review and informed cus- tomer consent to maintain standards. Here are the proposed rules:

- (1) There is a one-off charge of £5 for affiliation, to cover admin.
- (2) Members will be supplied with the template for the ICBINO logo, to use on all products that comply.
- (3) Members will be required to sign a guarantee that the ICBINO logo will only be used on produce sourced from land that has had no chemical fertilizers or pesticides or GM material applied in the last three years, with the following exceptions: livestock fed on waste food constituting no more than 25 per cent of their diet; livestock fed on specialist foods which are unobtainable organically (eg molasses) which constitute no more than 5 per cent of their diet; processed foods which contain modest amounts of non-organic additives because organic equivalents cannot be sourced from the UK; land manured with sewage waste, providing it conforms to current environmental standards.
- (4) Members must allow other members to visit, inspect and report on their land and farming methods, by appointment.
- (5) Members must organise and promote at least one open day every year when customers and the public can inspect the farm.
- (6) Members will be removed from the register if their standards are deemed unacceptable.²¹

The basic idea, in the words of Arun Sundarajan, is to replace regulation with reputation.

Because salient details are made visible not only to transacting parties but to the entire community, sellers (and buyers) have to stay honest and reliable to stay in business. In the sharing economy, *reputation* serves as the digital institution that protects buyers and prevents the market failure that economists and policy makers worry about....²²

^{21 &}quot;I Can't Believe It's Not Organic: A new DIY small producers' association is germinating," *The Land* 12 (Summer 2012) http://www.thelandmagazine.org.uk/articles/i-cant-believe-its-not-organic.

²² Arun Sundararajan, "From Airbnb and Coursera to Uber: Government Shouldn't Regulate the Sharing Economy," *Wired.com*, October 22, 2012 http://www.wired.com/opinion/2012/10/from-airbnb-to-coursera-why-the-government-shouldnt-regulate-the-sharing-economy/.

The present system of regulation—of certification either by government inspectors or by one's peers in professional licensing bodies—is in principle already a reputational system. The inspector and the members of a professional association are, after all, just human beings who vouch for the quality of your goods and services. The problem is that a reputation for quality that derives from such authority is far more likely to be false than one that derives from one's actual customers.

In addition, licensing associations in practice often do less to prevent malpractice by their members than to cover it up for them.²³

Potential Building Blocks. We already saw, in Chapter Five, the services medieval guilds performed for member enterprises, by certifying the quality of their wares. In addition, the guilds' functions of cooperative purchasing for their members would give them a great deal of collective bargaining power in negotiating quality standards on behalf of the membership. And as we saw, David de Ugarte cites tenth century Jewish merchants in the Maghreb as anticipating the reputational mechanisms in a phyle.²⁴

The central function of any networked "licensing" regime, according to Nils Ipsen, is the "dissemination of information and publication of the individual reputations." This assumes the function taking place against a common social background, ranging from informational reputational mechanisms among "very small groups, such as the neighboring ranchers in Shasta County," to more formalized mechanisms in large groups like the New York Diamond Dealers Club (within which most global diamond trade takes place). The DDC, Ipsen says, "not only offers a secure trading hall but also acts as a chamber of commerce. Based on this, the DDC defines the rules governing diamond trading and provides a mandatory private arbitration system."

But the DDC not only provides the infrastructure for the trading. It furthermore guarantees the exchange of information on the reputation of the individual dealers with various means so as to ensure compliance with the rulings of its own arbitration body. For this purpose, photographs of visitors and new traders are displayed on the walls of the common trading hall with information about their reputations and their personal references. These are complemented by photos of those who have failed to pay their debts....²⁵

As another example, Ipsen mentions the Memphis Cotton Exchange, which functions much like the DDC: "historically, the members of the MCE located their offices on one street in Memphis where a shared market center enabled the rapid exchange of information."

Gunnar Schuppert generalizes on these examples:

The existence of such a social network, which I refer to as a reputation community, can involve a professional group with specific professional-ethnical standards or, as in the case of the Jewish diamond traders, a religious group. The community of Jewish diamond traders in New York clearly exercises "reputation-based rule enforcement" as specified here...²⁷

²³ See Chapter Sixteen of Kevin Carson, Organization Theory: A Libertarian Perspective (2008).

