JEFFREY TUCKER

INTRODUCTION BY PATRICK BYRNE, CEO OVERSTOCK.COM

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HOW P2P IS FREEING THE WORLD

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Bit by Bit: How P2P Is Freeing the World by Jeffrey Tucker





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Introduction

The digital revolution has taken place with astounding speed — happening at a much faster pace than any social and economic transformation that preceded it in history. Even the Industrial Revolution pales in comparison. Those of us who grew up before the Internet cannot but marvel at the opportunities technology has opened up for the world.

And yet we don't live in the grand sweep of history. We live day to day, right where we are, and we improve what we can, when we can, striving to make our lives and our world just a bit better at the margin. It is the accumulation of all of these efforts, stretching across the globe and spread out over time, coordinated through emergent institutions, that have remade our daily lives in little more than one generation, granting more people access to economic opportunity and empowerment than at any time in history.

We see this in the data — income, education, health, longevity, peace — and we feel it in our hearts. Humanity is ever less willing to tolerate injustice, war, and oppression, and ever more willing to work for a world of universal opportunity. Hence, many tyrants across the globe are meeting their match simply in the publicity that social media allows.

Through digital technology, powered by entrepreneurship, we are seeing the unfolding of dreams rooted in the great tradition called liberalism, with a documented intellectual tradition of some 500 years but with roots in the highest aspirations of the ancient philosophers of the West and the East. Liberalism's major themes and hopes were the realization of universal dignity of the human person, the spontaneous evolution of the social order in the absence of despotism, and the promise and possibility of continually unfolding material and spiritual progress.

Liberalism dreamed of a world without barriers to human advancement. Its mighty intellectual achievement was to realize and explain that such a world would be built from the dispersed knowledge and choices of individuals, and not be imposed by "wise leaders" with all the resources and power. The themes of liberalism were liberty and peace, not central planning and coercion. That was the crucial difference between the old world and the new.

Liberalism also gave birth to the science of economics as a means of explaining material progress. It came to be realized that human freedom was inseparable from commercial freedom, and that the right to own, exchange, and innovate were as precious and sacred as the right to believe, speak, and associate.

What if it were possible for this commercial impulse in all of us to be realized by everyone independently of geography and regardless of class, race, and language? What if the traditional barriers of physical space can be gradually overcome so that we have to depend ever less on third-party legacy institutions to manage our lives and facilitate our associations? What if spontaneous individual associations come to replace nation-states as the organizing principle of the global economy?

These are the core hopes of Jeffrey Tucker's inspiring reflection on the theory, application, and meaning of peer-to-peer technology. He draws attention to the most impressive feature of the digital revolution: equipotency, or the equal distribution of power through technological innovation. Equipotency is an extension of the universal right to self-determination. It is necessarily disruptive to traditional forms of power. This radical vision of what's possible is only hinted at in many of the emerging commercial relationships he discusses in this book. These technologies point to a future very different from what we've known.

Tucker returns often to the example of cryptocurrency. Money as an institution has been largely held captive by public authority for hundreds of years, if not a thousand years or even more. But in 2009, we saw a break from this long history with "blockchain" technology that lives on a distributed network, is managed by open-source code, and can potentially operate as a market-based currency for the world.

Overstock.com was an early mover in this space. We began accepting bitcoin as a payment form in January 2014. Now at the end of the year, we've seen many dozens of other companies do the same, not just in the United States but around the world.

As Tucker points out, bitcoin is not just another payment system that sits atop a nationalized monetary system. It was conceived of as an independent unit of exchange and a payment system combined into one technology. It lives apart from and above the state. It was not imposed by any central authority. It was released as a distributed technology free for the whole world to use.

Five years ago, very few people outside the computer-code community took notice. Those who did take notice doubted the promise of bitcoin's future. After all, nothing like this had ever existed. Now the blockchain processes up to 100K transactions per day and is being used to empower workers and companies around the world. And even so, we may be just at the beginnings of this shift. Blockchain technology is not just a money; it is a means of bundling, porting, and verifying commodified information of all sorts, including titles, contracts, wills, and more.

Ultimately, the cryptorevolution is about parties exchanging value without needing central institutions to mediate their exchanges. Given the number of such central institutions that have evolved over time, and attached themselves like barnacles to the ship of civilization, a technology this radically innovative is going to have political effects so profound I am confident that the pace of social change is only going to quicken when those centralized institutions (including various government functions) find themselves disintermediated.

Will government slip into a naked rearguard action, as with taxis moving to outlaw Uber? Or will the people remember in time that these institutions were not sent to us from a burning bush, that we created them in order to fulfill functions, and that those functions can now be done within cryptotechnology at a tiny fraction of the price, and without the risk of centralized institutions getting captured?

Bitcoin is only one example, but it serves as an archetype of the kinds of innovative surprises that are gradually shaping the future. The most beautiful feature of our age is that it shows us that progress is possible and that the dreams of liberalism are realizable. This is a worthy hope. It is not necessarily a political hope, nor does the world need exalted leaders with power to get us from here to there.

The building of universal prosperity is a process that unfolds bit by bit through decentralized decision making and improvements at the margin through trial-and-error. To continue this process, we need understanding, patience, and dreams. Jeffrey Tucker's book is an excellent guide to all three.

Patrick Byrne January 1, 2015

Foreword

In bitcoin's brief existence Jeffrey Tucker has become one of its leading proponents. In this book we can see exactly why. Many people think of bitcoin as just money, but Mr. Tucker is able to explain, in a way that is easily understandable by all, the tsunami of innovation that bitcoin is about to release upon the world.

The coming P2P-based decentralization will disrupt nearly every area of our lives. Just two short decades ago, in 1995, very few people had any idea that the Internet was about to improve the lives of so many people across the globe. Today, only a similarly small number of people realize the drastic improvements that the bitcoin-enabled P2P revolution is about to bring to areas as diverse as finance, transportation, communications, real-estate, and even the structure of our society itself.

If you are new to these concepts, this book is a great place to start, and if you have already been pondering this subject for a while, you will find lots of interesting new insights. It is fantastic for those who are new to bitcoin and early adopters alike. Either way, the reader is sure to be intrigued by what he or she finds in this book.

Roger Ver Tokyo, Japan January 1, 2015

Credits

This reflection on new trends in peer-to-peer technology and their relationship to human freedom consists of observations, reflections, anecdotes, and incomplete impressions based on what I've seen and experienced as a writer, editor, site builder, and consumer over the last few remarkable years. Many of the ideas were tested in venues such as FEE.org (the Foundation for Economic Education), Liberty.me (the liberty-minded social and publishing network), and emerge from two years of interacting with others through speaking events, social engagement, and interviews.

Mostly I've sought to document my own exuberance over this extraordinary path we are taking. The world is unfolding before our eyes at a breathtaking pace of advancement. So fast is this all happening that this book will be obsolete in 24 months. It is a snapshot in time and nothing more.

This delights me mostly because no one really seemed to expect it, though many hoped for it. I often think of my friend Murray Rothbard (1926–1995) who dreamed of a world in which individuals and their preferred associations were the primary social and political unit. Now that this world is dawning and shows promise, few seem to understand its significance or trajectory. It's confirmation of two mighty truths: the world cannot finally be controlled and human beings will not forever live in cages.

Special thank you to so many that it is impossible to name them all. But I'll mention Marianne Copenhaver for the cover design, Richard Ellefritz for proofing and suggestions, Max Borders for the constant challenges he poses to these ideas, B.K. Marcus for his editorial eye, the team at Liberty.me for showing what progress means, all my teachers in the bitcoin space, Andreas Antonopoulos for radical and inspirational punditry, Laurie Rice for social media and intellectual mastery, Patrick Byrne for corporate leadership and his introduction, Stephan Kinsella for showing me about the magic of information economies, all the god-like brains from the past whose immortal writings have inspired me, and countless others who have added their wits and wisdom to my thinking on this topic. It's a crowd-sourced book. It's a crowd-sourced world. Always has been.

I. Liberation

Ms. Fereshteh Forough, scientist and philanthropist, grew up as a refugee in Iran. Today her work centers in Afghanistan. Her passion is the liberation of women from poverty and oppression in the developing world.

Toward that end, in 2012 she established the Women's Annex Foundation and opened clinics all over the country. Their goal was to take maximum advantage of new economic tools that would allow women in Afghanistan to acquire and use computer skills to become economically empowered and independent.

In today's world anyone, not just the elite and well-connected, can provide value to others, thanks to technologies that defy the limits of borders. You can code, design, input data, and deal with customer support from anywhere and for anyone.

Following her successes, Fereshteh began to notice a problem. The women who attended her clinics could acquire skills, offer those skills on a global market, and otherwise achieve great things in a country in which they are severely disadvantaged. But the sticking point was that they couldn't get paid.

Why? Every conventional form of payment system requires a depository institution. The women in the clinics didn't have bank accounts. They couldn't get bank accounts, either because they weren't near a money center or because women just cannot get them by custom or law. Lacking this ability, they had no rights to acquire much less accumulate wealth in a monetary form.

Without the ability to get paid for their work on a basis that is not contingent on proximity of the service receiver, their training could not be converted into real improvements in their living standards or personal freedom.

That's when she discovered bitcoin.

Bitcoin allows all the women in her clinic to open a bank account without permission from anyone. If they owned a smartphone, they only needed a free wallet app. Then they could receive and spend money without permission from any authority. That was the missing piece.

Given her background in computers and code, she saw the potential of the cryptocurrency and encouraged its use. It made the difference. She then began to accept donations in bitcoin. Bitcoin has become a centerpiece of her work, not because she is an anarchist or a geek or a digital futurist but simply because it works to improve people's lives.

How many people are in a similar situation as the women in Afghanistan? Perhaps half the human population is excluded from the cartelized, elite-dominated payment and money systems that prevail today. Money, as the old cliché says, is half of every transaction. That's why the new peer-to-peer systems that do not rely on third-party trust relationships represent a bright future.

What had to come together to make something like bitcoin possible? You need distributed networks, open-source programming, entrepreneurial drive, cryptography, and a world networked through the Internet. These innovations are all with us today, performing miracles while we sleep. They are forging a new world of person-to-person engagement, and reducing the role of powerful gatekeepers.

Distributed technology used to be called the "free market." But governments destroyed it piece by piece over the course of a century of socialism and fascism. Now we see the free market being recreated using information as a valuable commodity operating in the digital zone of freedom. It has a new name. But, really, it is just the high-tech realization of what we all truly want: access, opportunity, and the freedom to associate.

F.A. Hayek wrote in <u>The Constitution of Liberty</u> that the value of information to a humane prosperity exceeds even that of physical capital.

The growth of knowledge is of such special importance because, while the material resources will always remain scarce and will have to be reserved for limited purposes, the uses of new knowledge (where we do not make them artificially scarce by patents of monopoly) are unrestricted. Knowledge, once achieved, becomes gratuitously available for the benefit of all. It is through this free gift of the knowledge acquired by the experiments of some members of society that general progress is made possible, that the achievements of those who have gone before facilitate the advance of those who follow.

That's an overwhelming thought. What if we had systems that enabled unlimited amounts of information to be transmitted in complex networks built by end-user volition? What if those networks were not bound by geography and jurisdiction? What if they were universally accessible?

We began to see glimpses of this emergent world toward the end of the 20th century. The most wonderful innovation of all came when the network came to be decentralized. For most of us, the first contact with such a thing came with Napster, the file-sharing service that allowed peer-to-peer exchange of digital files of music.

I can recall the fascination and amazement I experienced the first time I logged on. There were two types of activity taking place: seeding and feeding. Giving and getting. If you did one, you did the other. The resource expended was computer power. Otherwise the "goods" you were sharing were not scarce, because they were simultaneously reproducible unto infinity. It takes your breath away to consider the implications.

Napster, of course, was taken down. But that did nothing to stop the progress of the distributed network as a technology. The innovation had been seen and experienced, and the innovations never stopped. What's called "piracy" is more prevalent than ever, but that's not the right place

to look. What matters is the innovation of the distributed network alone, both in its legal and illegal use.

Why does it matter? We are used to thinking of ownership as physical and therefore bound by the constraints of exclusivity and geography. Those features of private ownership whet the appetites of gangsters and governments. If you can lean on the owner with a protection racket of some sort, you can take a bite of the resource and even control the whole thing.

But the distributed network is different. Anyone can be an owner of and participant in the building of it. It can live on any computer node anywhere in the world, and all activity on the network is reflected in every individual instance of it. What that means is that there is no central point of control. It can vanish from one or a million nodes and reappear just as quickly on another one or million nodes.

That's why the distributed network evades the despots of the world. It knows no power, no geography, no jurisdiction, no regulation, no regimentation. It lives freely, developing like a global garden cultivated by an invisible hand.

It's a technological marvel, one that emerged auspiciously but has come to play a beautiful role in the freeing of the world from all forms of tyranny. Looking past the data and code, what's really at stake is the liberation of lives.

These technologies will not be uninvented. Over the past 10 years, they've found ever more applications. Over the next 10, we will see exponential increases in their uses. Their basis is not ideological but performative. They use existing opportunities to create more opportunities, and also work to disrupt the status quo.

People tend to look at innovations in isolation. Here is my new e-reader. Here is an app I like. Here is my new mobile device and computer. Even bitcoin is routinely analyzed and explained in terms of its properties as an alternative to national currencies, as if there were no more than that at stake.

But actually there is a historical trajectory at work here, one that we can trace through its logic, implementation, and spread. It's the same logic that led from the dial phone at the county store, operated by people pulling and plugging in wires, to the wireless smartphone in your pocket that contains the whole store of human knowledge. It's all about technology in the service of individuation.

It's one thing to dream of a world of universal human dignity and opportunity. But the structure of the world cannot finally escape scarcity of resources. We cannot merely wish the world we want into being, and we certainly cannot force its creation through politics and state control. It has to be built one piece at a time using the right tools. Those tools have to be created. Peer-to-peer technology is doing just this, making the highest material aspirations of humanity more within our reach.

Once you understand the driving ethos—voluntarism, creativity, networks, individual initiative—you can see the outlines of a new social structure emerging within our time, an order that defies a century of top-down planning and nation-state restrictionism.

It is coming about not because of political reform. It is not any one person's creation. It is not happening because a group of elite intellectuals advocated it. The new world is emerging organically, and messily, from the ground up, as an extension of unrelenting creativity and experimentation. In the end, it is emerging out of an anarchist order that no one in particular controls and no one in particular can fully understand.

The result is not perfection. No technology or social system is presented before us in final form to accept or reject. A wise programmer once told me that perfect software is useless software: by the time the code is perfectly clean it would be obsolete. It is the same with social systems. They are never finalized. They emerge, bit by bit.

Bit also refers to the slang for binary digit, the building block of the emergent world of borderless communication, commerce, and creativity. Bit by bit the future is being made, not through legislation, imposition, artificial lines on a map, and government planning, but through decentralized and globalized entrepreneurship.

How wonderful it would be to write a book that fully captured the revolutionary implications of it all! I've waited for that book for years. Alas, this is not that book, and that book will probably never be written. The revolution is too diffuse for any one mind to comprehend much less sum up in prose.

The intellectuals have spent two decades debunking it. The politicians and bureaucrats make it their job to stop it or guide it. But no matter what the elites say or do, the energy behind the digital age keeps growing and mutating in the interest of the dream of universal individual empowerment, whatever form that takes. Governments of the world can no longer expect compliance. The structures they built are being fundamentally challenged. Their rule of space is no longer presumed.

II. Peer to Peer

During and after World War I, the political slogan of the day was self-determination. The initial idea was that people who define themselves as nations should not be pushed into multinational state regimes that are not of their own choosing. People should be allowed to go their own way.

"National aspirations must be respected," Wilson said in a major address in 1918. "People may now be dominated and governed only by their own consent. Self-determination is not a mere phrase; it is an imperative principle of action...."

This perspective came to be embodied in the United Nations Covenant on Economic, Cultural, and Social Rights: "All peoples have the right of self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development."

One year following Wilson's speech, the great classical liberal Ludwig von Mises wrote a lesser-known book in German called *Nation, State, and Economy*. He pushed the idea of self-determination consistently and as far as it could go. "The right of self-determination of which we speak is not the right of self-determination of nations, but rather the right of self-determination of the inhabitants of every territory large enough to form an independent administrative unit."

Mises added: "If it were in any way possible to grant this right of self-determination to every individual person, it would have to be done. This is impracticable only because of compelling technical considerations, which make it necessary that a region be governed as a single administrative unit."

Mises said this path was the only way toward peace following the war. The war taught the world about the ghastly dangers of empire. Government needs to be democratic, geographically restrained, and extremely limited in their functions. Multinational states were no longer viable because they created conflicts between people. To prevent the next war, Mises said, we needed structures of government that were genuinely liberal, which is to say, they need to reflect the will of the people they rule, all the way down to the smallest unit.

Only "technical considerations" inhibit a world of completely fulfilled self-determination, according to Mises. There were no means for individuals to seek out associations regardless of geography, to be governed under geographically non-contiguous ruling regimes, to pursue associations based purely on individual volition. To Mises, we needed administrative units to overcome such limitations.

A century later, those technical limitations are being overcome. It has all happened rather dramatically. The smartphone, the distributed network, open-source technology, the app economy, the global spread of the Internet, the invention of value-carrying peer-to-peer transmission services, the mobilization and personalization of the online experience—all of

these trends and technologies have been invented, gradually emerged, or matured in the last ten years.

Right now, we can experience a form of commercial relationship that was unknown just a decade ago. If you need a ride in a major city, you can pull up the smartphone app for Uber or Lyft and have a car arrive in minutes. It's amazing to users because they get their first taste of what consumer service in taxis really feels like. It's luxury at a reasonable price.

If your sink is leaking, you can click TaskRabbit. If you need a place to stay, you can count on Airbnb. In Manhattan, you can depend on WunWun to deliver just about anything to your door, from toothpaste to a new desktop computer.

If you have a skill and need a job, or need to hire someone, you can go to oDesk or Elance and post a job you can do or a job you need done. If you grow food or make great local dishes, you can post at a place like credibles.co and find a prepaid customer base. If you get a parking ticket that you find unjust, there is an app for that: GetFixed.me. The service hooks up attorneys and clients who need each other to save money from being looted by rapacious local police.

If you have stuff to buy or sell, there are dozens of online marketplaces that are managed through the power of reputation, not government regulation. Loosecubes offers a professional workspace. GetAround enables you to loan out your car when you are not using it or get a car when you need one.

The food service business is changing with P2P catering with competitive delivery based on vendor bids. Services like EatWith are bringing back the dinner party, hooking up cooks with foodies for mutually beneficial exchange. Even social networks are getting there, with Tsu.co proposing to pay users for the traffic they draw, sharing ad revenue with the actual content providers.

Lending services have been one of the biggest surprises. Prosper allows people who need extra cash to find someone with spare cash to lend. The Lending Tree looks up parties to lending transactions too. The Funding Circle helps restructure student debt. Many crowd-sourced platforms such as Indiegogo and Kickstarter provide a meeting spot for entrepreneurs and investors.

Ten years ago, there was an emerging hysteria about how "quants" — super-smart number crunchers with private knowledge — were ruling the financial space, rigging the game and grabbing all available profits for themselves. Today, the same and better knowledge is being democratized with such services as Kensho, which is bringing quant-style power to every investor and institution, essentially running a Google-style search feature for investments, giving the information it gets based on real-time experience.

These are the technologies of the peer-to-peer or sharing economy. You can be a producer, a consumer, or both. It's a different model—one characterized by the word "equipotency,"

meaning that the power to buy and sell is widely distributed throughout the population. It's made possible through technology.

The emergence of the app economy—an emergent order not created by government or legislation—has enabled these developments, and they are changing the world.

These technologies are not temporary. They cannot and will not be uninvented. On the contrary, they will continue to develop and expand in both sophistication and in geographic relevance. This is what happens when technology is especially useful. Whether it is the horseshoe of the Middle Ages or the distributed networks of our time, when an innovation so dramatically improves our lives, it changes the course of history. This is what is happening in our time.

The applications of these P2P networks are enormously surprising. The biggest surprise in my own lifetime is how they have been employed to make payment systems P2P—no longer based on third-party trust—through what's called the blockchain. The blockchain can commodify and title any bundle of information and make it transferable, with timestamps, in a way that cannot be forged, all at nearly zero cost.

An offshoot of blockchain-distributed technology has been the invention of a private currency. For half a century, it has been a dream of theorists who saw that taking money out of government hands would do more for prosperity and peace than any single other step. The theorists dreamed, but they didn't have the tools. They hadn't been invented yet. Now that the tools exist, the result is bitcoin, which gives rise to the hope that we have the makings of a new international currency managed entirely by the private sector and the global market system.

These new P2P systems have connected the world like never before: erasing borders, circumventing restrictions, obsoleting old ways of doing things. They hold out the prospect of unleashing unprecedented human energy and the creativity that comes with it. They give billions of people a chance to integrate themselves into the worldwide division of labor from which they have thus far been excluded. Services like Brawker, incorporated outside a regulated financial environment, enable people to use bitcoin in a way that evades all attempts at control.

With 3-D printing and computer-aided design files distributed on digital networks, more people have access to become their own manufacturers. These same people can be designers and distribute the results to the world. Such a system cuts out every barrier that stands between people and their material aspirations—barriers such as product regulation, patents, and excise taxes.

It's time that we begin to expect the unexpected. What else is possible?

Entrepreneurs are already experimenting with an Uber model of delivering some form of healthcare online. In some areas, they will bring a nurse to you to give you a flu shot. Other health services are on the way, causing some to speculate on the return to at-home medical visits paid out of pocket (rather than via insurance).

What does this innovation do for centralist solutions like Obamacare? It changes the entire dynamic of service provision. The medical establishment is already protesting that this consumer-based, one-off service approach runs contrary to primary and preventive care—a critique that fails to consider that there is no reason why P2P technology can't provide such care.

The world of publishing and movie distribution has had to adapt to the pressure against copyright, which, after all, is a state-created restriction on information sharing. The Internet has been variously and rightly described as a global copying machine. Nationally enforced restrictions on sharing, the essence of copyright, cannot possibly survive this.

Hollywood's war on piracy has already been lost. Adapting to the new reality of ineffective copyrights has been subscription-based services like Amazon video and Netflix, which are producing their own content and sell not the movie itself but rather service access.

It's the same with books. Very few books now published cannot be accessed through pirate networks for free. How can Amazon charge for them? Because they offer a convenient service. It's not enforcement of copyright but rather the brilliance of improved service provision that has enabled producers to survive and thrive in a world that is adapting to the post-copyright reality.

How much can things change? To what extent will they affect the structure of our political lives? This is where matters get really interesting. A feature of P2P is the gradual elimination of third parties as agents who stand between individuals and their desire to cooperate one to one.

We use such third parties because we believe we need them. Credit card companies serve a need. Banks serve a need. Large-scale corporations serve a need. One theory holds that the State exists to do for us what we can't do for ourselves. It's the ultimate third-party provider. We elect people to serve as our representatives, and they bring our voices to the business of government so that we can get the services we want. That's the idea, anyway.

But once government gets the power to do things, it expands its power in the interest of the ruling elite. The taxicab monopoly was no more necessary than the government postal service, but the growth of P2P technology has increasingly exposed the reality of how unnecessary the State as a third-party mediator really is. The post office is being pushed into obsolescence. It's hard to see how the municipal taxi monopoly can survive a competitive contest with P2P technology systems.

Policing is an example of a service that people think is absolutely necessary. The old perception is that government needs to provide this service because most people cannot do it for themselves. But what if policing, too, could employ P2P technology?

What if, when there is a threat, whether to you or to others, you could open an app on your phone and call the private police immediately? You can imagine how such a technology could

learn to filter out static and discern threat level based on algorithms and immediately supplied video evidence. We already see the first attempts in this direction with the Peacekeeper app.

Rather than a tax-funded system that has become a threat to the innocent as much as the guilty, we would have a system rooted in consumer service. It might be similar to the private security systems used by all businesses today, except it would apply to individuals. It would survive not through taxation but subscription—voluntary and noncoercive.

How much further can we take this? Can courts and laws themselves be ported to the online world, using the blockchain for verifying contracts, managing conflicts, and even issuing securities? The large retailer Overstock.com is experimenting with this idea—not for ideological reasons but simply because such systems work better.

And here we find the most compelling case for optimism for the cause of human liberty. These technologies are emerging from within the private sector, not from government. They work better to serve human needs than the public-sector alternative. Their use and their growth depend not on ideological conversion but on their capacity to serve universal human needs.

The ground really is shifting beneath our feet, despite all odds. It is still an age of leviathan. But based on technology and the incredible creativity of entrepreneurs, that leviathan no longer seems like a permanent feature of the world.

The Shift

Government can prolong a useless function but not forever. Technology is an inexorable force. Government can slow it down but it can't stop it. The private sector keeps getting ever more amazing while the government's services — all over the world — keep getting worse.

The trend is spreading. It is affecting transportation where government monopolies are being shattered by private upstarts. It is happening to communication where, in a matter of a few decades, we went from government-owned talk boxes on the wall to magic human knowledge servers in our pockets.

It is happening to education (public education is rarely the first choice), retirement pensions (no one under 50 believes government will perform), health care (government-operated is synonymous with scandal), and security (even the government hires private services now).

In every area of life, the trend is obvious and it is intensified by the digital revolution, which opened up a new frontier for entrepreneurs to innovate outside government systems. The new innovations have become essential to our lives.

Thanks to the app economy, for example, we can listen to worlds of music, track our sleep patterns, navigate cities, play a musical instrument, all from our cell phones. Thanks to peer-to-peer websites, we can sell our stuff, rent an extra room in our house, call for a car, attend

classes with great teachers — or we can switch the whole process and buy stuff, get a room, get paid to drive, or teach a class. The tools for doing all these things are distributed to everyone, and bypassing governments completely.

This is a much more effective path toward liberty than conventional politics. All over the world, people are suffering under the weight of central planning, regulation, high taxation, barriers to trade, and monopolies over education, banking, money, and so many other areas. People are clamoring for more room to breathe, create, and serve. But how do we get from here to there? Innovation is the productive path that is making the difference.

Why does government provide any services at all? Why don't the political elite and their bureaucratic functionaries just take our money and keep it for themselves to live the high life forever at our expense? Why do they even bother to pretend to do things for us like protect us, give us lifetime security, clean the environment, protect us from bad guys, administer justice, and keep us from self-destructive behaviors?

The state would be better off not doing any of this. Instead of sticking its neck out to pretend to do glorious things for us, it would be far better off just operating as an open parasite on the rest of society.

But here's the problem. States need the support of people, at least tacitly. No government can rule by force alone. Control is crucially dependent on winning hearts and minds. It's that deeper cultural commitment to the rule of the majority by the minority that assures the stability of the state and keeps upheaval and revolution at bay. This is the fundamental reason for why the state keeps expanding its list of claims for how wonderful it is.

But look what happens when the state is not so wonderful anymore, when its security systems, banking systems, monetary systems, educational systems, regulatory systems, retirement programs, environmental and labor bureaucracies are obviously underperforming as compared with what can be accomplished outside the state. People naturally and normally, purely as a matter of self-interest, gravitate away from what doesn't work toward what does work.

They can build the state. But they can't make people use it, especially not if better alternatives exist. There are thousands and millions of ways to leave leviathan today.

Name any seemingly essential service that government has offered in the 20th century and you can name a cheaper, more effective, more innovative, and more accessible private alternative. There is nothing that states can do that needs to be done that markets cannot do better. The current technology trajectory is proving the point, many times over.

The result is political instability. A paradigm shift. Obsolescence of the public sector. The growing irrelevance of power. Ever less dependence on, and hence loyalty to, the coercive power structure and ever more cultural, economic, and social reliance on the structures that society creates for itself. The tolerance for taxation, slavery, spying, regulation, and war begins

to decline. Eventually it dies because it is unsustainable without public support. That's the story of how human liberty prevails over tyranny. It could be the story of our near-term future.

This is a peaceful path to reform. It is not a certain path, but looking around the world today, it is one that is most productive for human needs and also the one most threatening to the political elite. The ruling elite won't go without a fight, but increasingly they will be fighting people who are already discovering a better way of life than to live at others' expense.

The Backlash

Inevitably, such upheaval creates a backlash. I've been waiting for this for years, knowing that we can't smoothly travel from the old world of command and control to the new world of personal sovereignty without engaging in the intellectual argument.

What's been missing until recently has been the framework these arguments would take. That's now becoming clearer. The opponents of markets just can't reconcile themselves to embracing the very thing they have supposedly advocated for generations: popular empowerment.

Who could possibly be against such innovations? The answer is rather obvious: entrenched economic interests who stand to lose their old-world, government-regulated, and government-protected monopolies. Municipal taxi services, for example, feel deeply threatened by services such as Uber, Lyft, and Sidecar, which allow anyone to become a transportation service provider. The established monopolies are lobbying governments to crack down and are experiencing some modicum of success.

San Francisco's district attorney has sent threatening letters to companies that have vastly improved transportation, warning that they must make major changes in their business models. This reaction, he assured the public, is not because he is against innovation and consumer service. Rather, as a public servant, he is charged with making "sure the safety and well-being of consumers are adequately protected"—as if we are supposed to believe that the companies that give people rides are less interested than the government in consumer safety. Meanwhile, D.C. taxis have organized protests, as have the same in Los Angeles and other major cities.

As it turns out, these services are increasing safety. They make it easy for people who are too drunk to drive to click a button on their smartphones and get a ride home safely. Following two years in which DUI arrests increased 10 percent each year, they have fallen by 14 percent this year. The *LA Weekly* speculates that this drop is because of these ride-sharing services, which are used often late at night in locations with bars and clubs. All my conversations with Uber drivers seem to confirm this hunch. The taxi monopolies might have provided such efficient services, but without competition, the motivation for progress evaporates.

Similarly, we might expect the hotel industry, which is forced to pay high taxes and to comply with vast regulations, to grumble about room-sharing services such as Airbnb, which bear no

such costs. Individuals with an extra room in their house or apartment can charge less, often far less, than established players in the industry.

So too might bankers be annoyed by peer-to-peer lending services. Central banks are agitated by the rise of bitcoin. This reaction is pure economic interest at work against innovations that threaten their competitive advantage of the status quo.

This response is exactly what we would expect in any period of disruption caused by economic innovation. Cronies don't like being unseated from their positions of power.

But what about ideological opposition? Here is where matters get strange. The opponents of capitalism have, for more than a century, complained about the power that capital has over labor, all based on the idea that labor is being denied an ownership stake in the enterprise and some direct share in the company's profits. They have said this is exploitation. They have advocated a system in which the power that belongs to capital is transferred to labor.

Well, this shift is precisely what seems to be taking place—not through socialist upheaval or policy mandates but through the advancement of markets themselves. Economic productivity and exchange are increasingly happening peer-to-peer, thanks to technological innovations. Do we find the opponents of traditional capitalism now celebrating? Far from it. Apparently you can't make these people happy.

I offer as evidence a viral piece that appeared on the site Jacobinmag.com, the digital version of the magazine *Jacobin*, which describes itself as "a leading voice of the American left, offering socialist perspectives on politics, economics, and culture." The *New York Times* has praised this publication as "an improbable hit, buoyed by the radical stirrings of the Occupy movement."

In short, this publication is something of a harbinger of anti-market opinion. And given its popularity, it seems to speak for a sector of opinion that is intractably opposed to all forms of market action. So what does this publication say about the sharing economy?

"Uber is part of a new wave of corporations that make up what's called the 'sharing economy," writes Avi Asher-Schapiro in the strangely titled article "Against Sharing."

"The premise is seductive in its simplicity: people have skills, and customers want services. Silicon Valley plays matchmaker, churning out apps that pair workers with work. Now, anyone can rent out an apartment with Airbnb, become a cabbie through Uber, or clean houses using Homejoy."

So far, so good. But then the writer dives deep into the ideological thicket: "under the guise of innovation and progress, companies are stripping away worker protections, pushing down wages, and flouting government regulations."

Hold on there. By "worker protections," the writer probably means mandates on corporations to provide various benefits to workers, including healthcare. These rules might seem to help workers, but actually they promote dependency and increase corporate power by locking

workers into jobs that they fear leaving. Such mandates reduce rather than increase labor mobility.

As for pushing down wages, about whose wages are we talking? Such innovations might indeed reduce wages among the established players. This outcome is why labor unions hate them. But the producers under this new technology are new players in the market, and it is rather obvious that their wages are increasing relative to what they would be otherwise, else they would not have signed up to play.

Moreover, there is the inescapable matter of supply and demand. More drivers providing the same service at the same quantity demanded does indeed mean lower fares. The socialist who complains that market competition leads to lower wages for some is vexed when an entrenched elite gets marginally less. But the same socialist is completely indifferent to the grim reality of coerced monopolies: they unjustly force the masses of consumers to pay more. Using the force of government to funnel scarce resources to a politically protected few does not constitute an improvement in the social order.

I was in Wichita recently and took Uber everywhere I went. The service snuck in so quietly that the hotel clerk had no idea it was even available. I interviewed many different drivers. There was the single mom who loved making extra money to help with the kids' college. There was the welder who had extra time and now is making so much Uber money that he is considering giving up his old job. There was the retired man who had nothing to do. There was the new immigrant who faced too many language and cultural barriers to get another job.

They all had beautiful stories about what the service was doing for their lives.

And as for "flouting government regulations," to the extent such regulations stop progress, rob consumers, and reduce competition, this would seem to be a good thing. Flouting government is something that socialists once prided themselves in doing and favoring. How far they have fallen since the New Deal, when the left made its peace with the regimented corporate state. So far, the writer is just engaged in the usual agitprop. But he does introduce one very interesting argument.

"At its core," he writes, "the sharing economy is a scheme to shift risk from companies to workers."

Here is a remarkable claim. At last, a socialist has found a reason for a corporation to exist: to bear the speculative risk of investing in an uncertain future. Why any corporation would exist at all if it could not also gain some reward and therefore survive economically is the great unanswered question. All businesses form for a reason; it is not to bear all risk and then die. It's true that under the sharing economy, workers own the enterprise themselves. Rather than depending on the "the man" to decide wages independent of productivity, the workers make money as a direct result of the services they provide.

So yes, of course, with worker ownership comes the bearing of risk. A system in which corporations bear all risk but gain no reward can't work. Likewise, a system in which workers own the capital and reap all of the gain while bearing no risk is unsustainable. It's like giving grades to people who aren't taking the test, or taking the test without the prospect of being graded. The resulting data will mean nothing. It would be total chaos.

What this point speaks to is a fundamental flaw in socialist ideology. For centuries, socialists have spoken about worker ownership and empowerment. But they've never dealt with a problem just beneath the surface: Who or what is to bear the risk and reward for dealing with speculation? After all, "every capital investment is speculative," writes Ludwig von Mises. "Its success cannot be foreseen with absolute assurance." And so it is with every driver in the sharing economy, every renter in the overnight-stay market, every buyer and holder of bitcoin, every lender on LendingTree.

Welcome to the real world. It's a wonderful place to live. How precisely the risk associated with investment is to be allocated in society cannot be foreseen by any planner or pundit. Risk allocation is for the market to discover. With P2P services, which are radically decentralizing the capitalist ethos, we are finding that workers actually want to bear more risk—in the hope of greater gain than wages alone could provide.

Therefore, Asher-Schapiro is more or less correct in his conclusion: "there's nothing innovative or new about this business model. Uber is just capitalism, in its most naked form." And that is precisely what is so wonderful about it, in contrast to the mercantilist, monopolistic, corporatist, State-managed systems of enterprise that have been common for the last 100 years.

What's strange is why left idealism does not welcome this development but rather condemns it. I find this mystifying, as bizarre as the opposition of the socialist left to Walmart, which has brought remarkable products to the "workers and peasants" at ridiculously low prices, and to fast food, which has made a glorious diet instantly obtainable through a window at prices that are unthinkably low and falling all the time.

No matter how much capitalism develops in the direction of direct worker control and individual sovereignty, reducing the role of large-scale enterprises and monopolies, the socialists still complain with the old bromides of exploitation while calling for government to crack down. So much for revolution. It's the digital-age capitalists who have recaptured the revolutionary idealism that socialists long ago set aside.

The Silk Road

Other P2P technologies have elicited massive opposition. Napster was a solution that was strangled by government at the behest of the large players in the recorded-music industry. But this action killed nothing. It started a new era of file sharing and online music distribution that has changed the dynamic of the world economy.

The same thing is right now happening with illegal drugs. They will never again be wholly restricted in their production and distribution to dark corners of the physical world where people take inordinate risks. And just as with file sharing and illegal downloads, this is a magnificent triumph for humanitarian social evolution.

Consider that since 2006, more people have died in drug-related violence than have died in the Iraq war. By drug-related, I mean what happens somewhere in the United States nearly every day.

There is a meeting or a turf war. A dispute ensues. Lacking courts and normal channels for managing, the knives and guns come out and someone is hurt and killed. It has happened hundreds of thousands of times in the last ten years, all over the world.

None of it is necessary. This doesn't happen when you make or buy a hamburger, when you download an app for your smartphone, or when you grab a bottle of water from the convenience store. There is no ongoing threat of death and no shedding of blood.

What's the difference? Markets are about peaceful human cooperation. Some drugs, however, are illegal so the risk, profits, and stakes are really high. There are no channels for settling disputes that occur in physical space. Because of prohibition, people must risk their lives to buy and sell.

The solution is obvious. The "war on drugs" (those that the regime purports to dislike) needs to stop. All drugs need to be completely legal so that normal institutions of quality control, competition, rating systems, and dispute resolution can emerge as within every market. To favor this solution does not mean favoring drugs, any more than my own willingness to tolerate legalized boxing makes me want to practice it or watch it.

Nothing will ever stop the production and distribution of drugs that the State doesn't like, e.g. marijuana, cocaine, methamphetamine, and the endlessly changing varieties of designer drugs that big and small labs all over the world make every day. They are with us always and forever. The only way forward is *laissez-faire et laissez passer*.

However, there is a problem. Our political leaders are cowards and, frankly, don't give a damn about this violence. What's more, the bureaucratic army has a deep entrenched interest in continuing the war as a way of protecting their jobs and power. There are probably even deeper conspiracies, such as the desire on the part of the deep state to side with one aspect of the resulting dark cartel over another. In any case and regardless, the political system is stuck. It seems incapable of rationality, not only in this area but in nearly every other area of life.

That's where the genius of Silk Road came in. It was invented in 2011 as a "darknet" solution that allowed anyone to buy or sell anything online using a digital currency. It was Amazon.com except for products and services that are frowned upon by political elites. It brought peace to the

drug markets. If you wanted to make some or buy some, you just did it. No coercion, just exchange.

Instead of creeping around dark allies or dangerous burnout areas of town, you could open your computer and exchange on a mutually advantageous basis. No risk, no threats, no violence. Peace at last. If the series *Breaking Bad* were about Silk Road, it would have been impossibly boring. A guy would sit at his computer and fill orders, the end.

This innovation was epic, solving a problem that began the first day that one government decided to control what people could or could not do with their own bodies. Governments have never been able to achieve their prohibitionist aims but they do create conditions that lead to massive carnage.

So far as I'm concerned, the site founder and administrator who called himself the "Dread Pirate Roberts" should get the Nobel Peace Prize. The person alleged to hold this title is Ross Ulbricht, with whom I corresponded as the site was being conceived. It was obvious to me that he loved human liberty and explicitly so. He stuck his neck out to make progress in human affairs possible, just as every great entrepreneur in history.

Governments have expended trillions of dollars, caused a million deaths, and shredded every civilized liberty in the name of the war on drugs. The key to the Silk Road is that it found a solution to the violence that did not rely on political reform. It flowed from a technological innovation. It opened up a venue for people to cooperate with each other on a mutually beneficial basis. This undoubtedly made the drug cartels furious, and I wouldn't even be surprised if some of them backed the shuttering of the Road.

The Silk Road operated brilliantly for nearly three years, saving countless lives. For my own part, I ended up there two or three times and each time was a revealing experience. No, I didn't buy anything but I was amazed to see how the existence of a marketplace takes the evil mystique out of that which the civic culture attempts to demonize.

Suddenly, while surfing with my eyes popping out, it finally occurred to me: drugs are just things people make and people take. Some people abuse them, as with anything else. Lots of people just use them recreationally. There's really nothing more to say.

But instead of thanking the Silk Road for doing for society what needs to be done—a brilliant and peaceful alternative to ghastly war—the State shut it down, arrested the alleged mastermind. That man, who is now in jail, is my friend Ross Ulbricht, and he is a brilliant and wonderful person, as is his mother who works every day for real justice for her son.