²⁴ David de Ugarte, *Phyles*, pp. 128-129.

²⁵ Gunnar Folke Schuppert, "Law Without a State? A 'New Interplay' Between State and Nonstate Actors in Governance by Rule Making," in Thomas Risse, ed., *Governance Without a State? Policies and Politics in Areas of Limited Statehood* (New York: Columbia University Press, 2011), p. 68.

²⁶ Ibid., pp. 68-69.

²⁷ Ibid., p. 69.

Schuppert argue that, in frameworks of this sort, trust is grounded in shared community rather than the state. And such trust networks are more likely to be stable against a background of long-term community relationships, rather than one-off dealings.

...private regulatory systems do not arise "spontaneously" out of nothing, but build on an existing institutional infrastructure consisting of social or religious networks. [Amitai] Aviram cites as examples the Pax Dei movement and the German Hanse or Hanseatic League.

In order to explain the functioning of such social and religious networks Aviram... distinguishes two different stages of the evolutionary process that results in a private legal system: "First, a network creating a centralized bonding mechanism would form (most likely, not as an end of its own, but as a side effect of some other function the network serves)." And second, "the network would undertake regulating behavior, using its enforcement ability." Social networks... facilitate centralized bonding and for this purpose use reputation bonds. Such reputation bonds would be ineffective when individuals expect the network to fail. Many social networks, however, would continue to exist over long periods of time. As an example, he refers to "one's neighbors" who "will continue to affect one's social life indefinitely."...

Aviram describes the reputation and punishment mechanism of the social network as follows: "By gossiping about each other within the social network, and by reacting to the gossip according to common social norms, the social network can align most members' responses to any member's deviant behavior. When members of the same social circle are also part of another network that attempts to regulate behavior, they will care for their reputations, for while the regulating network cannot in itself harm them, the negative reputation they build will carry on to the social network, and there the centralized bonding mechanism will punish them."...

Aviram's thesis is that such social and religious networks initially only fulfill functions with low implementation costs, but with the strengthening of the implementation mechanisms the aspect of cost becomes less important. Thus, according to his conclusions, when a need for regulation arises the existing networks continue to to develop so as to provide this necessary regulation. The precondition for the emergence of a private regulatory system of this kind is always the existence of a network-like demonstrable homogenous group—a close-knit community comprised of members united by similar convictions and values.²⁸

The parallels to the phyle, which de Ugarte describes as emerging out of a preexisting networked cultural community, should be obvious.

There are also obvious parallels to the kinds of governance mechanisms for common pool resources that were the main focus of Elinor Ostrom's research.

Pierre Omidyar originally founded eBay on the assumption that "people are basically good"; within weeks, so many transactions had involved cheating that he introduced a reputation system based on mutual reviews for honesty, promptness, etc., between buyers and sellers.²⁹

It was designed, in Clay Shirky's words, "to cast the shadow of the future over both parties, giving each an incentive to maintain or improve their standing on the site...." As Arun Sundararajan argues,

Digital technologies created the sharing economy. Simply put, this economy facilitates new markets by matching providers who have specific assets or skills with the people who need them, dramatically expanding the possibilities for private commercial exchange of services between consenting entities.

This economy couldn't exist at scale in the past because transaction costs were too high. But as Hal Varian reminded us at his Ely lecture to the American Economic Association, the internet and informa-

²⁸ *Ibid.*, pp. 70-71.

²⁹ Shirky, Cognitive Surplus, p. 177.

³⁰ Shirky, Here Comes Everybody, p. 284.

tion technologies continually reduce trading frictions over time, largely by facilitating better measurement, accountability, and verification.

And now, these very technologies and the changes they engender provide the means for the sharing economy to regulate itself.

Technology enables digitally mediated self-policing: the reputation systems and monitoring tools that dramatically smooth the safety and friction of peer-to-peer transacting parties without requiring centralized intervention, and which are now creating distributed digital institutions that reduce the need for government oversight.