In the meantime, what has happened? Silk Road 2.0 came up. It was doing booming business, more than ever, for a full year. The old products were all back. The user reviews were back. The vendor reviews were back. Most importantly, people are engaging with each other peacefully. No war! No violence! No threats and risk and suffering!

Then it was taken down too, but, this time, there were another dozen or so services online. They too will be harassed and some taken down, leaving another dozen or several dozen. There will be no end to this, just as with Napster, pirate movie sites, and so on. Eventually the law will have to adapt to the new reality. There is no controlling the Internet, not in the long run.

What's most interesting is how the Silk Road paved the way for other P2P technologies to come online. The Open Bizarre is an open-source platform that makes a distributed store platform available to everyone in the world. You can download it, customize it, and distribute it. It allows users all over the world to engage in commercial transactions—essentially a customizable Silk Road for the globe, capable of becoming a platform for the buying and selling of anything.

Many fans of the P2P economy are happy to write off the Silk Road as a "bad actor," an outlier in what can and should be a mainstream economy that complies with legal and social norms. But one of the insights of the old liberal economists was that those who defy the norms actually manage to make a serious and substantial social contribution. They pave the way for others and disrupt failing systems of legal convention.

What this shows is that the State will never win this war. It cannot and it should not. In the name of humanity and peace, it should stop and move on.

The Silk Road solves an enormous problem created by the State that has resulted in a huge and pointless cost. Markets solve problems and bring peace where the government only offers violence, power, and bloodshed.

If you want peace, defend the Silk Road's right to exist. But even if you do not, it is going to exist regardless. There are some things mere mortals cannot accomplish. Controlling what people do or don't do with their talents and their bodies counts among the unachievable.

The Human Element

The P2P upheaval isn't only about technology and efficiency. It is highlighting a feature of the market economy that has always been there but has not been entirely understood with such clarity: it is a form of humane engagement among peoples.

I recently took a couple of hours, in the middle of the afternoon, to be amazed and thrilled by an action-packed movie, shown in a theater built for me though I never requested it, a movie that required a production structure of thousands of people, with some of the most skilled talent in the world, all for the purposes of delighting me. Others too. What these people wanted from me was \$7, in exchange for which I received an adventure experience that would have been unattainable anywhere on the planet just a few decades ago.

I felt loved. It's an interesting kind of love. I don't know any of the people who did this for me. But that they did it for me, I have no need to doubt, because as a consumer I possess the power to affirm or decline to affirm their every effort.

I had to wait until the end of the movie during the credits to even know their names. They don't know my name either, even though everything they do in their lives is targeted toward my interests. So it's not personal love. It's more like structural love, a system-wide devotion to mutual benefaction based on giving and getting.

But it's not always impersonal. I had ordered cheese popcorn. I didn't know that eating a small bag would effectively give me a second skin on my hand made of cheese powder. It took lots of scrubbing in the men's room to remove it. I returned to the concession to get some regular popcorn, and, in passing, mentioned my issue with the cheese. The person at the counter was mortified and offered to give me my money back.

I assured her that this was not a disaster really, and that I was perfectly fine. But I could still tell that she was truly upset, genuinely concerned that I was not entirely pleased. We exchanged a series of assurances that all is well. We smiled at each other. We wanted the best for each other. I walked off with a sense of happiness that comes from courtesies of these sorts. I didn't know her and I might never see her again, but there was still love there: a mutual affirmation of the inherent dignity of the other.

These stories might sound trivial. They happen to all of us every day and are a part of every commercial encounter. Yes, sometimes things go wrong: a clerk is rude, a customer gets too demanding, there is some misleading or manipulation going on. But that's just the point. We recognize this as the exception, and we work to fix it because we know it can be fixed. The driving ethos and ideal of commercial exchanges is that sense of affection, even devotion, to the ideal that everyone is better off.

This is the etiquette, ethos, and ethics of the capitalist spirit. It is about love.

Is that too strong a word? C.S. Lewis famously distinguished four loves organized by their intensity: *storge*, *philia*, *eros*, and *agape*.

Storge he describes as affection, a type of love. This is the core of what we find in commercial life. It is uncoerced and mutually regarding. "The especial glory of Affection is that it can unite those who most emphatically, even comically, are not; people who, if they had not found themselves put down by fate in the same household or community, would have had nothing to do with each other," he writes. "Affection is responsible for nine-tenths of whatever solid and durable happiness there is in our natural lives."

What he is really describing here is a feature of the regular course of events of capitalism, which is best thought of not as a system but a network of human relationships based on exchange.

Clearly, for centuries, the whole point of capitalism has been missed. It is not about material greed much less exploitation and exclusion. Its fundamental theme is love of this special sort. That is its driving energy and ethos. This love permeates every aspect of its operations. It requires love. It rewards love. It elicits love. It lives on love.

Think of the fundamental unit of capitalism: the exchange. You own and I own. We could keep what we possess. But we are attentive to bettering our lot. We discover something remarkable, namely that if we cooperate we could both be better off. I want what you have and you want what I have. You value mine more than yours and I value yours more than mine.

We come together in trust. We exchange, out of choice. Though nothing has changed about the material world, we have created value and wealth, something we know by reflecting on our inner sense of well-being. It's an act of love.

This act of love takes place trillions of times a day all over the world. The act can be as simple as exchanging money for a cup of coffee or as complex as a multi-billion dollar company changing ownership. In substance, these are the same acts. It is all about the giving spirit: you give me value and I give you value. We discover that in our mutual association, in the act of giving to get and getting only when giving, that our lives are improved.

We need each other. We trust each other. We are lovers. Indeed, the rarely used Latin term, commercium, literally means sex but came to be more commonly used in medieval spiritual writing to refer to the incarnation: God becoming flesh in a wondrous exchange (O admirabile commercium) between time and eternity, one that ends in the ultimate act of love (agape). This is the root of the term commerce. Love—even the divine love that leads to a new creation—is present in every exchange.

It is easy to see how *storge* can lead to *philia*, which is friendship. Think of your co-workers, business partners, long-term customers, and other relationships. They begin in the affections that are a normal part of commercial life but then intensify as these relationships persist. You need each other and therefore become more deeply concerned about each other. You celebrate birthdays. You cheer moments in life like weddings. You weep together over sad turns of events.

Commercial relations turn into social occasions and deepening friendships. There are dinners, drinks out, backyard parties. Social circles begin to be organized around them. They become centers of mutual learning and more benefaction. Philia extends outward from them. We all know this from experience. Commerce may not form the basis of a permanent bond but it can be its introduction and foundation, the occasion for coming together and growing together through the years.

The next form of love spoken about by Lewis is *eros*, and this meaning is well known and the most common meaning of the term love today. It is known to create in the human mind something extraordinary and even biological. It gives the heart a lift and affects the way we see

the world. Through eros, old things take on a new shape. We are inspired to imagine new possibilities. We see things in our mind that previously had not existed. Through eros there is a blossoming of the human spirit, a conviction that the world can be made new. It feels like a new dawn, and we wake every day with a sense of possibility. This is the work of *eros*.

Where do we find this in the world of economics? If you have ever known an entrepreneur with a dream, and you have listened to this dream and watched as it unfolded, you see the realization of eros. The entrepreneur is a lover of something he or she can see that does not yet exist, and from this comes the inspiration to take wild risks and work unfathomably hard to see that love realized. And where is this love directed? Toward the discovery and service of others' needs, because it is the consuming public that is in a position to say whether it was all worth it.

Eros in the classical world was known for its capacity to lead to the overthrow of whole kingdoms and becoming the force for the turning of history. In the world of commercial capitalism, eros becomes a source of new shopping centers, new technologies, new software applications, new fashions and style—all things that cause the material world to avoid the natural trajectory towards decline and instead give a lift to life itself. Eros is the source of progress because it inspires us to depart from what is and believe in what could be.

It is easy to wonder sometimes why it is that merchants and entrepreneurs do what they do. Why spend the time, the resources, the energy, the risking of reputation and credibility, all in the service of a goal that is statistically very unlikely to ever really result in profits? It truly is a form of beautiful insanity—precisely that kind of insanity that is the foundation of every romance. Entrepreneurs are lovers.

These forms of love are woven into the fabric of the voluntary society where exchange flourishes and creates new value, where commercial relationships lead to deep friendships and networks of mutual aid, where dreamers breathe deeply the air of freedom and imagine the possibility of creating worlds that do not yet exist and commit their lives fully to see them come to fruition.

Love is an affair of the heart. It extends from our fundamental right to choose. It is instantiated only through the exercise of human volition inspired by our own values. These features of love are realized not only in spirit and not only in sexuality but also, and in the most common and socially beneficial way, through the material world, in the ceaseless effort to grow the bounty of wealth for us all.

And so it has been for 150 millennia, from the dawn of time to our time, the longest and most cumulative story of at least three forms of love working themselves out in the course of human events, drawing us out of the state of nature and always into a future full of promise, all with the dream of a world of unbounded plenty. The story of this material rise, and the commercial relationships that give us so much of what we need and want and hope for in the future, is a story of love.

Love can only occur between individuals. No institution can manufacture it into being or cause it to disappear once it is real. It is the most beautiful peer-to-peer relationship. It finds its economic expression in the exchange economy, which is made ever more perfect the more it can instantiate the desires of individual hearts — without depending on third-party trust and without the element of force.

The best and most beautiful innovations of our time embody exactly that spirit.

III. Bitcoin

Many people who have never used bitcoin look at it with confusion. Why does this magic Internet money have any value at all? It's just some computer thing that someone made up. Consider the criticism of goldbugs, who have, for decades, pushed the idea that sound money must be backed by something real, hard, and independently valuable.

Bitcoin doesn't qualify as sound money, right?

Maybe it does. Let's take a closer look.

Bitcoin first emerged as a possible competitor to national, government-managed money nearly six years ago. Satoshi Nakamoto's white paper was released October 31, 2008. The structure and language of this paper sent the message: This currency is for computer technicians, not economists nor political pundits. The paper's circulation was limited; novices who read it were mystified.

But the lack of interest didn't stop history from moving forward. Two months later, those who were paying attention saw the emergence of the "Genesis Block," the first group of bitcoins generated through Nakamoto's concept of a distributed ledger that lived on any computer node in the world that wanted to host it.

Here we are six years later and a single bitcoin trades at \$400 and has been as high as \$1,200 per coin. The currency is accepted by many thousands of institutions, both online and offline. Its payment system is very popular in poor countries without vast banking infrastructures but also in developed countries. And major institutions—including the Federal Reserve, the OECD, the World Bank, and major investment houses—are paying respectful attention.

Enthusiasts, who are found in every country, say that its exchange value will soar in the future because its supply is strictly limited and it provides a system vastly superior to government money. Bitcoin is transferred between individuals without a third party. It is nearly costless to exchange. It has a predictable supply. It is durable, fungible, and divisible: all crucial features of money. It creates a monetary system that doesn't depend on trust and identity, much less on central banks and government. It is a new system for the digital age.

To those educated in the "hard money" tradition, the whole idea has been a serious challenge. Speaking for myself, I had been reading about bitcoin for two years before I came anywhere close to understanding it. There was just something about the whole idea that bugged me. You can't make money out of nothing, much less out of computer code. Why does it have value then? There must be something amiss. This is not how we expected money to be reformed.

There's the problem: our expectations. We should have been paying closer attention to Ludwig von Mises' theory of money's origins—not to what we think he wrote, but to what he actually did write.

In 1912, Mises released *The Theory of Money and Credit*. It was a huge hit in Europe when it came out in German, and later too when it was translated into English. While covering every aspect of money, his core contribution was in tracing the value and price of money—and not just money itself—to its origins. That is, he explained how money gets its price in terms of the goods and services it obtains. He later called this process the "regression theorem," and as it turns out, bitcoin satisfies every condition of the theorem.

Mises's teacher, Carl Menger, demonstrated that money itself originates from the market—not from the State and not from a social contract. It emerges gradually as monetary entrepreneurs seek out an ideal form of commodity for indirect exchange. Instead of merely bartering with each other, people acquire a good not to consume, but to trade. That good becomes money, the most marketable commodity.

Mises added that the value of money traces backward in time to its value as a bartered commodity. Mises said that this is the only way money can have value.

The theory of the value of money as such can trace back the objective exchange value of money only to that point where it ceases to be the value of money and becomes merely the value of a commodity.... If in this way we continually go farther and farther back we must eventually arrive at a point where we no longer find any component in the objective exchange value of money that arises from valuations based on the function of money as a common medium of exchange; where the value of money is nothing other than the value of an object that is useful in some other way than as money.... Before it was usual to acquire goods in the market, not for personal consumption, but simply in order to exchange them again for the goods that were really wanted, each individual commodity was only accredited with that value given by the subjective valuations based on its direct utility.

Mises' explanation solved a major problem that had long mystified economists. It is a narrative of conjectural history, and yet it makes perfect sense. Would salt have become money had it otherwise been completely useless? Would beaver pelts have obtained monetary value had they not been useful for clothing? Would silver or gold have had monetary value if they had no value as commodities first? The answer in all cases of monetary history is clearly no. The initial value of money, before it becomes widely traded as money, originates in its direct utility. It's an explanation that is demonstrated through historical reconstruction. That's Mises' regression theorem.

At first glance, bitcoin would seem to be an exception. You can't use a bitcoin for anything other than money. It can't be worn as jewelry. You can't make a machine out of it. You can't eat it or even decorate with it. Its value is only realized as a unit that facilitates indirect exchange. And

yet, bitcoin already is money. It's used every day. You can see the exchanges in real time. It's not a myth. It's the real deal.

It might seem like we have to choose. Is Mises wrong? Maybe we have to toss out his whole theory. Or maybe his point was purely historical and doesn't apply in the future of a digital age. Or maybe his regression theorem is proof that bitcoin is just an empty mania with no staying power, because it can't be reduced to its value as a useful commodity.

And yet, you don't have to resort to complicated monetary theory in order to understand the sense of alarm surrounding bitcoin. Many people, as I did, just have a feeling of uneasiness about a money that has no basis in anything physical. Sure, you can print out a bitcoin on a piece of paper, but having a paper with a QR code or a public key is not enough to relieve that sense of unease.

How can we resolve this problem? In my own mind, I toyed with the issue for more than a year. It puzzled me. I wondered if Mises's insight applied only in a predigital age. I followed the speculations online that the value of bitcoin would be zero but for the national currencies into which it is converted. Perhaps the demand for bitcoin overcame the demands of Mises' scenario because of a desperate need for something other than the dollar.

As time passed—and I read the work of Konrad Graf, Peter Surda, and Daniel Krawisz—finally the resolution came. I will cut to the chase and reveal it: Bitcoin is both a payment system and a money. The payment system is the source of value, while the accounting unit merely expresses that value in terms of price. The unity of money and payment is its most unusual feature, and the one that most commentators have had trouble wrapping their heads around.

We are all used to thinking of currency as separate from payment systems. This thinking is a reflection of the technological limitations of history. There is the dollar and there are credit cards. There is the euro and there is PayPal. There is the yen and there are wire services. In each case, money transfer relies on third-party service providers. In order to use them, you need to establish what is called a "trust relationship" with them, which is to say that the institution arranging the deal has to believe that you are going to pay.

This wedge between money and payment has always been with us, except for the case of physical proximity. If I give you a dollar for your pizza slice, there is no third party. But payment systems, third parties, and trust relationships become necessary once you leave geographic proximity. That's when companies like Visa and institutions like banks become indispensable. They are the application that makes the monetary software do what you want it to do.

The hitch is that the payment systems we have today are not available to just anyone. In fact, a vast majority of humanity does not have access to such tools, which is a major reason for poverty in the world. The financially disenfranchised are confined to only local trade and cannot extend their trading relationships with the world.

A major, if not a primary, purpose of developing bitcoin was to solve this problem. The protocol set out to weave together the currency feature with a payment system. The two are utterly interlinked in the structure of the code itself. This connection is what makes bitcoin different from any existing national currency, and, really, any currency in history.

Let Nakamoto speak from the introductory abstract to his white paper. Observe how central the payment system is to the monetary system he created:

A purely peer-to-peer version of electronic cash would allow online payments to be sent directly from one party to another without going through a financial institution. Digital signatures provide part of the solution, but the main benefits are lost if a trusted third party is still required to prevent double-spending. We propose a solution to the double-spending problem using a peer-to-peer network. The network timestamps transactions by hashing them into an ongoing chain of hash-based proof-of-work, forming a record that cannot be changed without redoing the proof-of-work. The longest chain not only serves as proof of the sequence of events witnessed, but proof that it came from the largest pool of CPU power. As long as a majority of CPU power is controlled by nodes that are not cooperating to attack the network, they'll generate the longest chain and outpace attackers. The network itself requires minimal structure. Messages are broadcast on a best effort basis, and nodes can leave and rejoin the network at will, accepting the longest proof-of-work chain as proof of what happened while they were gone.

What's very striking about this paragraph is that there is not even one mention of the currency unit itself. There is only the mention of the problem of double-spending (which is to say, the problem of inflationary money creation). The innovation here, even according to the words of its inventor, is the payment network, not the coin. The coin or digital unit only expresses the value of the network. It is an accounting tool that absorbs and carries the value of the network through time and space.

This network is the blockchain. It's a ledger that lives in the digital cloud, a distributed network, and it can be observed in operation by anyone at any time. It is carefully monitored by all users. It allows the transference of secure and non-repeatable bits of information from one person to any other person anywhere in the world, and these information bits are secured by a digital form of property title. This is what Nakamoto called "digital signatures." His invention of the cloud-based ledger allows property rights to be verified without having to depend on some third-party trust agency.

The blockchain solved what has come to be known as the "Byzantine generals' problem." This is the problem of coordinating action over a large geographic range in the presence of potentially malicious actors. Because generals separated by space have to rely on messengers and this reliance takes time and trust, no general can be absolutely sure that the other general has received and confirmed the message, much less its accuracy.

Putting a ledger, to which everyone has access, on the Internet overcomes this problem. The ledger records the amounts, the times, and the public addresses of every transaction. The information is shared across the globe and always gets updated. The ledger guarantees the integrity of the system and allows the currency unit to become a digital form of property with a title.

Once you understand this, you can see that the value proposition of bitcoin is bound up with its attached payment network. Here is where you find the use value to which Mises refers. It is not embedded in the currency unit but rather in the brilliant and innovative payment system on which bitcoin lives. If it were possible for the blockchain to be somehow separated from bitcoin (and, really, this is not possible), the value of the currency would instantly fall to zero.

Now, to further understand how Mises's theory fits with bitcoin, you have to understand one other point concerning the history of the cryptocurrency. On the day of its release (January 9, 2009), the value of bitcoin was exactly zero. And so it remained for 10 months after its release. All the while, transactions were taking place, but it had no posted value above zero for this entire time.

The first posted price of bitcoin appeared on October 5, 2009. On this exchange, \$1 equaled 1,309.03 bitcoin (which many considered overpriced at the time). In other words, the first valuation of bitcoin was little more than one-tenth of a penny. Yes, if you had bought \$100 worth of bitcoin in those days, and not sold them in some panic, you would be a half-billionaire today.

So here is the question: What happened between January 9 and October 5, 2009, to cause bitcoin to obtain a market value? The answer is that traders, enthusiasts, entrepreneurs, and others were trying out the blockchain. They wanted to know if it worked. Did it transfer the units without double-spending? Did a system that depended on voluntary CPU power actually suffice to verify and confirm transactions? Do the rewarded bitcoins land in the right spot as payment for verification services? Most of all, did this new system actually work to do the seemingly impossible—that is, to move secure bits of title-based information through geographic space, not by using some third party but rather peer-to-peer?

It took 10 months to build confidence. It took another 18 months before bitcoin reached parity with the U.S. dollar. This history is essential to understand, especially if you are relying on a theory of money's origins that speculates about the pre-history of money, as Mises' regression theorem does. Bitcoin was not always a money with value. It was once a pure accounting unit attached to a ledger. This ledger obtained what Mises called "use value." All conditions of the theorem are thereby satisfied.

To review, if anyone says that bitcoin is based on nothing but thin air, that it cannot be a money because it has no real history as a genuine commodity, and whether the person saying this is a novice or a highly trained economist, you need to bring up two central points. One, bitcoin is not a stand-alone currency but a unit of accounting attached to an innovative payment network.

Two, this network and therefore bitcoin only obtained its market value through real-time testing in a market environment.

In other words, once you account for the razzle-dazzle technical features, bitcoin emerged exactly like every other currency, from salt to gold. People found the payment system useful, and the attached accounting was portable, divisible, fungible, durable, and scarce. Money was born. This money has all the best features of money from history but adds a weightless and spaceless payment network that enables the entire world to trade without having to rely on third parties.

But notice something extremely important here. The blockchain is not only about money. It is about any information transfer that requires security, confirmations, and total assurance of authenticity. This pertains to contracts and transactions of all sorts, all performed peer-to-peer. Think of a world without third parties, including the most dangerous third party ever conceived of by man: the State itself. Imagine that future and you begin to grasp the fullness of the implications of our future.

Mises would be amazed and surprised at bitcoin. But he might also feel a sense of pride that his monetary theory of more than 100 years ago has been confirmed and given new life in the 21st century.

The Influences on Bitcoin

Bitcoin seemed to emerge out of the blue in early 2009 as a unified monetary and payment system, something no one anticipated. It's true that the people who saw its merits and viability early on were code slingers and hackers. They posted their masterworks in strange places, and these works are not available at university libraries. It's all a little much to get your mind around, and there's no academic literature about it. But then, the beauty of bitcoin is that you can jump in, start using it, and learn from the ground up.

For my part, I was incredulous about bitcoin for two years after I heard about it. It just seemed crazy that money could somehow be created by a computer without any external or physical foundation. In some ways, it seemed contradictory to everything we know about money. But now that the currency has taken hold, its infrastructure is being built, cash-to-bitcoin machines are going up everywhere, and mainstream opinion is gradually coming around. Cryptocurrency is real and it's not going away.

It's time for a retrospective on exactly who among economists anticipated such a radical idea, that markets themselves could discover and sustain a money independent of the State. When looking for economists, we need to begin with those who regarded money as a market good, created through entrepreneurial experimentation.

That path points directly to the Austrian school.

Carl Menger (1840–1921). "Money is not an invention of the state," wrote the great founder of the Austrian school. "It is not the product of a legislative act. Even the sanction of political authority is not necessary for its existence. Certain commodities came to be money quite naturally, as the result of economic relationships that were independent of the power of the state."

This idea runs against most of what we think we know. Money is produced by the State today and has been in most places in the world for the better part of 100 years, creating an illusion that the State is the reason for money's existence. This is untrue.

Money was nationalized away from markets, just as the roads and schools were. None of the reasons for this development are good. Government likes to control the money because it can depreciate it and thereby have another revenue source besides taxes. It can guarantee its own debts to prevent markets from evaluating them realistically.

The banks oblige this wish. In exchange, they are protected from market competition and enjoy protection against bank runs. In essence, the government grants banks the right to counterfeit so long as government can enjoy the first fruits of the printing press.

Once you release yourself from the myth that government created money, new possibilities emerge. Menger describes the emergence of money in evolutionary terms. There is trial and error. There is innovation. There are fits and starts. Something can be money in one place and not in another. Its emergence is gradual and goes through many iterations. "This transition did not take place abruptly, nor did it take place in the same way among all peoples," Menger wrote. This is a good description of bitcoin's emergence.

Ludwig von Mises (1881–1973). As I explained earlier, Mises deepened and broadened Menger's original theory about the origin of money in a book published in 1912. He was seeking an answer to the question of money's original price in terms of goods and services. He explained that at any time, there are many goods competing for money status—that is, someone would acquire the good not just to consume but also to trade for other goods.

He explained that it is impossible for anything to just be labeled "money" and therefore obtain value. There must be more to the process than that. Gold and silver, for example, obtained their money value by virtue of their prior use in barter. In this sense, money must extend from a living market experience.

How does this lesson apply to bitcoin? Bitcoin's underlying value is connected to its incredibly innovative payment system. The technology combines a distributed network, a ledger updated and verified for each transaction, cryptography, and a direct peer-to-peer system of exchange to create the blockchain. Users played around with the results for eight months before the attached currency (bitcoin) obtained its first market value.

Giving value to this digital currency was not something that government or social contract could accomplish. It takes real market experience with a valued good—or, in the case of bitcoin, a wonderful service that the whole world needs. Such is the origin of bitcoin's value. In fact, if there were no payment network bound up with the currency, the currency would have no value.

In my experience in explaining this process to people, the payment network is a real sticking point. Most people think of money and a payment system as different entities (dollars versus Visa). With national money, this reasoning is entirely correct. But bitcoin is different. It unites the two in one. That's hard to think through.

Mises made two additional contributions to the theory of money. He said that central banking was not necessary and predicted that it would be detrimental to the soundness of money. History has proven him right. In his ideal, money would function entirely apart from the State—just as bitcoin does. Also, Mises closely tied the cause of sound money to freedom itself. He compared sound money to constitutions that guarantee fundamental human rights.

F.A. Hayek (1899–1992). Hayek was Mises's colleague in pushing for fundamental monetary reform for many decades. Together they warned of the dangers of central banking. They demonstrated how expansionary credit policy leads to price inflation and business cycles and also fuels the growth of government. They begged and pleaded to reverse course. But they were doomed to be prophets of decline.

One year after Mises's death, Hayek decided to take a different course. In 1974, he wrote *The Denationalization of Money*. He gave up on the idea of government involvement in money at any level and concluded that there had to be a complete separation, even at the level of reform. He suggested a revolution from below.

He once favored the gold standard, but with this book he said, in effect, "We certainly can do better than that, though not through government." He explained that "we have always had bad money because private enterprise was not permitted to give us a better one." He endorsed a system of privately created monies based on a variety of technologies, including indexes of commodity baskets. These monies would all compete for market dominance, the same as any other good.

This book seemed mind-blowing at the time. But with bitcoin, it's not so crazy. The technologies were not around during Hayek's day, but now we can see how much we've been missing in the age of nationalized money. Money has gotten worse rather than better—and this evolution is different from that of private commodities, like phones, cars, and computers. Money can indeed be a product of private enterprise. The right reform plan is to just forget about the government's system and move onward to something more wonderful. In the competition for money and payment systems, the market system will win.

Murray Rothbard (1926–1995). The first I ever heard of private coinage was from Rothbard's 1963 book, *What Has Government Done to Our Money?* The idea astonished me, though,

again, the notion seems not entirely outlandish now. New research has emerged that has shown that private currency is a huge part of modern history, from England in the Industrial Revolution to the American 19th century.

The idea of private coinage wasn't his central contribution. Rothbard was a theorist of the idea of private property, spelling out its implications for the whole of the social order. It is private property that brings order, secures liberty, rationally allocates resources, keeps conflict at bay, allows for the adjudication of disputes, incentivizes production, and generally shores up human liberty. Rothbard firmly established that money is and must remain private property.

Why does that insight matter? It comes down to one word: banks. They first existed as warehouses, made necessary because of safety and the costs of transport. The function of banks as lenders is really something different. In either case, the rights to who owns what ought to remain clear. Alas, it was not to be the case. Banks love ambiguity over ownership. If they can warehouse your stuff and make money by lending it out at the same time, that's good for them. If they can get government backing for the practice, that's even better.

Rothbard's best idea for reform—spelled out at great length in his 1983 book <u>The Mystery of Banking</u>—was to reinstitutionalize property rights in the realm of money. No more should there be confusion and uncertainty about the titles to money property. Just as in the rest of the world, there should be clear distinctions. You can warehouse your money or you can lend it to a bank lender at a risk, but there should be no mixing of the two. In today's world, no one has a clue who has a right to what.

Now consider bitcoin. When I own it, you don't. When you own it, I don't. There are no intermediaries, no chargebacks, no confusions about how many there are or to whom they belong. To pay is to transfer, not just on some fictional ledger that may or may not reflect reality. This system is a Rothbardian dream come true.

To be sure, Mt. Gox's collapse muddied the situation substantially, but that failure is not intrinsic to bitcoin itself. It was a result of one firm that was poorly run, and this firm was compromised by a hacking theft, a cover-up, incompetence, or outright fraud (it's still just starting to be sorted out—for instance, Mt. Gox later found 200,000 BTC it didn't realize it had). But the beauty of the situation is that even with that institution's obfuscation, users knew of the foul play. For years prior to bankruptcy, it was obvious that something was amiss.

Bitcoin is still being traded. The newest firms are going the extra mile to make it clear that they hold all your property at all times. Plus, with paper wallets and cold storage, you don't have to use third parties at all.

Unlike the gold that Rothbard favored as currency (he died in 1995, just as the Web was privatized and began to mature), bitcoins are both weightless and spaceless. This means that bitcoin's warehousing function is technically unnecessary. Every owner can be his or her own

banker. This is a dream in many ways, since the warehousing function is technologically contingent, not an eternal feature of the world.

Israel Kirzner (1930–). Kirzner is a student of Mises's who has dedicated his life's work to understanding and expanding upon an insight of his teacher. Mises saw that economics resisted formal modeling for many reasons, but a major factor was the presence of entrepreneurship. There is a reason that textbooks neglected this topic for decades. It contradicts the goal of perfect prediction and perfect control. Entrepreneurship introduces an element of chaos that defies every expectation. Kirzner elaborated.

Entrepreneurship is the act of discerning unmet technologies and needs in a market setting and bringing them to life for consumption and production. Entrepreneurship means introducing something new that had been previously unknown. There is an element of surprise that is essential to entrepreneurship that drives forward the process of market development.

When we think of bitcoin, how can we not think of entrepreneurial surprise? It was released not as a traditionally capitalist product but rather on a free forum. Anyone could download it and start "mining" bitcoins. But only those super-alert to the opportunity did so. One of those was the inventor himself, who is a very rich person today. This is what it means to be alert to and discover an opportunity.

Today there are many thousands of businesses that have grown up around bitcoin. There are wallets, exchanges, retail and wholesale stores, service companies, and so much more. Each one represents a risk. Most will not make it. But some will. What determines their success or failure (leaving aside government regulations) is whether they meet the consuming public's needs. No one can know the results in advance.

Kirzner is the master of describing this process, one that Menger said is at the heart of causing a new money to emerge. Thus have we come full circle: 120 years of scholarship that describes the very economic heart of cryptocurrency. To most people it is mystifying and amazing, and truly it seems that way. But there is a logic to it all, even if it is only obvious in retrospect.

How many years will it be before the economic science of the non-Austrian variety catches up? For now, most professionals in this field are politely ignoring how bitcoin has blown up nearly all conventional wisdom about monetary theory and monetary policy. (Konrad Graf, though, is already on the story). Indeed, bitcoin was necessary in part because the current State-based system has utterly failed to keep up with the times. Had the market been allowed to work all along, instead of being restricted and truncated by State control, the system would likely be further along than it is.

Now is a good time to look back, dust off those neglected books, and rediscover the school of thought that anticipated the core of what makes bitcoin so incredible.

Money and Marriage

Money and marriage have several features in common. They both came to be controlled by public authority about a century ago. In the case of money, it was central banking that came to the sector. In the case of marriage, it was the mandated marriage license, implemented with a eugenic ambition.

In both cases, the advent of government control has forced the institutions into a particular shape in defiance of what would otherwise be subject to adaptation and evolution according to people's diverse social and economic preferences. And in both cases, they are sectors subject to a huge amounts of political controversy. Money and marriage have become weapons in the political war.

Bitcoin represents an attempt to escape regimentation and war.

What if the State had absolutely no control over marriage? That would solve some problems. No political figure would have a stake in how to define it. All control would devolve to social institutions. The existing bitter and divisive political battles would vanish. Everything would be handled by agreement, promises, contracts, private law, and non-state institutions, the same as other areas of life. Disputes would be handled through private arbitration.

I was so pleased to be tapped to help take history in a significant step in this direction. At the conference Coins in the Kingdom, a bitcoin event held at Disney World, I was honored to officiate at the first-ever marriage done on the blockchain.

The blockchain is the fantastic digital innovation that provides not only a ledger for the currency unit bitcoin but also an indestructible public record of verified contracts with timestamps. It works without any public authority—or any third party at all.

This wedding between my new friends, David Mondrus and Joyce Bayo, was recorded on the blockchain. They "burned" exactly 0.1 bitcoin through a CoinOutlet bitcoin ATM right there in front of all the witnesses. The transaction permits secure messaging, which, in this case, will be the wedding vows themselves, which were then permanently available for the world to see.

What's the advantage of this approach over the conventions? Well, if you know the way marriage licenses work, the jurisdictions don't communicate with each other. They are bogged down in terrible bureaucracy. The couple has to depend on access, verification, and confirmation from the public sector, and, meanwhile, disputes result in massive human suffering for everyone involved, and so only the lawyers win.

Moving agreements to the blockchain detaches the vows from the court system, the political system, jurisdictional geography, and third parties in general, among which is the State itself. It's a form of privatizing your own marriage, transferring it from the public sector to the realm of private decision making—among the two people who actually make the marriage happen—where it belongs.

Recall that aside from the technology discussed here, this private status is precisely how marriage has been contracted for nearly all of human history until fairly recently. Marriage has only been the monopoly of the State for little more than one hundred years. That's when we got this thing called a marriage license, and it wasn't long before the politicians were using the institution for their own purposes and deciding who you could marry and could not.

The idea behind the politicization of marriage was to control demographics. It was all about reproduction, and along with that came eugenics, the chilling hope among elite intellectuals for wiping out undesirables in one generation. Even today you find remnants of the eugenic spirit in the medical tests associated with the license to marry and the requirement that people who officiate at the marriage do so in the name of the State.

No surprise here: anything that politics touches doesn't end well. If you are looking for a root cause of the current culture wars over marriage, look at its nationalization and you will find the answer.

In our times, technology offers a viable alternative. Since the Genesis Block was released in January of 2009, all the focus has been on bitcoin and its spinoff coins. But if you isolate the merit of the blockchain itself, you find an extraordinary innovation that is capable of doing far more than provide a new, de-politicized money for the world.

The blockchain is a system of providing durable, verifiable, time-stamped records of information transfer, peer to peer and without third-party trust relationships. It holds out the possibility of reinventing the way we think of all contracts and even contract law.

This realm of distributed ledger technology is only now being explored. Just imagine its use in business-to-business contracting, futures contracts, public stock offerings, titles and mortgages, and so much more. What if all the institutions that are currently doing these things come to be displaced by the same P2P system of shared exchange that is reinventing so many other services today?

Does it sound outlandish, this idea of removing contracts and laws from the realm of the State? Probably. But remember, at its beginnings, bitcoin was so crazy that even the highly educated and informed dismissed it as non-operational. In the intervening period, bitcoin is being accepted by huge companies and nonprofits, is being embraced by the world's largest payment systems, and is being used all over the world. Just in 2014, bitcoin wallet transactions have nearly quadrupled.

Looking back further to the origin of email itself, I can recall dismissing it as a geeky innovation without any practical significance. Who needs the ability to send some message to some far-flung box on cyberspace that will be picked up at some unknown point in the future by only the handful of people who happen to have this thing called an "email address?" The way history unfolded from there was not anticipated by the mainstream.

It's been this way with online commerce too. Amazon, YouTube, Google, Wikipedia, the app economy, gaming, and the whole of the world that we all live in today was dismissed by those in the know. It's been 25 years of non-stop surprise. Given this, why do we cling so tightly to our embedded expectations that the status quo will persist? Why do we continue to dismiss edgy experimentation with technology as an inevitable dead end?

This is why I'm so respectful of the prospects for the blockchain to change the way we engage in our commercial and personal relationships, even if we can't know precisely how this will evolve. The blockchain makes something possible that has never been previously possible. With it, we can create property out of information, scarcify it, verify it, seal it up with cryptography, prohibit its alteration or duplication, and have every assurance that it will stay exactly as it is forever. And in doing this, we don't have to use coercion or worry about geography, politics, governments, and the immense legislative cruft that bogs down most all societies today.

Remember that progress starts small. It can begin with the first flight, the first phone conversation, the first email sent, the first bitcoin transaction on the blockchain, the first marriage contracted on distributed cryptographic ledger.

What will it mean in the future? One thing we've learned about the course of civilization is that people gravitate toward institutions and technologies that improve life and eventually come to throw out those that do not. Might this be just the beginning of a new way of thinking about contracts, law, and even government? Perhaps.

The Dinner Bill

A new technology solves a problem we didn't know we had. It make us aware of deprivations we didn't know existed until we discover the innovation. Once discovered, we can't go back.

People in the 1950s, for example, never missed the smartphone. They were pleased to have a phone at all. But today, we would never revert, not even to technologies one year old. It was this way with electricity and railroads and printing all the way back to the wheel and fire.

So too with bitcoin. People sometimes ask why we need a new payment system and new form of private money. The current system works just fine: That's what they think until they use bitcoin. Once they do, they wonder how the world can put up with such a slow, expensive, intrusive, fragile, and old-fashioned system as the dollar nexus.

Investor Peter Schiff pointed this out to me. He had been a bitcoin skeptic. Then he saw how his own clients can transfer funds while on the phone at near-zero cost, without going through banks or other institutions. He was dazzled and thrilled. After you experience that, the ground seems to shift.

Here's my latest example, drawn from a regular experience we've all had. You go to dinner or a bar with a group of 8 or 10 people. Early in the night, people are happy and living it up. Drinks, appetizers, more drinks, more snacks, shots, desserts, more drinks, whoo hoo! Life doesn't get any better than this!

Oh but wait! There is the matter of the bill. No one has mentioned this before. At this point in the evening, you start noticing that people drift to the exits to step outside for a smoke. Maybe it is deliberate, or maybe it is not. But regardless, it seems inevitable that by the time the check arrives, the crowd is oddly thinned out. They have avoided what is always an uncomfortable scene.

You could divide the check but no server appreciates having to do this, and even then you get the complication of who is paying for whom. So the total amount usually arrives in one check. It's less complicated this way. But when it arrives, you can't all just stare at it on the table, as if it were poisonous. At this point, someone must accept it or at least pick it up.

Let's just say you are kind and a natural leader, and the bill lands in your lap somehow. That's when the problems begin. You need to collect from everyone present. Not everyone has cash. A few people will point out that they only have a credit card, and since you don't accept credit cards—individuals don't accept credit cards, only institutions—they will just have to owe you or they will "pick up the tab next time," which, of course, they never do.

Some people have some cash but not enough. If you pick up the tab with a credit card and start collecting cash—based on people's estimates of how much they have consumed—it is a universal law that you will be short on funds. You will collect a third to half as much as you need.

Then you face that great dilemma. Do you do the math and start dunning people? Talk about a downer. Everyone will leave vaguely annoyed at you. In my experience, what happens is that one person ends up paying and collecting a fraction of the cash necessary to pay for the whole table. When this reality dawns on everyone—"I've got it covered"—people immediately act like it is a wonderful act of generosity, thank their benefactor, and move on with the night.

This scene is repeated thousands or millions of times every night. It is actually a serious source of quiet conflict and feeds resentments that can last and last. For those who have figured out the racket, they avoid it and some actually try not to find themselves in large groups for fear of the great struggle over the bill.

The entire trouble seems like a deeply *human* conflict, but actually it traces to technological limitations. First, individuals have no way to pay other people on the spot except through cash, of which they rarely carry in the right amounts. Second, individuals have no way to accept non-cash payments at the moment—no one is going to write a check under these conditions—so you end up with debts and vaguely made and unfulfilled promises.

No one is really trying to rip off anyone else or sponge off their neighbor, even if it seems to end up that way. It's all about the tools we use to make payments. Until recently we have lacked the means to carry flexible amounts of instantly transferable funds that can be moved at low cost from person to person without invoking the services of some third party agency that doesn't really serve individuals.

Now you might be thinking that there is PayPal. There is. But then you have to get an email address, and you have to pay some fairly high fees, and the service isn't really set up for casual friend-to-friend payments. It can happen but not without some difficulty.

The other night I was out with friends at a bitcoin conference. At this event, most everyone had a bitcoin wallet. When the check came, it was super easy and wonderfully fun to split. You hold up your phone, scan the QR code from another phone or allow your code to be scanned, and send or receive whatever amounts are necessary to pay what you need to pay. The process is a delight.

This works even if the establishment doesn't accept bitcoin. One person accepts the bill and everyone else pays via bitcoin. No more excuses about lacking cash or promises to pay later. The whole problem of the shared check is solved right there on the spot. People have every incentive to pay the right amount, since you aren't shoving cash around but creating a permanent record of a transaction. They can do so instantly, without paying notable transaction fees. Everyone leaves happy. It doesn't matter how the check is divided or if it is divided at all. The entire problem of check splitting goes away.