Think about eBay for a moment, even though it's largely for owning goods and not accessing services. It seemed inconceivable in the mid-1990s that it could grow into more than a marketplace for trading Beanie Babies. How, we asked ourselves, would strangers in different countries trade products of unverifiable quality and authenticity – without some form of central intermediation or control? But now, it comprises billions of dollars' worth of trade; people trustingly buy even their cars there.

Because salient details are made visible not only to transacting parties but to the entire community, sellers (and buyers) have to stay honest and reliable to stay in business. In the sharing economy, reputation serves as the digital institution that protects buyers and prevents the market failure that economists and policy makers worry about.³¹

Other similar mechanisms include the ratings of service providers on Angie's list, and the ratings of guests and hosts on AirBNB.

In the fictional world, we already saw in an earlier chapter how people linked to the Darknet could see the reputational tags attached to other people. And in the post-scarcity world of Cory Doctorow's *Down and Out in the Magic Kingdom*, material goods like food, housing and manufactured goods are freely available at no cost. Individuals accumulate a personal reputation score called "whuffie" through reliability and willingness to undertake effort on behalf of others, and general performance in the p2p groups that dominate society. Whuffie is used to purchase things that are still scarce (mostly things requiring human attention, like service in a bar, or scarce locational goods like an apartment with a good view or use of a convenient meeting hall).

It's possible to encode a great deal of information about the sourcing and quality standards of a product into tags on the product itself. John Robb describes how it works with the Gulf Wild program:

When you buy a fish that has a Gulf Wild ID number on it, you can find out everything about it.

Simply enter this ID number on their website or (cell phone) and it will provide you with:

- 1. The bio and history of the fisherman who caught the fish.
- 2. What the fish is, where the fish was caught (with a map) down to 10 miles, and when it was caught.
- 3. Info on fishing practices (e.g. was it caught as part of a sustainable fisheries program?)....

I believe we're going to see programs like this for all of the food (and an increasing number of products) we buy, from meats to vegetables.

Why? Info like this is addicting. Once you get it, you want it on everything.

Fortunately, it's also really easy to put a service like this together for local producers, and that's a good thing.

Here's why: This type of insight would positively differentiate fresh, high quality local produce from the generic products of indefinite age, quality, and origin we get from the global industrial system.³²

³¹ Arun Sundararajan, "From Airbnb and Coursera to Uber: Government Shouldn't Regulate the Sharing Economy," *Wired.com*, October 22, 2012 http://www.wired.com/opinion/2012/10/from-airbnb-to-coursera-why-the-government-shouldnt-regulate-the-sharing-economy/.

³² John Robb, "Here's How to Build a More Resilient Food System...," Resilient Communities, April 10, 2003

There's also great potential for activist organizations to compile databases of corporate misbehavior, with consumers checking products against the database by simply scanning a product bar code with a smart phone application. One step in this direction is Boycott SOPA,

an Android app that scans barcodes and tells you whether an object's manufacturer/publisher is a supporter of the much maligned Stop Online Piracy Act.

If you've ever scanned a barcode on your Android phone to look up a book or CD on Amazon, Boycott SOPA works in exactly the same way: First you have to install the ZXing Barcode Scanner app, but then you simply go around pointing your phone's camera at product barcodes. Boycott SOPA gives you a big red cross if the product is distributed by a SOPA supporter, or a green tick if it's "clean."....

...The idea is that you should scan everything that you buy at the supermarket, and refuse to put any SOPA-backed products into your basket. It's a very grandiose idea, and in a day and age where shoppers regularly eschew a selection of products on principle ("damn baby-killing multinationals!"), or buy entirely local produce, Boycott SOPA fits right in.

Inadvertently, though, the developers of Boycott SOPA have given us a tantalizing hint of how technology empowers consumers. Imagine for a second if you chopped "SOPA" from the name of the app and simply called it "Boycott." Imagine if there was an Android app that let you boycott whatever you wanted....