You might think, "oh, this check-splitting problem is just a silly annoyance, not a serious problem." In fact, it is a persistent issue that affects friendships and otherwise tight communities, and ruins social networks. It's a case in which you don't really know the source of the problem until you see the solution in operation.

Once you see the solution—a method for transferring value person-to-person instantly at near-zero cost without using a third-party intermediary—you see a huge array of applications for it.

I'm now thinking back to a scene from my childhood in which my father and his father argued over the check at a restaurant. No one had cash. Each had a credit card, so it was an all-ornothing deal. This was not a polite argument. It became worse and worse. Eventually it became physical, as each man grabbed the check from the other man. It was angry and awful, and oddly traumatizing for a young son to witness.

How much nicer this would have been if they could have quietly and effortlessly exchanged value through their smartphones. My dad could have paid bitcoin to his dad, and if his dad objected, he could have sent it back. Pretty simple, all with a smile. This would have been charming and delightful, an exercise in exchange and generosity.

So many human problems have their roots in technological failings. Think of how much late or lost mail made a mess of things before the age of email, or how many family conflicts were related to fighting over the use of the same phone. Solve the technological problem and you make life better for everyone.

Bitcoin can be this way. Once it enters into regular use, we'll all be amazed that we ever managed without it.

The Basics: A Bitcoin FAQ

Learning about bitcoin today is a bit like learning about the electric bulb in the 1880s. You either know everything because you are a specialist, you know nothing because you have never heard of it, or you have heard of it but feel too intimidated by the technical details to look in more detail.

This FAQ is designed for that third type, because, before about 14 months ago, that's who I was for two years. I was the archetype of rational ignorance. Who needs to know stuff before it's necessary?

Then I received my first bitcoin. That's when I realized that I had to buckle down and learn. What I discovered convinced me that it is the currency and payment system of the future. It is that much better than what we currently use.

Think of it.

The creation of the Federal Reserve in 1913 was not just about centralizing the creation and regulation of the money stock. It was about the nationalization of the money. What happens when you nationalize something? Development stops. It fails to keep up with the times. Quality goes down little by little. It stops serving people and starts serving politics. As time goes on, people forget what might have been in absence of nationalization. We adapt to the new dumb.

That's precisely what has happened with our money. No one really thought about what we might have been missing as a result of nationalization. Plenty of people imagined—for decades—that we should go back to a gold standard or to a free banking system. All of that is true enough. But it wasn't until 2009 with the release of the bitcoin protocol that we gained insight into what kind of development of which we have been robbed as a result of government control.

What does a modern, digital-age, Internet-based system of money and payment look like? Bitcoin shows us just that, and it is amazing to behold.

As compared with the dollar and dollar-based systems of payment transfer, we are looking at a Maserati as compared with a Model T. Fees are near zero, time of transfer is very quick, exchange takes place peer-to-peer with no third party, you move real property and not trust

relationship, there is perfect transparency, quantity of creation is limited, divisibility is potentially infinite, and anyone in the world with an Internet connection can use it.

What's not to like? Well, the technical details can be overwhelming. People can't get over the sense that something must be wrong. To fully grasp its merits, you need to understand open-source programming, distributed networks, cryptography, monetary theory, and the value of good code in the digital age. That's a ton to know. On the other hand, as with how people eventually didn't need to understand the light bulb to turn on the lights, we will eventually come to the time and place in which we just use the stuff.

But in this transition phase, people need to know. Hence, a few quick answers to common questions.

Question: What is bitcoin?

Answer: Bitcoin is cash designed for exchange on the Internet. It allows for the transfer of value between any two people in the world without the aid of a trusted third party. It has all the properties of money (divisible, scarce, fungible) but with two extra features: it takes up no space and weighs nothing. The protocol was released in late 2008 following that year's financial crisis. It became obvious that we needed a new system for the digital age. After many years of failure, the technical solutions to many extant problems were solved and Bitcoin came into being. It lived as a payment system for 10 months before the currency obtained any market value, and that value was a response to the market's experience that the payment system was working.

Question: Very simply, how does bitcoin work?

Answer: Bitcoin depends on a ledger system that exists on the Internet in millions of different copies that reside on any node. The ledger keeps up with property titles to bitcoin, recording public addresses and their movements through exchange using cryptography. Bitcoin has value because of this payment network called the blockchain. Everyone can see the blockchain in operation. There is perfect transparency, even if the identity of the owners are not known. New bitcoins are created through a process called mining, which really amounts to verifying transactions.

Question: Is it anonymous?

Bitcoin is not anonymous. It is based on pseudonymity. Your public key is recorded forever, and it is up to you whether you want your public key associated with your identity. How many public keys can a single user generate? In principle, an unlimited amount. Many merchants generate a new key for every transaction. There are many methods being created right now that further anonymize transactions but the user has to take that extra step. What matters most here is that bitcoin transactions are a direct exchange that do not require surrendering the whole of your personal identity, as happens with credit card transactions, resulting in massive fraud and identity theft. Another gigantically important factor here is this: in order to use bitcoin, you do not

need to be approved by a third party agent that assesses your merit and worth as an individual. You only need to be an owner.

Question: Are there any fees?

Answer: There are fees but they are very small, paid to computer nodes that verify transactions. This is another way to incentivize people to commit computing power to keep the network sound. The fees are a fraction of what credit cards cost. The high fees of credit cards are mostly related to fraud prevention, which is not an issue in the bitcoin world. Again, bitcoin is both a payment network and a currency. It is a completely different method of facilitating exchange than the status quo.

Question: Can't anyone create an unlimited quantity of bitcoins?

The number of bitcoins are strictly and severely limited by the protocol. It's true that bitcoin is an open source protocol, meaning that anyone can copy it but, at the same time, everyone knows who copied it. So you can create bitcoin as an exact copy but it will have no value. The ledger on the canonical system is constantly monitored for its integrity. Maintaining that ledger is not the responsibility of a company. It is the responsibility of the whole community in which anyone can enter.

Question: The estimated cap on bitcoin is 21 million. Is this enough bitcoin to go around?

Answer: The upward limit on bitcoin is enough because bitcoin is divisible. People say it is deflationary but that only means that it grows more valuable over time in terms of goods and services. Yes, prices fall in terms of bitcoin but falling prices are often associated in history with growing economies and economic sectors such as computers and software.

Question: What are your thoughts on the publicly traded bitcoin fund (ETF) proposed by the Winklevoss twins?

Answer: It shows promise, as do thousands of other bitcoin-related projects. Which ones succeed and which ones fail, we have to take a wait and see attitude toward. Let us remember that bitcoin is just a protocol, a string of code. It is not a company. It is not a stock. The infrastructure that grows up around is left to entrepreneurs and the market process of trial and error. Sometimes it is best to avoid the hype.

Question: What do you think about the feds approving bitcoin for campaign contributions?

Answer: It's fantastic, but obviously self-serving on the part of the political class. It's fascinating that usually bitcoin is treated by government like something only drug dealers and terrorists use (actually, they prefer the dollar). But in this case, the ruling was all for bitcoin. It passed muster because it would mean more value going to the ruling elite.

Question: Please explain what happened to Mt. Gox, the defunct bitcoin exchange based in Tokyo? What are the theories? What is the legal situation? What can we do now?

Answer: Every bitcoiner I knew rejoiced when Mt. Gox went down. Everyone in the know had a strong sense of the problems and resented its one-time, near monopoly on the exchange market. With this poorly run company out of the way, better players take their positions. What likely happened is a series of security breaches that resulted in theft that was covered up. Or it could have been outright fraud. Or denial. Regardless, lawsuits are pending. What we can do now is be careful not to trust any institution fully. Security for your property is at a premium until the market shakes itself out.

Question: What is Dogecoin? Tell me about it.

Answer: It's very cool, or maybe it is a silly fad. The market has to decide. Dogecoin is one of many currencies built on a Litecoin protocol, which in turn was built on bitcoin. There are tens of thousands of so-called altcoins in circulation today. This is market competition at work. They all live in their own ecosphere. May the best coin win!

Question: How does the U.S. government classify BTC?

Answer: The Treasury Department says bitcoin is property subject to taxation. FinCEN, a bureau of the U.S. Department of Treasury whose mission it is to safeguard the U.S. financial system, says it is a foreign currency subject to regulation. And now the FEC says it is just money that can be given to political campaigns. Defining and regulating bitcoin—which is a combination payment system and digital currency—is like putting a round peg in a square hole. Governments around the world will be trying to figure this out for years to come.

Question: How does mining work? What method does bitcoin use to authenticate/allocate blocks from miners? What are the alternatives?

Answer: Mining involves committing computing power to verifying transactions. The amount of bitcoin created during any period of time is fixed by the protocol, so the more computing power dedicated to the task, the lower the return. Mining in the early days of bitcoin was profitable given the price increase of bitcoin but much less so now. Currently, mining is mostly performed by large consortiums.

Question: What is a public key?

Answer: The public key is a known identity title to a certain transaction. It is part of the public record and part of the encryption process that protects the pseudonymity of bitcoin.

Question: What is a private key?

Answer: The private key is embedded in a particular user's wallet and is unknown to the user on the other end of the transaction. It's purpose is to maintain security between users, sharing only the information that needs to be shared and no more.

Question: Is it possible to double spend bitcoins?

Answer: It is practically impossible. There have been instances of double spending in the slice of time after transfer and before confirmation but systems are protecting against that unlikely scenario ever more regularly and efficiently. Dollars, on the other hand, depend fundamentally on double spending. That's the essence of fractional reserve banking as subsidized by the central bank's power to inflate.

Question: What about the size of the blockchain? Could that be a problem?

Answer: The blockchain is growing in size, and, yes, that is a problem. But developers are always at work on fixes to improve the efficiency and scalability of the ledger, which will grow until the end of time. This is beauty of open-source software. Every problem cries out for a fix, and the fix is then forthcoming.

Question: What is an altcoin?

Answer: Altcoin stands for alternative to bitcoin, which is mostly based on the bitcoin protocol. There are tens of thousands or more in circulation. Some are serious, many are scams, and most fall somewhere in between. They do provide an excellent testing ground for future developments in cryptocurrency.

Question: Are they scams? What is pump and dump?

Answer: As in any sector, there are scams, among which is "pump and dump," meaning that developers release a coin, fuel the hype, and then sell it. Which ones are real and which ones are not is impossible to say. There are serious risks to such altcoins and it will be some time before the altcoin market becomes stable and reasonably disciplined by market forces. This is part of what happens in any startup technology.

Question: Can you tell me about one or two popular altcoins? How are they different? Will they replace bitcoin?

Answer: Litecoin is the second most popular cryptocurrency. It is based on a different algorithm from bitcoin, and it has an infinite inflation rate. Others include Namecoin, Dogecoin, Worldcoin, Peercoin, Primecoin, and Feathercoin. All have unique properties and some appeal to people for specific reasons. The Indian nation of Lakota, for example, uses its own coin called Mazacoin.

The cryptocurrency market is still in its infancy. There is no way to predict its precise direction. However, the technology is there and its growth has been absolutely phenomenal to behold, as if development had been truncated by 100 years of government control. But there is no more holding us back!

If we were to assess Federal Reserve notes by the standards of bitcoin, we would observe (as did the poster on the bitcoin subreddit) that the US government has a 100% monopoly on mining, that the mining algorithm is run by 8 political appointees, that the block reward increases exponentially forever, that double spending is institutionalized by banks, that the confirmation time is slower than snail mail, and that the security test is neither proof of work nor proof of stake but proof of violence.

In a competition, the winner should be obvious. It is only a matter of time. The wheels of markets grind up government monopolies slowly, but eventually they grind to a very fine powder.

The New Wifi

Today most large cities have a network of shops, restaurants, and bars that are accepting bitcoin. They attract a dedicated group of fans and do very well by the cryptocurrency. They are the early adopters and it is paying off.

Why doesn't everyone accept it? Well, eventually they will. Bitcoin has every advantage. The fees are tiny as compared with credit cards. The transactions are safe, fast, and secure. There are no lost cards. There are no chargebacks. The money you make is yours.

It is just going to take some time to get from here to there. Markets are fast but the mainstream of market activity lags behind what the dreamers and idealists are doing.

You know what this reminds me of? The gradual way in which wifi came to be installed in coffee shops, restaurants, and airports.

It was the spring of 2004—if I recall correctly—and my favorite coffee shop had no wifi. Starbucks had it but only for users of some particular cell service. It wasn't common at all. It suddenly occurred to me that this made no sense. I can get service in my home. Why can't a coffee shop have wifi for its customers?

I had a talk with the manager. I explained to him that many people are becoming rather addicted to their online lives. If he made wifi available, I would do my best to get the word out. He would have a competitive advantage over others. People would come to be there just for that, and spend money on his coffee in the mean time.

I know all of this seems rather obvious at this point in history, but ten years ago, it wasn't so obvious. Merchants were just figuring this out. There were early adopters who won.

There were many questions about wifi in those days. Would people just languish and take up space, not spending money but hanging out forever? What if they use the network to download illegally? What kind of patrons are the type who can never stay away from the Internet?

This particular merchant decided to try it out. He got wifi. Over the next week, his place became so crowded and so sought after that he decided to stay open 24 hours. After that, he thanked me every time I came in the door.

Today of course every fast food restaurant has wifi. In fact, every casual space with places to sit is at a disadvantage if it doesn't have wifi. It took about ten years to make this a reliable feature of the world.

I seriously doubt that it will take that long for bitcoin acceptance to be common.

How important is it for the future of bitcoin? In one sense, it doesn't matter at all. The currency is invented for the Internet. Its primary feature is that it is the first technology that allows for the exchange of value, person-to-person, involving no third party trust relationships, in a manner that completely disregards geographic contiguity.

Even if no local shop that relies on foot traffic ever accepted bitcoin, bitcoin could still become the global currency for online commerce.

At the same time, there is a marketing appeal to being able to spend your bitcoin in your own community. How many times have you heard someone say something like this: "I will take bitcoin seriously when I can buy a sandwich downtown with it"?

It really does matter.

And the beauty is that the bitcoin network is so advanced that devotees of the currency love to turn up and spend as a way of rewarding early adopters. They will start holding meetups in your place and do promotion for you. You can't buy this type of advertising.

How long does it take for a merchant to get set up with bitcoin? It can be done in one day. There are many services out there but the most successful so far is with Bitpay. You need an account, some iPads or other tablets around; then the menu needs to be imported, and you are ready to go.

This presumes the merchant desires to convert bitcoin into dollars upon receipt. Most do, of course. The really significant stage of adoption comes when merchants prefer to accept and keep bitcoin. This will happen when enough of their own suppliers are accepting as well. That will require the phase of adoption in which bitcoin is actually used for accounting. That is to say, bitcoin will become the unit of account. Some people believe that it can be considered money only when this stage does arrive.

It all depends on how you want to define money, but I do think F.A. Hayek is correct here: moneyness exists on a continuum. Only in the final stage does it become a widespread unit of account. And to be sure: even now, there are many people who live entirely in the bitcoin ecosphere and care nothing for its dollar exchange rate.

All of us can play a role here in pushing history forward. Help out a local merchant and suggest that he or she accept bitcoin. It's a small way to make a big difference in the world.

Say I buy a cup of coffee with cash but the coffee turns out to be cold and stale. What should I do? I could just be annoyed and move on. Or I can march back into the shop and tell the merchant what happened.

More than likely, she would give me a new cup of fresh coffee. Of course she could also dispute your claim and say that you were at fault for not drinking the coffee right away. That would probably be a bad idea because she would lose you as a customer.

In any case, the negotiation of disputes here takes place in a normal way. You, as a consumer, try to find some way to settle the problem. If the problem can't be settled, you take note and change what you do the future. You don't go back to that store or you test your coffee before you pay. In this scenario, there is no imbalance of power. The merchant and the consumer try to work something out.

Now, let's change the scenario just slightly. Let's say that I as a consumer come into the store, I buy 12 cases of beer, 10 rolls of toilet paper, 20 cans of oil, and 10 cartons of cigarettes. The total bill is around \$350. I pay with a credit card. The next day I'm appalled at my free-spending ways. I call my credit card company and dispute the charge. I say I never bought this stuff.

Now what happens? Maybe the customer's card is cancelled for fear of theft. Or maybe not. In any case, the process called chargebacks comes into play, in accordance with federal law (circa 1968). The entire financial aspect of the transaction is reversed. The merchant does not get her money. But she no longer has the goods. The burden of proof is on the merchant to demonstrate that the transaction really did take place and that the consumer is lying.

Then the process of settling the dispute begins. It can take up to six weeks or longer. The merchant must pay all bills associated with settling the dispute. And the further the merchant takes the dispute, the higher the bills. The resolution process can cost between \$400 and \$5,000. So at some point the merchant must make a decision. Maybe it is just better to forget the whole thing and take a \$300 loss. Indeed.

Let's call this what it is: theft. My first exposure to the problems of credit cards and their ways came when I first worked in retail. A guy came in and picked out about \$2,000 of clothing. I was young and naive and very excited about the sale. I took his credit card and tried to run it. Visa called and said it was stolen and I had to confiscate it. I did this. The attempted theft was stopped. The guy was bummed but just walked away, which I thought was rather strange.

The credit card system has been around since the 1950s. My father was an early worker in this industry and he told stories about how wonderful it was. The entire system was based on trust. The store trusted you so it accepted your credit rather than make you pay immediately. Third party providers got involved. The store trusts Visa, Visa trusts you, so the transaction takes place.

The system was designed only for those who are trustworthy. In the intervening years, gigantically complex systems have been implemented to shore up this trust relationship. It is exclusive to those who have banks, cards, and other systems based on trust and known identities.

This is a serious problem in the age of the Internet in which all people in the world (potentially) can partake in exchange relationships with any other person in the world. Geography no longer matters. Identity no longer matters. All that matters is that you have talents, skills, and the desire to make a trade.

But there is a problem. Credit cards depend on far more than that. They depend on personal identity. That means that anyone without a card or a bank or a certified identity that a third party trusts cannot get involved. They are excluded. So far as anyone knows, this could be somewhere between 2.5 and 4 billion people in the world.

This is where cryptocurrency comes in. It restores money as real property. It moves on a ledger system that requires no trust relationship and no third party certification. It works entirely peer-to-peer.

Remember the case I mentioned in the beginning, the one in which I bought a cup of coffee with cash? Cryptocurrency allows that type of property exchange to take place between any two parties anywhere in the world. The entire chargeback system that has been constructed by government becomes completely irrelevant.

I hadn't thought about this point entirely until this past weekend. I heard a speech by Jamie Robinson, the CEO of QuickBT in Canada. He announced to the audience that the greatest, number one, most fabulous thing about bitcoin is that there are no more chargebacks. I've never heard this claim before. Even the audience seemed taken aback.

He went on to rail against the unrelenting looting of the merchant class through chargebacks and the legislation that is entirely skewed to defend the customer and steal from the merchant. He was very excited about the change that bitcoin means. But what interested me was how the audience didn't entirely process his point. People mostly sat there puzzled. Why?

Well, the problem is that only a tiny percentage of the population has experienced what it is like to be a member of the merchant class that pays these fees and faces the despotism of the chargeback regime. Most people have very little sympathy for the merchant in this case. In

some ways, I really admire this man, who works with merchants every day as part of his business, for daring to stick his neck out and say this, for speaking out on behalf of the producer for a change.

Bitcoin really is different. It is property, like cash. Once I made an error and sent an extra bitcoin payment to someone. I was stunned. I then realized that I had only one way to fix the problem. I had to ask for it back. It was quickly returned. That was that. Just like cash. Just like property. (To be sure, if I had my wallet configured for use with multiple signatures, that would not and could not have happened.)

For average merchants just trying to get by and serve consumers with honesty and integrity, this makes a gigantic bit of difference.

The Cure

Think back to 2008, the year the financial world nearly melted. Real estate was in a free fall, and the devastation was most intensely felt by the largest banks and investment firms holding mostly worthless assets in the form of mortgage-backed securities. The lame-duck Bush administration was frantically lobbying to spend \$800 billion to bailout the banks.

To achieve this implausible goal, the Bush administration, along with its counterpart in the U.K., had to whip up a kind of hysteria. Administration officials warned of a melting financial world. Banks would die, ATMs would run out of money, goods would not ship, the monetary system would break down, and the U.S. would go the way of Iceland, which, at the time, had run out of purchasable groceries.

Was it true? I never believed it. I had seen this kind of government-induced frenzy before, in which the establishment was pushing through things like Homeland Security, or NAFTA, or other huge and decisive bills that met with massive public opposition. The establishment has to create an environment of fear in order to get the bill through Congress. That's the way they do it.

Looking back at those days, it seems obvious now that this was a turning point in history, a time in which it became very clear to some very smart people in the world that the U.S. government's system of financial and monetary management was broken. If an entire system could be brought down by declining house prices, is it really robust enough to support global economic growth too much further into the future?

Enter the faceless programmer, Satoshi Nakamoto. Around the same time as the housing crash, he was putting the finishing touches on his newly proposed currency network, bitcoin.

It would be created entirely out of code. It would have all the main features that we know good money has. It would be divisible, portable, durable, uniform in quality, and scarce. He chose the model of open source code: everyone could see exactly how it is made. It would live on a ledger

in the Internet cloud, and the ledger would keep strict controls on creation of new units and the ownership of existing units.

There was just one problem: His newly created currency had no value whatsoever.

Nakamoto knew that if it were ever to have value, it couldn't be imparted by the programmers. It had to come from the market itself. The proposed product appeared that January, as the new administration was taking office. You could think of this as an act of secession, a final declaration of no confidence in the existing system.

For the next eight months, it was nothing but a curiosity. It was a techy dream that never reached beyond the dark part of the Internet and the tiny group of genius-geeks who follow things like it. But in October 2009 something amazing happened. Bitcoin obtained a price on the market. It began to trade at about 2/10 of a penny. In other words, one U.S. cent would get you 5 bitcoins.

How could this happen? Well, it had proven itself to be very useful and functional. It was portable. The system was stable. The ledger in the sky called the blockchain worked exactly as Satoshi expected it would. Bitcoin was also scarce. Only a certain number could be created in any period of time, and the way they would be created was through the hard work of computers themselves. This feature—scarcity and resource use—led the market to value them.

But of course that was all of 5 years ago. Today, bitcoin is roaring. There are a number of salient factors driving this. The myth that bitcoin is valuable only for purchases of drugs online has been shattered. The "Amazon for narcotics" was shut down but the exchange rate of bitcoin to the dollar did not collapse. In fact, after about 48 hours, the price had actually risen in value.

Also, China has entered the market in an important way. Some people believe that one-third of current trading activity is coming from China, where the government has shown itself to have a very laissez-faire attitude when it comes to the currency.

The Congressional hearings that manifested on Capitol Hill featured a line of administration officials warning bitcoiners that they were *on the job* to make sure that bitcoin would never be used for nefarious purposes.

But can these government regulators really fulfill their promises?

Bitcoin lives on a distributed network that cannot be taken down. It is immortal in that sense. The transactions take place under pseudonyms. That means you can track ownership *numbers*, but you can't necessarily connect those numbers to any particular person's identity if they choose to remain anonymous. It is not a perfect system for preserving anonymity, but it comes closer than anything that exists.

Government cannot control bitcoin any more than it can control algebra. Bitcoin exists and it is not going away. It will forever live outside the control of any State.

Satoshi proposed his system as a possible new standard for money in the Internet age. It was a wild dream and a speculation. But these are times in which dreams come true.

The current monetary system has been nationalized for over 100 years, and it has broken down. By their own admissions, the world's central bankers and presidents have said the current system is unstable and needs constant bailing out. That's not what you want to hear from people in charge of the system.

Satoshi saw that it was time for something new. The market apparently agrees. Now, no matter what any government does, they can't help but inadvertently promote the use of this new medium of exchange. It has a life of its own.

Bureaucrats can complain, threaten, pronounce, and warn. But in the end, bitcoin just doesn't care.

IV. Decentralization

I argued earlier that the market economy rests on love: affection and friendship between people as well as the romance of living out a dream. It's a peaceful love that depends fundamentally on human choice and the constant engagement of individual volition. Nothing in the market happens through initiated force. The result is not a utopia—there are always privations, misfortunes, misdeeds—but the market sees all of these things as problems to solve and contains mechanisms and means to work progressively and peacefully toward solutions.

To more clearly see this, it's useful to compare the market with the State, which also goes by the name of the public sector. But is it really about serving the public? Many thought it would be. About a century ago, when the intellectuals, politicians, and professional bureaucrats started building Leviathan, they said it was all about us. There were things we wanted that we just couldn't do for ourselves. If we let them have vast resources and power, and put the right people in charge, we could make ourselves wealthier, smarter, healthier, and happier. This old idea of liberty for all really had to go.

The claim seemed viable for a time. They would provide schools, keep our meat and hospitals safe, stabilize the money, bring about fairness, and professionalize philanthropy. There would of course be a cost to getting these great benefits. There would have to be a tax. It would only apply to the richest of the rich who deserve to take it on the chin. Their income would be taxed and their estates would be taxed. It's a small thing really. And look at the benefits!

The whole bargain really was a poison apple. It looked delicious but it was deadly for society. The realization of what had been unleashed on the world came early. The birth of Leviathan coincided with history's first world war. It was a total war, meaning that it wasn't just between states; it was between whole nations and peoples. More than 37 million people became casualties of that war, which was financed all around the world through the new magic money machine called central banking.

At the same time, states around the world found a great excuse to test out their new-found powers. There were price controls, wage controls, speech controls, conscription, labor camps, shutdowns of financial markets, censorship of the press, and all-round central planning. The whole of life, which had been somewhat normal and peaceful only ten years earlier, became ugly, oppressive, bloody, and despotic. It was a moment that shocked the world.

But the precedent had been established. The wartime bureaucracies did not go away in peacetime. A new class of bureaucrats had been born of people who held their jobs and powers regardless of public will or elections. Unlike businesses, which go away when they stop being useful to others, the new agencies were designed as permanent fixtures, and thereby became essentially unaccountable to the people.

The first global war set the stage for a series of calamities that came after, each of which became a new excuse for the new class of planners to unleash hell on their populations. There

was prohibition in the U.S. followed by the Great Depression and the fascistic experiment in national planning called the New Deal. All told, the U.S. had it pretty good as compared with others. The Great War ushered in Communism to Russia. In Europe, the political and economic destabilization from the war gave rise to fears of communism and the fascistic response to the communist threat.

The eventual result was the very thing that two generations of peace activists desperately tried to prevent: yet another world war, this time with more weaponry, brutality, and cruelty. This time 60 million people died, amounting to 2.5% of the world's population. It's amazing to consider. Every effort to bring peace consumed intellectuals and activists for twenty years and, because the State had more power and influence than all of them combined, and because the State had all the weaponry and power, war came anyway.

The response to the depression and the second world war gave birth to another layer of state control. Massive welfare states were born that continue to control health care, mandate work hours, form cartels of corporate establishments, provide security to old age, stamp out drug use, end invidious discrimination, redistribute income domestically and internationally, and so on. Nothing was beyond the power of the State. Not every power was used in every sector or in every case, but from this point on, very few states in the world were willing to acknowledge any effective limit on their powers. They were total.

None of the new monstrosities unleashed on the world bore much in common with the original Enlightenment-era vision. There was a time when people dreamed of a limited state, one that was checked by constitutions, representative democracy, courts that complied with laws passed by legislatures beholden to the people. This dream fully died 100 years ago. But let's move forward to the scene in contemporary America.

Until recently, people imagined that there were still *good* parts to the State, aspects of this machinery that were a net positive for our well-being and safety. This good part was embodied most closely in the police. They kept us safe, and surely we need that because private criminality remains a threat to everyone. There is a difference between the police and a police state. Surely the latter will never happen to us.

There were three major landmark events that changed the situation in the United States.

The first came in 1995 with the bombing of the Oklahoma federal building. It was a retaliatory act, accomplished by a man who had his conscience darkened by the killings in the first Iraq War. He was inspired to an act of vengeance in response to the government slaughter of an entire religious community in Waco, Texas. The explosion seemed to signal the start of a new kind of Cold War, one between government and the people it ruled. From that point on, the public sector coalesced into a tribe of its own, no longer thinking of itself as civilian. The bureaucracy united based on a paranoid fear of the people.

The second step came with the domestic terror of September 11, which seemed to confirm the public sector's fears of its own safety and instilled in the population a conviction that liberty had to be traded in for security. Spending on protection, surveillance, and militarization of the police at all levels was ramped up beyond what anyone had previously imagined. This effort consumed the better part of ten years of public policy planning and effort. The American police state was now lying in wait at all levels of society.

The third step came in an unlikely form: the financial crisis of 2008, which devastated local tax revenues due to the collapse in real estate prices. At the federal level, the multi-trillion dollar bailouts of established banking, corporate, and financial firms effectively ended any serious commitment to the idea of competitive market capitalism. At the local level, to protect revenue streams and pensions, police establishments turned to raising their own money through enforcement. They became agents of tax collection, living as direct parasites on otherwise peaceful people, and governments sincerely appreciated it.

There was a time when it was seemingly plausible to imagine the State as a helper, a benefactor, an agent of charity, a force for justice, a bringer of fairness, a planner more farseeing and wise than the decentralized, diverse, and dispersed population over which it ruled. Those days are really over. Now it is just a matter of connecting the dots and taking notice that the same institution that people believed would bring us to new glories has brought us to new depths of depravity.

The State does not love us. It's just not that into us. We should have known all along. How and why? Because the State brings to the social matrix only one unique thing: the legal use of compulsion, which means the power to hurt people and take their stuff (Matt Kibbe's phrase). One can only look back with astonishment that anyone ever believed unleashing it would do good things for the world.

How to make matters right?

It is not enough to understand what is wrong with the world, though that is an essential step. What awaits is a new awareness, one that reclaims the old liberal insight, that society can manage itself without a monopolist of power and coercion. Generations ago, people misidentified violence as a source of love; it is up to this generation to correct the error and embrace the real thing.

What do standing in line at the post office and doing the same at the airport security have in common? Both are rare times when average citizens are forced to deal with government directly. Admit it: we all hate it. But why do we put up with it?

Service according to the State: It means unpredictable wait times. You aren't really a customer; you are a bother—at best. Objecting to any aspect of the service is mostly pointless. Step out of line and you have predictable results. In addition there have been exploding costs. Individual rights have been violated. Our privacy and constitutional protections have been shredded.

Inefficiencies have ballooned. And what for? No credible terrorist threats have really been stopped.

Somehow, at the time this gigantic government apparatus was created, many people imagined that this time would be different, that government would magically do a better job at securing us than the private sector could or would do. Of course this time is never actually different. The bureaucracy gets created and people shake their fists at it, but, by then, it is actually too late.

A bureaucracy created never goes away. It gets worse even as it expands and takes on a life of its own. The abuses, wastes, and inefficiencies mount and no one can do anything about it. What I conclude from this is that the average person lives with a complete mental disconnect when it comes to government. We don't like dealing with it. We know the truth in our hearts. And yet we keep suspending our incredulity on the belief that government must be doing some wonderful thing somewhere even if we don't experience it ourselves.

There are people out there who have begun to see the pattern. These people are known as libertarians or liberty lovers or classical liberals or whatever. They are people who know that government is never the best means for social management. It doesn't matter the issue. Government promises always fall short.

Even worse, government wrecks everything it touches.

Wars increase violence. Moral crusades produce opposite results. Cultural planning backfires. Welfare programs break and fail to service. Monetary policy from the Fed yields massive financial distortions. Government security makes us less secure and subjects us to scary regiments of spooks and thugs.

The emergence of the libertarian sensibility is the single most exciting political trend of our time. It is happening at home and abroad, and it is intensifying the world over. No matter where you look these days, you see rebels. Many people are alarmed by this. I'm not. Rebellion is a necessary corrective to encroaching despotism.

The emergent rebellion is apparent in many sectors. When Obama flirted with war against Syria, there was a massive public outcry. The push for legalized pot arises from the same impulse. The outrage against NSA spying reflects it too, as does the push for the repeal restricting the rights of gays to marry. It might all sound like progress, but put it all together and you are in trouble. You are a subject, and the sullen faces and dreary postures of your fellow citizens in line underscores the point.

The truth is that no one relishes dealing with the government at any level. Where would you rather be: the drivers license bureau or McDonald's? The school district office or a local bar? A military base or a car plant? The courthouse or the shopping mall? Do you want to deal with a government cop or a private security guard?

There's a pattern here. It's a hugely important one. The relationship between the individual and the State vs. the same individual and the market is fundamentally different. We all know this intuitively.

I personally know no one who relishes dealing with government. No one. And yet I know plenty of people who support letting government take over ever more aspects of our lives. How can we make sense of this paradox?

Well, most expansions of government power are pushed without overt public approval, with plenty of deception, and the unfair advantage that government itself has in the political process. In other words, it is not necessary that people actively favor government expansion for government to continue its imperial march through society. It only requires a certain level of passive compliance.

The creation of the Department of Homeland Security—and the TSA as the centerpiece—is a great example. I was talking with Edward Lopez, economics professor at Western Carolina University, about how this came about. We were both around at the time and we compared notes. How did it happen?

Government took advantage of public fear and panic following 9/11 to impose what government had always wanted. There was private lobbying too: plenty of contractors have gotten rich, so their lobbying has paid off. The airlines might have played a role too in offloading security liabilities.

And this is a *brief* look at the political sector. In other areas of life, we are seeing the rise of massive innovation in the private sector that shows the failure of government. Large companies are generating their own power. The global digital money—bitcoin—is making new inroads. Local zoning laws and taxi monopolies are being strained by private initiative. And the daily excitement about private communication systems is breaking down the capacity of political elites to control the conversation.

It's not likely that any of us is going to make a dent against government control while acting on our own. But through innovative techniques chronicled and fostered at Liberty.me—which functions as a friendship network, publishing platform, news source, broadcasting system, and discussion board—we can work on solutions that can make government less relevant and eventually obsolete.

But in order to understand where we are headed, we need greater clarity about where we are. And we need a name for the system we are leaving.

Fascism Is Real

The term fascism really needs reviving, not as a swear term but as an actual description of an idea. This is because the idea is real, has a deep history, and taps into a political agenda and political system very much alive in the world today.

Sadly, when any word becomes unpopular enough, it just becomes an epithet. It then begins to lose its substantive meaning.

It's the same way with the term racist, for example. Today it is just a term used to insult people, somewhat like racist terms are used as insults. It's easy to forget that racism is actually an ideology, a body of ideas that makes specific claims about people, the social order, the political system, and the way all should be managed toward specific social goals. Racism as an ideology has had a gigantic role in the course of world events. It led to state-run eugenics programs, sterilization campaigns, exclusionary laws, wars, and attempted exterminations.

Fascism is an example of the same. When was the last time you heard the term used with any purpose other than to call someone a generalized bad guy? It has lost its actual meaning, and this is deeply regrettable. The term has been hijacked as little more than a generalized insult, and its actual significance has been lost.

To the extent that we fail to take fascism seriously as an ideology, we lose the capacity to recognize it when it appears before us. It would be far better if we could discuss fascism—and racism, for that matter—dispassionately as a serious body of ideas. Only then can we clearly see its actual evil and its continued dangers to the cause of human liberty.

I know of no better source for understanding its origins, implications, and meaning than John T. Flynn's remarkable 1944 book, *As We Go Marching*. Flynn provides a rigorous history of the birth of the idea in Italy as he moves on to map out its main features.

Resolutely, Flynn turns to the "bad form" of fascism as it emerged in Germany. He covers its realization in Spain, Greece, Portugal, Romania, Poland, Slovakia, Turkey, and Latin America.

Then he turns to the "good form" of fascism that inspired the New Deal—and it is because he called it what it was that this book is mostly unread today. His analysis is rich with detail, and his documentation of the parallels between fascism in Europe and fascism in America are overwhelming.

Today, we don't use the term to describe what happened in the U.S. in those years, simply because we like to congratulate ourselves for fighting and wiping out fascism in World War II. But did we really? The leaders of those systems are long dead but the ideas that brought them to power and kept them there are as alive as ever.

Fascism is a specific political and economic idea that arose in the 1920s, beginning in Italy, both from within the socialist ethos and as a response to it. It came from within socialism because it

opposed market forces and laissez-faire as a model for social order. It embraced the State as a unifying and competent manager of society.

But it rejected many ideas held by Marxist-Leninists and arose in political opposition to them. To that extent, it is a specifically non-leftist theory of politics with its own cultural, religious, and economic ideas. This is why it's incorrect to call fascism either right-wing or left-wing. It is both and neither.

Unlike full-blown socialism, fascism does not seek to overthrow institutions like commercial establishments, family, religious centers, and civic traditions. It seeks to control them by digging into this organic matter of the social order, celebrating it, uplifting it, centralizing it, cartelizing it, politicizing it, and using it in the glorification of a central father figure who works to make them work together toward the unified goal of building the greatness of the national identity and mission.

This is why fascism—unlike socialism—has an appeal to the bourgeois middle class, even to the corporate class, and why it is tolerated by religious establishments and trade unions. Unlike socialism, it preserves most of what people hold dear but promises to improve economic, social, and cultural life through unifying their operations under government control.

In terms of political influence on the 20th century, you can make an argument that fascism was far more influential than socialism, at least as regards Europe, Latin America, and the United States. Socialism, despite all the red baiting and frenzied debate for and against, was probably never much of an authentic threat. Fascism, on the other hand, absolutely was such a threat.

You can know this just by reading the mainstream periodicals from the early 1930s. Free markets were widely considered failed, old fashioned, and absurd. Socialism, at least in the American press, was regarded as dangerous to all that we hold dear.

Fascism, on the other hand, received a respectful and broad hearing. The *New York Times* profiled Benito Mussolini as a genius of central planning. Churchill praised him as the man of the hour. Fascist theorists wrote for American books and were lovingly interviewed by all the major journals. Even as late as 1941, *Harper's Magazine* was praising the glories of "the German financial revolution" and the magic of the fascist system.

The idea was in the air because fascism seemed like a viable alternative to both the presumably failed system of laissez-faire and the scary and creepy idea of socialism. What was this idea?

The idea can be summed up in the much nicer phrase "planned society." It is based on the leadership principle and the conviction that industrial enterprise, if it was to work at all, had to be guided from the top by experts with an eye to maximum efficiency and socio-political priorities.

Fascism's heralds did not seek to nationalize industry much less disrupt family life or abolish religion, as the crazy socialists imagined that they might do. It preserved that which was

politically valued by the population, and to this extent, fascism did not set itself apart from tradition. It sought only revolution within the form, a new and more scientific way of managing national life.

FDR's chief economic adviser, Rex Tugwell, summed up the entire philosophy, and in so doing, spoke for an entire generation of economists, planners, political pundits, and social scientists:

From what I know of human nature I believe the world awaits a great outpouring of energy as soon as we shall have removed the dead hand of competitive enterprise that stifles public impulses and finds use only for the less effective and less beneficial influences of man. When industry is government and government is industry the dual conflict deep in our modern institutions will have abated.

In greater opposition to the prospects of bitcoin, few ideologies could do better.

Flynn explains that fascism is nowhere near as clear as socialism in its agenda for society. Expediency itself is upheld as a principle—the State would do what it had to do no matter what. But after examining its operation in history and the moment in which it arose, along with the expressed principles of every fascist theorist and practitioner, he did come up with eight points that he regards as the core of the fascist creed.

According to Flynn, the fascist system is one

- 1. In which the government acknowledges no restraint upon its powers—totalitarianism.
- 2. In which this unrestrained government is managed by a dictator—the leadership principle.
- 3. In which the government is organized to operate the capitalist system and enable it to function—under an immense bureaucracy.
- 4. In which the economic society is organized on the syndicalist model, that is by producing groups formed into craft and professional categories under supervision of the State.
- 5. In which the government and the syndicalist organizations operate the capitalist society on the planned, autarchical principle.
- 6. In which the government holds itself responsible to provide the nation with adequate purchasing power by public spending and borrowing.
- 7. In which militarism is used as a conscious mechanism of government spending.

8. In which imperialism is included as a policy inevitably flowing from militarism as well as other elements of fascism.

Flynn concludes: "Wherever you find a nation using all of these devices you will know that this is a fascist nation. In proportion as any nation uses most of them you may assume it is tending in the direction of fascism."

Flynn wrote this in 1944, and his book's title had a double meaning. We were marching to fight fascism abroad. But at the very same time, the U.S. economy and society had fallen under complete government control: price and wages controls, the draft, rationing, corporatism, perpetual spending and debt, plus militarization and war. The irony was intense, and Flynn called it out. It's a wonder this book got through the wartime censors.