You could even take it one step further and make Boycott the one-stop-shop for all of your political needs. Imagine if you could scan a cereal box and find out that the company's CEO likes to hunt rhinos, ride elephants, and eat shark fin soup—at the same time. Imagine if you could scan a video game box and immediately see all of the active legislation, the Representative sponsors and supporters, and how much money they've received from industry lobbying. You could even go as far as equipping the app with facial recognition, so that you can point your phone at a Senator's face on the TV and quickly find out whether what he's saying actually jibes with his real world behavior and voting record. This isn't a futuristic concept; we could do this right now with the tech we have.³³

An already-existing example is a mobile barcode-scanning app for boycotting Koch Industries products.³⁴

One of the most promising systems to date is OpenQRS, a project aimed at developing "an open source ecosystem for open data monitoring of health care devices and empowers health care product designers to build monitoring for quality, reliability and safety data into their product's design, to ensure that these health care products do what they promise to do." It's intended to do this even—or especially—in Third World countries without a functioning regulatory state.³⁵

Take this interlocking system of mobile electronics and reputational metrics a bit further, and you get something like the Collective Contracts we discussed in an earlier chapter. Doc Searls speculates on how such a system might work:

As you prepare for your guests, you discover that your espresso machine isn't working and you need another one. So you pull [a] hand-held device from your pocket, scan the little square code on the back

http://www.resilientcommunities.com/heres-how-to-build-a-more-resilient-food-system/>.

³³ Sebastian Anthony, "Boycott SOPA: An Android app that terrifies publishers and politicians," *ExtremeTech*, January 9, 2012 http://www.extremetech.com/computing/112579-boycott-sopa-an-android-app-that-terrifies-publishers-and-politicians>.

³⁴ Clare O'Connor, "New App Lets You Boycott Koch Brothers, Monsanto And More By Scanning Your Shopping Cart," *Forbes*, May 14, 2013 http://www.forbes.com/sites/clareoconnor/2013/05/14/new-app-lets-you-boycott-koch-brothers-monsanto-and-more-by-scanning-your-shopping-cart/>.

³⁵ Kate Ettinger, "OpenQRS: Open Source Tools to Assure the Quality, Reliability and Safety of Health Care Devices," Knight Foundation: Knight News Challenge, September 16, 2013

https://www.newschallenge.org/challenge/healthdata/entries/openqrs-an-open-source-community-developing-tools-to-assure-the-quality-reliability-and-safety-of-health-care-devices>.

of the machine, and tell your hand-held, by voice, that this one is broken and you need another one.... An "intentcast" goes out to the marketplace, revealing only what's required to attract offers. No personal information is revealed, except to vendors with whom you already have a trusted relationship.

Within a minute offers come in, displayed on your device. You compare the offers and pick an espresso machine to rent from a reputable vendor who also can fix your old one. When the replacement arrives, the delivery service scans and picks up the broken machine and transports it to the vendor, who has agreed to your service conditions by committing not to share any of your data with other parties and not to put you on a list for promotional messages. The agreement happened automatically when your intentcast went out and your terms matched up with the vendor's....

Since the Industrial Revolution, the only way a company could scale up in productivity and profit was by treating customers as populations rather than as individuals—and by treating employees as positions on an organization chart rather than as unique sources of talent and ideas. Anything that stood in the way of larger scale tended to be dismissed.

The Internet has challenged that system by giving individuals the same power. Any of us can now communicate with anybody else, anywhere in the world, at costs close to zero....

...In the not-too-distant future, you will be able, for example, to change your contact information with many vendors at once, rather than many times, over and over, at many different websites. You will declare your own policies, preferences and terms of engagement—and do it in ways that can be automated both for you and the companies you engage. You will no longer have to "accept" agreements that aren't worth reading because, as we all know, they cover the other party's butt but expose yours....

Once economic signaling starts to crank up on the demand side of the marketplace, the supply side will have to start regarding customers as complex and fully empowered actors. Consider what's already happening with an early species of VRM tools: browser add-ons for blocking ads and tracking the trackers. Usage of these is on the rise. 36

Silk Road was a paradigmatic example of what networked, horizontal reputational mechanisms could accomplish, even in a black market where sellers and buyers were forced to operate underground.