It deserves a close reading today, especially as we look around at government policy. Every industry is regulated. Every profession is classified and organized. Every good or service is taxed. Endless debt accumulation is presumed. Immense doesn't even begin to describe the bureaucracy. Military preparedness never stops, and war with some evil foreign foe remains a daily prospect.

All institutions of government originate with an idea. That idea has a name. It's not socialism. It's not laissez-faire. It's the third way that became all the rage in the 1930s. That few dare use the term correctly and accurately changes nothing about the reality.

The Police

Fascism as a political and social system centers on the use of the police power. How is that power used today to serve the political elite?

Somewhere in my bag I have an envelope that contains a bill. It was handed to me by a local policeman after being stopped on an interstate highway in Texas. I was doing a mean 80 miles per hour in a 75 mph zone.

So of course this great servant of the public had to stop me before I endangered the lives of so many others, including the people driving at 85 and 90 miles per hour who were passing me on the right and left. I got caught because—well, probably because the others were going too fast to catch.

So this guy stops me and informs me of my very bad behavior. He explains that I'm not allowed to do what I was doing and so therefore he has to give me a citation. But he assures me that this citation does not mean that I'm necessarily guilty. This is a government of laws, not of arbitrary dictates by heavily armed people in bulletproof vests, and so therefore I have a constitutional right to a fair trial.

Or so we are constantly told.

I kind of began pressing him on this, which I probably should not have done lest I get arrested yet again. But I couldn't help myself.

"Let's just say that I think you are wrong. I mean, you are probably right, but let's just say that I think you made this whole thing up. I can dispute this in front of the judge?"

"Yes, sir, you may. Just see the court date."

"And where is this court?"

"Right here in this county."

Of course I had to explain to him that I was headed to the airport and that I live 1,000 miles away. I asked whether I could use Skype or Google Hangout to attend my hearing.

"I'm sorry, sir, you have to attend in person."

I continued on: "So I have to drive to Atlanta, catch a flight to Dallas, rent a car and drive 100 miles south on some particular date in order to have my rights realized? You do understand that this would cost me probably two days of work and as much as \$1,000?"

"Well," he said, "how you get to the court is up to you."

"How much is the ticket?" I asked.

He said the cost chart is printed on the citation itself. Looking at it, I thought as best I can tell this will cost me about \$135. I asked whether, if he were in my position, he would rather spend \$135 or \$1,000. He didn't answer.

So I pressed further. "Let's say that I go through all of this and finally end up at the bench of Mr. Judge and declare my innocence. What happens then?"

"At that point, the judge will schedule a trial."

"Now, hold on here just a moment. So I've come all this way back and spent \$1K and then the judge schedules a trial, so then I have to repeat the whole thing over again, therefore spending \$2K?"

"Again, how you travel and how you get here is your concern."

"And, in the end, I still have to pay the ticket because, after all, you are the policeman and I'm just some schmoe who says you are wrong."

At that point, just slightly annoyed with me, he wished me a good day and left. I was the idiot holding the bill, and I couldn't help but just laugh.

After all, look at what my rights come down to. I can spend \$2,000 and probably four days of my life plus \$135, or I can just pay \$135. Hmmm, hard decision! Exercising my rights can be pretty darn expensive!

So let's think about this scenario for a moment. What happened to me? Did I get in trouble for endangering people, meaning that my citation improved the social order by goading us all into safer behavior? Somehow I don't think so.

I'll tell you what happened: I was taxed, which is to say I was robbed. This seems to be the major function of police work now, raising money for the government. In fact, it is something that police themselves have suggested as a way of forestalling budget cuts.

As *Police Chief Magazine* suggested after the 2008 financial crisis, there is a way to "help the survival of a city and maintain or expand police service through generating new revenue streams as a proactive approach to meet the fiscal crisis of today and the uncertain future of tomorrow."

Of course they don't pitch it this way to the public they plan on looting. We are told that it is all about our safety. Lysander Spooner said that at least the highwayman doesn't claim that he is stealing from me for my own good. Police should have at least as much integrity.

Now, let's take this analysis a bit further. What if I don't pay? I'll get a note that says I'd better cough it up and fast, or else I will lose my license.

Let's say I do lose my license and I drive anyway. Then I get caught and get fined again. And what if I don't pay again and still drive? At some point, I'll be jailed. And what if I try to run away while they are arresting me? I might get tased. I might get shot with real bullets. I might even die. This happens to people all the time, as we are learning from the countless videos of police abuse appearing online daily.

It all seems quite extreme, doesn't it? The death penalty for going a few miles an hour over the speed limit. But if you think about it, every law is enforced this way, all the way to the ultimate end point. Even the most seemingly innocuous law is enforced with aggression, not only against property, but also against life itself. This is why law, legislation, and regulation are so dangerous. In the name of bringing peace and order, they actually bring the threat of violence to bear against us all.

Sorry, officer, I don't feel helped.

The truth is that it is not police who make the traffic work. It is you and I who make traffic work. If traffic can work, society can work.

This is my revelation after fighting my way through Atlanta in rush hour. The level of mutual trust that is required to make it all come together is awesome to consider. Every driver controls what could either be transportation convenience or a killing machine. The prospect for deadly pileups and mass death is constant. And yet such results are actually rare. Mostly people get where they are going.

Human volition is the whole key, and self-interest (getting to where you want to be faster) is the universal goal. Instead of chaos, we mostly see an implausible order evolve. At every instant, people are making decisions to advance themselves but in a way that is least dangerous to themselves, which requires a certain level of cooperation with others.

Norms emerge. Tradeoffs ensue. Nonverbal cues take on huge significance. There are micropunishments in the form of horn honks and little acts of courtesy taking place constantly. You can't script this stuff. You can't make rule books detailed enough. In the end, you have to trust human decision making. The results are imperfect and constantly adaptive. It's a little society that shouldn't work but, in the end, it does.

This morning, it was rush hour in Atlanta, and I needed to turn right after I left the main highway. There was only one lane and it was backed up half a mile. The devil on my shoulder told me to stay in the middle lane and just drive, taking the chance that someone sweet who is closer to the intersection would let me in line.

As I got closer, I noticed that bumpers were closer together than I had hoped. I started inching my way in but a number of drivers were onto my game and refused to let me in. I can't blame them. I was driving contrary to the established norm, effectively trying to cut in line while feigning a certain naïveté about it. But as cars behind me that were being blocked started honking, a driver in the right turn lane took pity on me and let me in.

I inched my way in and turned, beating probably 30 people to my goal. I got away with it. I'm not proud of it. I cut corners in a way that was unnecessary and even a bit rude. Other drivers were not oblivious. Some stood their ground on principle. But one decided to give in a bit if only to keep the traffic functioning. She gave up a bit of her own interest in the interest of the whole.

I've deconstructed the scene in slow motion, but these kinds of micro-dramas occur millions of times in the course of rush hour in every major city in the world. We hardly think about them. Making such judgments, ongoing, instantly, continually, is what it means to be an experienced driver. They are part of the tacit knowledge of how we manage our lives.

If you had no confidence in the capacity of humans to manage their own lives, and likewise for order to emerge out of that, you would never allow such a thing to exist in the first place. In fact, given the ethos in government today, there is virtually no chance that government would ever have permitted such a system. Think of it: a huge flat space with painted lines and metal

contraptions operated by individuals hurling back and forth at top speeds. It's insane. But it works. It works because human society works.

On a hangout the other day, bitcoin scholar Andreas Antonopoulos told me about a case from London in the 1860s about which I knew nothing. Vehicles first emerged on the scene. The Parliament panicked, figuring that these terrible machines were capable of ruining the whole of life. The results were the Locomotive Acts and the Red Flag Act.

They limited speeds to 4 miles per hour. A person with a red flag had to run in front to alert others to the coming disaster. These acts were the first to establish vehicle registration and drivers' licenses. They were brought about by a government that didn't trust the capacity of people to manage technology. The result was that Great Britain put itself out of the running in terms of automotive innovation. That happened in the U.S. instead, the one-time land of laissez-faire.

Today, of course, car regulation is completely out of control. It's so bad that people have turned to building their own cars just so that they can own something that looks cool without having to buy and direct import from Italy. The obsession with safety is supposedly the driving concern, but this is ridiculous. Spend a few minutes driving in any major city and you realize that safety concerns cannot be addressed by coerced tweaks. The entire structure of highways and the right of individuals to control their cars at all are the major safety concern—at least, this is what it would appear from the outside looking in.

And speaking of innovation, the prospect of driverless cars now awaits, and these offer the chance for authentically improving safety. Will the government stop them through endless hectoring and belligerence? Government can slow down development, but they are coming regardless. As much as I love the way the potential chaos of the highways can lead to authentic order, there's always an improvement to be made.

In order to experience this improvement, however, there is really only one path forward, however crazy it may sound. You have to allow chaos in order to realize order.

Control Is Fantasy

Allowing chaos doesn't mean to live in it. Liberty and private property are a precondition for order. As an example, my visit to Disney World overwhelmed me with the incredible achievement of this private-property paradise. It only takes one visit to dismiss all the dismissiveness.

Despite what you hear, it is not about decadent and superficial consumerism. It's 43 square miles of eye-popping amazingness, making it not just the world's most visited vacation resort but also a living testament to what commerce can achieve when the State leaves it alone. It is always developing, always innovating, always wonderful for everyone who comes to see the sights and experience the dream. And every year more than 52 million people do so.

My super-short trip gave me only the smallest look into what it is all about. Even so, I could tell there was something different about this place from the rest of public life in the United States. And I don't just mean that people were everywhere dressed up as their favorite Disney character or that vast numbers of people were walking around in Mickey ears and Elsa dresses. Nor is it only about the merciful absence of heavily armed cops around every corner as you see in most places in the U.S. today.

The overwhelming impression that I gathered is a bit counter-intuitive. For all the fantasy and dreaming embedded in the experience, Disney World is more real world than I expected. And I mean that in the best possible sense. It is a place without pathology and systematic illusion about the structure of how the world works.

The driving ethos is clear: to achieve happiness. But isn't this also the driving ethos of life itself? Yes, and how does Disney World do this? By delighting us, bringing us beauty and fun, realizing our dreams insofar as reality can see them realized. It extracts the best that we can imagine and presents it to us.

These features drive out that bane of modern life: the pathologies of politics.

What I mean was summed up for me when I saw a little girl in an Elsa dress (*Frozen*) but with a head covering to indicate her adherence to the Muslim faith, an impression solidified by the dress of her parents. Indeed, religious diversity was everywhere, with people from every land and every faith all enjoying the sights and sounds. Every race, every people, were represented among the attendees. It was a huge jumble of people whom public life today says should be in conflict, but there was no conflict. There were only smiles.

It was a gigantic sea of people united in the desire for a good and happy life. Crucially, they were disunited in every other way, but those points of disunity had no relevance for whether their desire for happiness could be realized. This is because of the institutional structure of Disney World, that is, its nature as a private-property society. No one is struggling for control. No one is using the system as a method for surreptitious plunder. No one is seeking shelter from being pillaged by the mob divided into voting blocks.

Is this because there is top-down control by a corporate oligarchy? No, that is one of the great myths. There are thousands of hotels, hundreds of thousands of businesses, endless numbers of separate owners and entrepreneurs that have thrived as part of Disney's original business structure. The light of the original vision has brightened and spread to the point that it really is an example of a decentralized structure—just the right mixture of spontaneity and planning in the service of human needs.

Human choice is the heartbeat of the entire apparatus. It's an empire created from human volition. All of which is to say this: what I find special here is that people could relax and just be regular human beings. Why? It is not just because it is a fun place. There is a deeper reason.

Disney World is depoliticized. There is no State, and Walt Disney intended it that way. Long before people imagined "free cities," digital cities like Liberty.me, or Seasteading, Disney imagined a fully private world of commerce and hope.

Therefore, there are no fights over who will control the State and what that State will do. The entire issue that has dominated public life in most all places for many hundreds of years is entirely off the table.

As such, the real fantasies and pathologies of our time—those flowing from political life—are nowhere present. You might consider some of the more egregious ones. In political life, people are led to believe the following:

- Politicians can pass bills to create productive jobs that private enterprise would not otherwise have thought to create;
- The Federal Reserve will use the power to print money to bring economic recovery magically into existence out of nothing;
- Regulators and politicians can calibrate the conditions of industrial production in a way
 that will control the global climate in a manner that beautifully balances planetary health
 with human need, and at the lowest possible cost;
- Health professionals and elected officials can sign a piece of paper mandating physical and mental health and cause them to come into being;
- Generals and war planners can come to cause the Middle East to be peaceful and prosperous by supplying the right people with weaponry, imposing martial law via foreign occupation troops, and periodically bombing people who have doubts;
- People exercise their political freedom by going to the polls every four years to vote for one of two marionettes for coalesced special interests and that the winner's "vision for our nation" will bring about a glorious new order;
- People can be made to be moral and virtuous at the point of a gun;
- Civil servants and the police can cause a whole population to lose its penchant for drugging itself with illicit substances and not find illegal ways to get them;
- Judges and jailers can bring about justice by rounding up non-compliant citizens by the millions and keeping them in cages for decades at taxpayer expense;
- The political class can enact one of the highest capital gains taxes in the world without incentivizing business to move its operations farther away;

And the biggest, grandest illusion of all: that people can't run their own lives because they are too stupid and powerless but these same people are smart enough to be given the power to choose others to run their lives for them.

And that's only a handful of millions of pathologies and fantasies that dominate public life—they go far beyond anything woven by a Disney movie and they are far more dangerous because the people who believe them have every intention of seeing them realized. The proponents of this worldview are weavers of illusions and for a nefarious purpose. They want us to submit to their plans.

The State is a gigantic version of the witch with the poison apple. It invites us to bite in hopes of quelling our hunger but the result is sickness and death. Its security apparatus is Rapunzel's captor who wants us to stay in the tower, safe from the wiles of the world outside. It is the wizard who claims to create something out of nothing and ends up drowning us in illusions and lies.

Disney World is mercifully free of all of this. Instead it taps into our desire to live a normal life, seeking happiness and dreaming of a better tomorrow. It is a world built by our choices and our aspirations, not one built on the pathological desire to control and change the world into something it is not and cannot be. To enter Disney World is to leave behind the worst and most destructively malevolent fantasies ever imagined by the human mind.

The Invisible Order

F.A. Hayek is an epic figure in the history of human freedom. He stood for liberty at a time when most intellectuals in the world embraced ideologies of command and control. His literary legacy continues to provide some of the most powerful arguments ever made for the depoliticization of the social order, including its commercial life.

But, in my personal experience, he can also be one of the most difficult thinkers to grasp. After F.A. Hayek died in 1992, for example, a magazine commissioned me to do a final tribute to his life and work, summing up his main contributions. It was supposed to be for a popular audience. There's nothing like such a writing assignment to reveal how much you actually know—or do not know—about a subject.

I thought it was going to be a snap. I covered his biography and politics just fine; I mentioned his business-cycle studies and his work on capital theory. But of course his main contribution to the world of social science is summed up in the phrase "the knowledge problem." Even though I read most of his major work, and read his seminal articles on the problem of knowledge, I was stunned to find myself with writer's block.

What I came to realize is that I didn't understand, much less appreciate, his writing on this topic. So I covered the basics (the knowledge needed to run the social order is distributed in individual minds and inaccessible to planners), but my heart wasn't in it. That's where matters stood for me for about twenty years.

I tried to make an effort to get how it was that Hayek was able to write vast literature on this one subject, why his seminal article "The Use of Knowledge in Society" was the most cited article in the second half of the 20th century, why innumerable dissertations have been written on Hayek's insight, and why he has influenced countless scholars in so many disciplines for so long.

Part of the problem is that Hayek did not always write with his logic and conclusions on his sleeve. His rhetorical style is not so much hortatory or doctrinaire as it is searching and exploratory. You get the sense that he is thinking through an issue as he writes, struggling to find the right combination of words, the right phrasing, the right examples to capture his insight—which always seems to be unfolding in real time rather than stated like a final product for consumption.

For someone who is looking for final answers and pure theory, this type of writing can be frustrating. There was the additional problem that Hayek can just be downright annoying in places, contradicting himself by endorsing political programs at odds with his own theory. He also has a habit of backing away from the hardest conclusions of his own narrative. If you seek a clear definition of ideas like freedom or property rights in Hayek's work, you will come away disappointed. He often seemed so consumed by the complexity of the world that he shied away from clarity for fear that he had missed something. For readers looking for ironclad deductions and arguments, his approach can give the impression of being an elaborate display of obscurantism.

In order to understand Hayek and to learn from him, you have to be prepared to think alongside him as he writes. His work presumes an open mind that is ready to think about complex topics, most often from the inside out. He is asking and seeking to answer a completely different set of questions than most people are even willing to consider. Most readers are not prepared to consider them. This is a point it took me many years to understand.

What changed for me? I needed a visual application of the knowledge problem, something that connected the theory with reality. This happened to me at a bar atop one of the highest spots in São Paulo, Brazil, a spot where you could make a complete turn and see the lights of the city as far as you looked. It was a world without end, in all directions.

I was overwhelmed at its utter incomprehensibility. It was too much for my mind because it is too much for any mind. The revelation hit me like a truck: this is an order that no one can possibly comprehend in either its totality or its parts, and, as such, an order that no one can possibly control. It cannot be built by anyone in particular; it is built only by an extended and hyper-complex process that is driven by individual minds that takes many generations to unfold.

It can only be harmed by those who would presume to control it—and the bureaucrats and politicians in this city surely do. The regulators can pass regulations. The planners can order buildings built and torn down. They can loot those who are willing to comply. But, in the end, in this city of more than 11 million people, even in the presence of overweening government, society somehow takes its own course. How this happens and why cries out for explanation. "The knowledge of the circumstances of which we must make use never exists in concentrated or integrated form," explains Hayek, "but solely as the dispersed bits of incomplete and frequently contradictory knowledge which all the separate individuals possess."

I came to realize, right there, that this is not just about São Paulo. It's about any city in the world. In fact, it's about every social setting, large or small. It's about the whole world. Only individuals possess the knowledge that nearly all social scientists—and bureaucracies—imagine that they can, must, and do possess. Anyone who seeks to control the social order is presuming that the unanswerable questions are already answered and proceeds from that point. Hayek is digging deeper to observe that we cannot possibly know what we must know if we seek to design much less rule the world. The knowledge is dispersed and, by its nature, uncollectible.

Is Hayek describing a world of disconnected chaos and uncoordinated randomness, a nihilistic social order of swirling unpredictability? That is not the world in which we live. Why not? Because of the existence of institutions like prices, mores, habits, signaling systems of culture and learning—of knowledge that we all possess, not always consciously but mostly inchoately. They are institutions that we ourselves have not created, but they assist us in making the most of our lives.

"We make constant use of formulas, symbols, and rules whose meaning we do not understand," writes Hayek, "and through the use of which we avail ourselves of the assistance of knowledge which individually we do not possess. We have developed these practices and institutions by building upon habits and institutions which have proved successful in their own sphere and which have in turn become the foundation of the civilization we have built up."

As I stood at the same bar in São Paulo looking all around me, my vision changed from macrocosm to microcosm. I observed two people standing close by. They were embracing, kissing intimately. I wondered whether this was a first date or if they had been together for many years. I had no access to that information, and nothing they did gave me the answer. They seemed to be courting each other but at what level and in what way I could not know. And yet this information was foundational to everything both of them were thinking at the time. To truly understand this relationship, I would have to know not just about their relationship but countless bits of information I could not really know.

What's more, even this two-person society was not comprehensible to the two people themselves. Part of the spark of their relationship was the emotional dance they were engaged in right there on the spot. Their intimacy was their means of accessing, however incompletely and briefly, the true spirit of the other's intellectual and emotional state of mind. They can come close, through every means available, but never entirely achieve that oneness for which true love strives.

Even so, both people in this two-person society were seeking longingly and lovingly for the ideal, coordinating their actions through shared cues, language, and symbols. And in so doing, they created their own micro-order right there, as had everyone else in that bar, as has every one of the 11 million people in that city, as has every one of the 7 billion people on this planet.

We all seek some form of individuality but also a connection to others. We can create institutions to make this possible, but mostly we embed ourselves within them. The institutions

emerge from within the structure of our shared experience, chosen and not imposed, and we gravitate toward those who work and eschew those who don't, in an ever-evolving process of discovery.