Functioning much like a tweaked Amazon or eBay, it offered a host of useful features that helped facilitate trust between sellers and buyers, such as an Escrow payment system, seller feedback, and dispute resolution. According to their civil forfeiture complaint..., the FBI purchased samples from SR's drug listings and laboratory-tested them..., and typically found high levels of product purity matching what was advertised. The reputation-based nature of SR, combined with often accurate information on seller profile pages and the official forums, empowered buyers to make informed choices and remain safe.³⁷

A recent development, the Open Value Network, has especially interesting implications for transparent supply chains and the internal transparency of networked production processes.

The economy currently works with the collaboration of multiple process around the world that coordinate their efforts to produce products.

At the same time each production process has a wealth of information about its functioning that is kept away from the public eye.

The OVN model proposes that each production process publishes all information about its internal functioning. That allows production methods to be copied. Provides accountability. Public view allows people to propose better solutions and to detect errors sooner. Moreover, ecological and other externalities are easily Identifiable.

³⁶ Doc Searls, "The Customer as a God," *Wall Street Journal*, July 20, 2012 http://online.wsj.com/article/SB10000872396390444873204577535352521092154.html.

³⁷ Gabriel Amadej, "The Black Market Correction," Center for a Stateless Society, April 16, 2014 http://c4ss.org/content/26426.

The OVN model also proposes that information about the supply chains be also visible. All production processes should provide information about their product and the requirements they have in tools, materials and human resources as well as the current suppliers and customers.

The ability to search and analyze these data allows for different groups that were otherwise isolated and small to interconnect. This has the profound advantage that these small groups can cooperate, coproduce value and thus be able to compete with traditional companies with a higher number of capital assets. Moreover the information about the supply chains allows people to suggest more efficient supply chains and at the same time bypass the supply chain middlemen entirely.

Food networks like Fair Trade networks, Community-Supported Agriculture, buying clubs, and the like, are well suited to a transparency model similar to the Open Value Network.³⁸

The blockchain ledger, originally associated with Bitcoin and other crypto-currencies in that ecosystem, also has independent value as an internal accounting system for networks of all kinds.

It's important to recognize that blockchain technology is not confined to digital currency applications. It can be applied to a wide variety of circumstances in which a community of players – in markets, commons or other circumstances – want reliable systems to manage their inter-relationships on network platforms.

...Former FCC Chairman Reed Hundt has proposed using the block chain technology as a way to create distributed networks of solar power on residential houses. The ledger would keep track of how much energy a given homeowner has generated and shared with others, or consumed, and it would enable the efficient organization of decentralized solar grids.

...In a comment to a blog post a few days ago, Primavera de Filippi, one of the leading tech/legal thinkers about blockchain technology, wrote:

...It is my belief that the blockchain can help implement new forms commons-based governance that could greatly benefits the CBPP ecosystem.

For a long time, commons-based communities have been institutionalized around centralized or federated structures, which might bring a series of trade-offs in terms of democratic governance, flexibility, and ability to evolve. These institutions were built, for the most part, to facilitate the coordination of disparate groups of people that would otherwise have had a hard time coordinating themselves, because of either scale or lack of proper coordination mechanisms. They also served the purpose of establishing trust among groups that did not engage into sufficiently frequent and repeated interactions.

Today, traditional issues related to shared common-pool resources—such as the free rider problem or the tragedy of the commons—could be addressed with the implementation of blockchain-based governance, through the adoption of transparent decision-making procedures and the introduction decentralized incentives systems for collaboration and cooperation. The transparent and decentralized nature of the blockchain makes it easier for small and large communities to reach consensus and implement innovative forms of self-governance....

Decentralized blockchain technologies bring trust and coordination to shared resource pools, enabling new models of non-hierarchical governance, where intelligence is spread on the edges of the network instead of being concentrated at the center. Flexible decentralized organizations could entirely replace the hierarchical format of current centralized formations, enabling commons-based communities to operate in an more decentralized manner. Instead of relying on traditional top-down decision making procedures, the blockchain allows for such procedures to be entirely crowdsourced, delegating to the community's collective intelligence the responsibility to monitor and evaluate its own achievements.

³⁸ Dimitris, "Open Value Networks," *CommonsFest*, April 3, 2015 http://commonsfest.info/en/2015/anichta-diktia-axias/>.

While online communities will probably be the first one to experiment with these new apparatus, as the ease of creating these organization decreases through standardization, online communities could be easily brought offline to create and build new organizations that operates in the physical world.

Thus far, while commons-based peer-production communities have flourished in many fields of endeavor, they have had a hard scaling up, without turning into more bureaucratic and centralized institutions. It is my hope that, with the new opportunities provided by blockchain technologies, we can come up with new applications that can support the operation of these communities (both in the digital and physical world) in a more distributed and decentralized manner.³⁹

In particular, Jutta Steiner speculates that blockchain ledgers can be used to make supply chains more transparent by providing "a true chain of custody, along even the most complex supply chains, at a very low cost." ⁴⁰

IV. Commons-Based Governance and Vernacular Law

History is replete with examples of self-organized institutions for governance outside the state, going back to the neolithic village commune with its open field system, which persisted for millennia before the rise of the state. As Pyotr Kropotkin recounts in *Mutual Aid* and *The State*, popular institutions for self-governance like mutuals, friendly societies and other manifestations of social solidarity persisted for centuries or millennia more with states and parasitic class systems superimposed on them—much of the time with the state actively hostile to them.

The commons, as described by David Bollier and Burns Weston, is a vernacular, social governance institution organized outside the state.

The Commons is a regime for managing common-pool resources that eschews individual property rights and State control. It is a system of governance that relies on common property arrangements that tend to be self-organized and enforced in complex and sometimes idiosyncratic ways (which distinguish it from communism, a top-down, State-directed mode of governance whose historical record has been unimpressive). Today the commons can be seen in such diverse resources as the Internet, rural forests, fisheries, town squares, universities and community life.

A commons is generally governed by what we call Vernacular Law – the "unofficial" norms, institutions and procedures that a peer community devises to manage its resources on its own, and typically democratically. State law and action may set the parameters within which Vernacular Law operates, but the State does not directly control how a given commons is organized and managed.⁴¹

Their concept of Vernacular Law borrows Ivan Illich's term "vernacular," which includes the entire range of "informal, everyday spaces in people's lives where they negotiate their own rules and devise their own norms and practices." Vernacular Law emerges from "the informal, unofficial zones of society"; its "matrix of socially negotiated values, principles and rules are what make a commons work."

³⁹ David Bollier, "The Blockchain: A Promising New Infrastructure for Online Commons," P2P Foundation Bloq, March

^{12, 2015 &}lt;a href="https://blog.p2pfoundation.net/the-blockchain-a-promising-new-infrastructure-for-online-commons/2015/03/12">https://blog.p2pfoundation.net/the-blockchain-a-promising-new-infrastructure-for-online-commons/2015/03/12.

⁴⁰ Jutta Steiner, "Blockchain Can Bring Transparency to Supply Chains," Provenance, June 19, 2015

< http://www.business of fashion.com/community/voices/discussions/does-made-in-matter/op-ed-blockchain-can-bring-transparency-to-supply-chains>.

⁴¹ David Bollier and Burns Weston, "Green Governance: Re-imagining our Stewardship of Nature," CSRWire, November

^{29, 2013 &}lt;a href="http://www.csrwire.com/blog/posts/1124-green-governance-re-imagining-our-stewardship-of-nature">http://www.csrwire.com/blog/posts/1124-green-governance-re-imagining-our-stewardship-of-nature.

⁴² Bollier and Weston, "The Importance of Vernacular Law in Solving Ecological Problems," CSRWire, December 13,

^{2013 &}lt;a href="http://www.csrwire.com/blog/posts/1147-the-importance-of-vernacular-law-in-solving-ecological-problems">http://www.csrwire.com/blog/posts/1147-the-importance-of-vernacular-law-in-solving-ecological-problems.

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