Let's say you set out to plan the world. "If we possess all the relevant information," writes Hayek, "if we can start out from a given system of preferences, and if we command complete knowledge of available means, the problem which remains is purely one of logic." We only need to plug in the right data into our calculus and issue orders. The problem is that this solution presumes that the unsolvable problem—gaining that information—has already been solved.

What is the significance of this revelation? It lays waste to a century—or many centuries—of intellectual pretense. The social order is built by the coordination of plans. If those plans are always individual plans, radically individuated and subjectivized, coordinated only through evolved institutions created by no one in particular, the dreams of every would-be master of the universe come crashing down.

The most obvious conclusion is also the most powerful one from a political point of view. The source of order is not the government, even though people continue to believe that despite all evidence. The bureaucratic class and the politicians who empower that class are no more or less smart than you and I. They are people with no special insight. Because of government's legal right to plunder, the government is corrupt and exploitative. It takes stuff from people. That's about the whole of it. It is not the source of anyone's order.

What then is the source of social order? It is our individual minds, however imperfect they may be in making judgments about our world. Freedom is the only real option there is. Anything else is based on a lie—a "pretense of knowledge," as Hayek would say. Anything that subverts that freedom, which means any State at all, amounts to an attack on the very source of social order.

"If we can agree that the economic problem of society is mainly one of rapid adaptation to changes in the particular circumstances of time and place," Hayek concludes, "it would seem to follow that the ultimate decisions must be left to the people who are familiar with these circumstances, who know directly of the relevant changes and of the resources immediately available to meet them.

We cannot expect that this problem will be solved by first communicating all this knowledge to a central board which, after integrating all knowledge, issues its orders. We must solve it by some form of decentralization. But this answers only part of our problem. We need decentralization because only thus can we insure that the knowledge of the particular circumstances of time and place will be promptly used.

I'm drawn to Hayek's use of the terms "immediately" and "promptly." With these words he introduces the ultimate enemy of all those who would control the world: the passage of time. With the existence of time comes change, and with change comes new and different knowledge. Even if it were possible somehow to gain a complete snapshot of the world with all

its existing knowledge, by the time it could be used for any purpose to bend the world from its course to another, that knowledge would be outdated and hence useless. Even under the best circumstances, the planners would only be planning the past.

Here, then, is the knowledge problem. It is about more than the ability to plan an economy. It is about the whole of our lives. It is about the ability to plan and direct the course of civilization. That capacity to manage the world, even the smallest part of it, will always and everywhere elude our grasp. That's a beautiful insight, because it reveals the truth about human freedom.

Freedom is not just one way to organize society. It is the only way.

What We Cannot Control

The conversation with a good friend—brilliant man but a head full of confidence in the planning state—was going well. We've agreed on so much, such as war, civil liberties, the dangers of religious intolerance and so on. We've always argued about points concerning economics and property rights but it has always been polite.

Then the other day that changed. For the first time ever, the topic of climate change and policy response came up. I casually dismissed the idea that mandatory steps away from industrialization plus global regulatory controls could accomplish anything. Plus, how can we really know the relation between cause and effect, cost and benefit, problem and solution?

These are not radical points. The same crew—tax-funded experts and functionaries—that claims to be able to fix global temperature and save humanity from melting ice caps decades from now also said 25 years ago that they would bring peace, happiness, and understanding to Iraq. They spent \$2.4 trillion and smashed a civilization.

This is what bureaucrats do. They always pretend to know what they cannot really know, and are more than happy to squander other people's money and liberty in order to realize their dreams. When they screw up, no one pays the price. This is why government almost always—make that always—gets it wrong.

Whatever the problem, government is not the answer. Hardly any proposition concerning life on Earth strikes me as more obvious.

So, my tossed-off, slightly dismissive comments on the global warming crusade didn't seem so outlandish to me. I was merely extending F.A. Hayek's "knowledge problem."

We can't know with certainty whether, to what extent, and with what result, and in light of possible countervailing factors, how climate change (especially not 50 years from now) really affects life on earth. We can't know the precise causal factors and their weight relative to the noise in our models, much less the kinds of coercive solutions to apply and whether they have been applied correctly and with what outcomes, much less the costs and benefits.

We can't know any of that before or after such possible solutions have been applied. Science requires a process and unrelenting trial and error, learning and experimentation, the humility to admit error and the driving passion to discover truth. In other words, real science requires freedom, not central planning. The idea that any panel of experts can have the requisite knowledge to make such grand decisions for the globe is outlandish and contrary to pretty much everything we know.

Plus, throw politics into the mix and matters get worse. From everything I've read, I'm convinced that fear over climate change (the ultimate public goods "problem") is the last and best hope for those lustful to rule the world by force. Some people just want to run the world, and this entire nightmare scenario that posits that our high standard of living is causing the world to heat up and burn is the latest and greatest excuse. And that remains true whether or not everything they claim to be true is all true or all nonsense.

In the conversation with my friend, I didn't say all of this; I just hinted at it vaguely. It was enough. He began to shake. He turned white and began to pace. He called me a denialist. He was horrified to discover that his good friend turns out to be some kind of extremist weirdo who disparages science. He began to accuse me of believing in things I never said, of failing to read the science (though later admitting that he hadn't read the science).

I stood there stunned that I could have so quickly and inadvertently changed the whole dynamic of our conversation and even friendship—all for having suggested that something seemed a bit out of whack with mainstream opinion on this topic.

This is not the first time this has happened. In fact, I should have come to expect it by now. Every time this subject comes up with anyone who favors government action on climate change, the result has been the same. We seem to be unable to have a rational conversation. It's like an article of faith for them, and I'm suddenly the dangerous heretic who believes the world is flat.

Now, in light of this, I read Paul Krugman this morning. He has written this in his column: "Read or watch any extended debate over climate policy and you'll be struck by the venom, the sheer rage, of the denialists."

The denialists? My whole experience has been the opposite. By denialists, I'm assuming he means people who doubt the merit of his grand central plan for the world economy. Among them, I've found a vast range of views, an open mindedness, and curiosity about the full range of opinion, and, quite often, an attitude that seems to me—if anything—to be far too quick to defer to all main conventions of this debate.

I have no interest in taking on the science of climatology but every time I've looked into this in depth, I've found that the consensus is far more loose than people like Krugman would suggest. Real scientists do not have the intensity of certainty that the politicians and pundits demand they have.

Discerning cause and effect, cost and benefit, problem and solution, in a field that touches on the whole of the social and natural sciences—come on. We are kidding ourselves if we think there is just one way to look at this.

If you want tolerance and humility, and a willingness to defer to the evidence and gradual process of scientific discovery, you will find it among those who have no desire to manage the world from the top down.

What can we say about those who want to empower a global coterie of elites to make the decision about what technologies we can use and how much under the guise of controlling something so gigantically amorphous and difficult to measure, detect, and precisely manage as earth's surface temperature?

This is a level of chutzpah that surpasses the wildest fantasies of any socialist planner. Even without knowing anything of the literature, without having read any of the best science on the topic, anyone with knowledge of the politics of science and the politics of public policy can know this much about attempts to deploy the State to deal with climate change: this is not going to end well.

And perhaps this explains the incredible intolerance, belligerence, and stunning dogmatism of those who are demanding we shut down the market in order to accommodate their wishes. They really can't allow a debate, because they will certainly and absolutely and rightly lose. When that is certain, the only way forward is to rage.

V. The Future

The classically liberal intellectual tradition revolted against the planning state of the 20th century and kept the flame of liberty alive during dark times. The economic and social trends of our time confirm that its once-lonely adherents were right to do so. And today we see the emergence of a new generation that has embraced this tradition of thought to bring it to the new century with new applications.

The fall is regional conference season, with liberty-minded events flourishing all over the country. It's keeping me hopping from place to place. I've had a blast finding liberty in unexpected places, with participation booming in ways I never could have imagined ten years ago.

The change is palpable. Consider, for example, what happened the weekend I spent in Wichita, Kansas. For half a century, many of the old guard of libertarian thinking had worked to get a student movement going in the city, drawing from local colleges and universities. They worked it for years but never got it off the ground. Their every effort ended with disappointment.

The Students for Liberty held an event and packed a conference room at Friends University with interested students. They stayed for the whole event of lectures and panels, ate lunch, and went to the social later. It was an exuberant group, with equal numbers of convinced libertarians and people just curious about what's going on with this intellectual and social movement.

The older people were delighted and pleased by what they saw. Why is this happening now and not in the past? Why after 50 years of work do we see new and seemingly sustainable energy in this idea space?

One major change is that organizers of these events have come to understand that they need to be about more than seminars and lectures. Liberty on the Rocks, Students for Liberty, Young Americans for Liberty, and many other organizations have built fun and socializing into the structure of what they do. There are pre-conference socials, warm environments, lunches with live music, gatherings at bars afterwards, interesting exhibitors and much more.

They have worked to make the presentation of ideas part of an exuberant and delightful experience. Why is this important? We need to model in real life the dream we share for the world of the future. Freedom can't only be about instruction, it also has to be about a life well lived. The new style of seminars are about demonstrating the happiness, creativity, and spontaneity that flows from the free mind.

The quality of the presentations has vastly improved in recent years too. As a lecturer at many of these events, I've felt the pressure to get better and better. Hiding behind a podium, reading a speech in a low tone, trailing off at the end for Q&A—these approaches are now depreciated in favor of standing on an open stage, speaking without notes, using great visuals, and keeping it lively. A delightful environment of competition between speakers has emerged.

The topics that are covered have tended to pertain to real life and less often focus exclusively on high theory. The history lectures deal with daily life of the past and how expanding freedom improved it. The political topics are about provocative subjects like drugs, immigration, women's rights, and war. There seems to be a conscious attempt to show the diversity within libertarian thought and to treat this as a strength rather than a problem.

I've also noticed a shift toward application to life outside of politics. This is an important change. For decades, the only real "action item" related to liberty was to get involved in a political campaign. The trouble with this approach is that, realistically, there is very little any of us can do about directly changing the structure of the State. My own opinion is that this past emphasis on politics alone is one reason for high attrition: people lose heart if they believe systems don't change the world around them.

But these days, the liberty agenda has many ways to be applied outside of politics. There are lifehacks everywhere, designed to make liberty a going concern in our daily lives. There are ways to protect yourself from the police, to get around the central plan on education, to live in freer places, to integrate the idea of freedom into family life, to manage personal finances toward maximum liberty, to innovate with new technologies, to use private currencies, and so on.

These are new directions for the cause of liberty. It's about building the freedom we love, not just waiting for it to be given as a gift from the on high. The socialists have always been interested in applied versions of their theory. This is why they rarely talk about environmental regulation without exhorting people to bike not drive, to recycle, to start a composting pile in the backyard, or whatever. Ideology needs application in daily life for it to really matter and make a difference. Libertarians are just starting to get the point.

After talking to many of the students at these events, I've also noticed a new urgency to find better ways to understand the world. Life is changing dramatically in the digital age. We are living on our smartphones, accessing peer-to-peer technologies, finding better ways to organize our lives.

But when you turn on the television and watch the political news, you find very little discussion of these new realities. They only talk about intensified ways to control the old world. They talk about the merit of a new foreign war even though war has completely failed. They talk about spying on our communications even though no one wants to be spied on. They talk about ramping up the failed war on drugs even though there is no prospect of success.

The chasm between our real lives and the made-up world that dominates political life grows larger every day. There are growing anomalies between the way young people know the way their world works and the way the political culture pretends the way the world works.

Technology is working to build a new world every day. But the political culture is obsessed with both holding back that progress and trying to fix their unfixable errors from the past. This strange situation is generating a new curiosity among the millennials to find a better way to understand the world.

The result of all these changes—internally and externally—is that liberty-minded events, websites, and organizations are thriving as never before. It seems to have staying power this time, and it portends a beautiful future.

Not everyone sees the need for a conscious adoption of liberty as an intellectual ideal.

"What are you complaining about all the time?" people sometimes ask me. "I'm just about as free as I want to be."

Here's the problem: How can we really know what we want if we've never had it before? The less free we are, the less we know what freedom feels like and how it shapes who we are. The more dependent on government we become, the less we crave independence. This is why it is important to find literature that takes us out of our present moment and introduces us to different ways of thinking.

We have to imagine a different ideal.

This is why I'm nuts for a book that came out right at the end of the Gilded Age, and just before we got the permanent income tax and the Fed, as well as World War I. It is the last look at the mindset of what I would call the real "greatest generation."

The author of <u>The Joys of Living</u> is Orison Swett Marden (1850–1924). It is one of my picks for my top 25 life-changing classics.

I first bumped into his writing when researching the entrepreneurs of the Gilded Age. He turns out to be the great psychologist and sociologist of this generation that built the modern age in America. He was a physician, a hotel owner, and a fantastic thinker and writer. He was the editor of *Success Magazine*, a hugely influential publication during the age when Americans adored their inventors and entrepreneurs—and deeply loved the richest of the rich among them.

Yes, it was a completely different time! The rich did not hide. People didn't want them to. They walked the streets proudly, and people sought to emulate them. They built huge homes in the middle of town. They gave vast sums to charities, churches, and libraries and were pleased to have their names attached. They wore clothing that suited their station in life. The wealthy

capitalist class was the new aristocracy, and with that status came social obligation, an elaborate code of manners and mores, and a great deal of public adulation.

What a world!

It's a world and a time I admire because it was built by the unleashing of the capitalist spirit in the second half of the 19th century. Lives lengthened. Infant mortality fell dramatically. The rich of yesterday became the middle class of today, even as tomorrow would mint the newly rich, and the process continued without end, each advance touching everyone throughout society. There were new products, new services, and new forms of communication and transportation, and each seemed to point to a future of peace and prosperity. Such inventions were celebrated in great public spectacles called World's Fairs.

Orison Swett Marden was the public intellectual who made sense of it all. He was a serious journalist, a great thinker, and a wonderful writer. His outlook embodies the ebullient optimism of the Gilded Age. He studied the phenomenon of progress and tried to discern its causes. He located them in the hearts and minds of the men and women who made the difference. He devoted his life to chronicling their lives and the lives of those they touched with their creativity and generosity.

The point was not to celebrate privilege but rather to see the possibilities available to every person. Marden himself was like many of the first-generation rich of this period. He came from poverty. He faced family hardship. He worked his way up and chronicled the path.

In his view, the greatest discovery of the time was not a technology but a philosophy. It was the philosophy that the individual human mind was the most productive resource on the planet, more powerful than all the natural resources or man-made machinery. It was the human mind that was the real source of progress and prosperity. Previous generations believed they were trapped by fate, by class, by social position, or by forces more powerful than they. This generation saw the truth that nothing could contain an idea whose time had come, so long as there were great men and women around who believed in it and acted upon it.

This is why so many greats of his time cited Marden as their inspiration: Henry Ford, Thomas Edison, Harvey Firestone and J.P. Morgan. Many of this generation had very humble origins. Marden celebrated how the sacrifices made in youth turn to a bounty in middle age. To his mind, there was cause and effect that operated in the universe where freedom prevailed: Hard work, dedication, determination, and dreams could remake one's world and the whole world.

I read several of his books before I encountered <u>The Joys of Living</u>. I was hardly through the first chapter when I realized that I had found his great work. This was the philosophy he had picked up from so closely watching the nature and function of entrepreneurial success. As he saw, the key to life is to find happiness in the mystery and magic all around you, and to find ways to work within the structures you have been given to improve and generate that progress of which you dream. His recipe is made of three parts: seeing, emulating, and acting.

To his mind, there are no circumstances that we face that would make seeing the world this way impossible. The source of joy is around us, but we have to seek it, see it, embrace it, and expand upon it.

This little book beautifully encapsulates the capitalist spirit of his time and all time. It is unapologetically designed to inspire, and it does this as few books I've ever read. It really amounts to spelling out a life philosophy, one that is deeply practical and actionable in every way, every day.

Indeed, this might be the most inspiring book you will ever read—not because it solves all mysteries concerning who we are, how we got here, and what we should seek as the very purpose of life. He stays away from these larger questions, because it's the smaller questions that are more interesting and effective.

What he deals with more directly concerns what we might call a more mundane aspect of philosophy: how we should approach each day in order to get the most out of life. As such, this is a philosophy of how to live an excellent life, no matter what our calling. Capitalist, monk, mother, teacher, worker, banker, mechanic, musician, preacher, writer—whatever we do can be done with a sense of joy, a spirit of awe, and an ambition to drive forward the engines of progress.

This is the 101st anniversary of this forgotten classic. In some ways, this book is a relic in the best sense of that term. I don't even believe it could be written today. We lack the social template that could produce such a work. The spirit is not in the air that could allow us to extract such thoughts. People today are too vexed, too burdened, too distracted by costs and impositions to see these things. But Marden did see them. And just because we are too often blinded to the reality that he illuminates in these pages doesn't mean that this is not our reality too.

Note that nowhere does he talk of storming Washington, agitating for our rulers to overthrow themselves, or sending institutions into upheaval, much less agitating for societal transformation and uplift. He speaks only to the individual. He tells you what you can do in your time, right where you are, to bring happiness to your life. Social and political change is an effect—it comes only after we change ourselves.

My whole experience suggests that personal inspiration is the ingredient lacking in the current generation of people who have come to love liberty. They have access to texts, knowledge, and theory as never before in human history. What they lack is a method for using what they know and the personal drive to do so. People are too quick to blame outside forces for failure without realizing that outside forces conspiring against progress are part of the structure of all social environments in all times and places. This book provides that missing element, that key to brush away despair and unlock the inner drive to make a difference.

"The golden opportunity you are seeking is in yourself. It is not in your environment; it is not in luck or chance, or the help of others; it is in yourself alone."

The Happy Heart

No matter how much I'm convinced that the commercial marketplace is more magnificent than we know, there are times when I'm sure there's even more to it.

What if the presence of commerce is actually a reason that we have hope day to day? What if its presence or absence is a reason for whether we love life or hate it? What if it affects our outlook for ourselves and humanity at large?

Big questions, sure, but here is a story that illustrates why I'm asking them.

I was flying out of the country through the Los Angeles international airport. I was in some long, zig-zaggy line, awaiting one of many government-run checkpoints. This line, if I remember correctly, was just checking to see if we had passports and boarding passes. But it was very long. It was an hour wait. We were standing shoulder to shoulder. Imagine cattle lined up for the slaughterhouse.

The monotony was intense. You go one direction and look at the faces of people on both sides of you walking the other direction. You round the corner and wait a few minutes and see the same people yet again. *Déjà vu*.

At every step, people have to move their bags. The lights were low and hot. The smell just seemed like a mass of sweat from all over the world.

There were unruly kids. People were speaking every language. Every manner of shabby clothing was on display, everyone prepared for a long trip. The multiplicity of languages was cacophonous. Manners didn't really exist. The only source of order was the line. Faces looked grumpy. And people really were grumpy. And tired. And annoyed.

This was a setting in which everything seemed awful. Nothing was right. And the sense of annoyance on everyone's part was palpable. Of course, people should have been annoyed at the government, but the government was not what we were seeing. We were seeing each other.

Therefore, we became the object of each other's irritation. Hearts sunk, tempers were on edge, and everyone felt vaguely trapped with people unlike themselves.

It was depressing, even dreadful. If this were all we knew about the human condition, Schopenhauer would have been right: "On the whole, life is a disappointment, nay, a cheat."

But the story doesn't end there. Eventually I got through the line, as did everyone else. We stepped past the guard and opened the door to a corridor and walked through. We were passing from the realm of government to the realm of private enterprise.

We could hear music. But then we saw: Ceilings stretched up five or six floors. There were huge 3-D murals that were animated and changed their theme every 10 mins. There were luxury shops and vendors everywhere. There were beautiful wine bars, pastry shops, computer stores, clothing and handbag dealers, money exchange counters, massage chairs.

There were smiles all around. Thousands were there from all lands. They all spoke different languages, dressed in different clothing, all special in their own way. Children ran from here to there. People were engaging each other in lovely ways, despite religion, ethnicity, origin. Passersby would nod with smiles and friendly gestures that allowed us to communicate without language. The music was upbeat and ebullient.

What an amazing community! And how it so beautifully exhibited the brotherhood of man! It might as well be the World's Fair. All was right with the world. Nothing was wrong.

It took me about 10 minutes of walking around in this little utopia to have a sudden and astonishing realization.

These were the same people with whom I had just stood in line!

It wasn't the people who made the difference between the darkness and the light. It was the spirit of the people that had changed, practically from one instant to the next. And why did it change? Government didn't go away.

What changed was the absence vs. the presence of commerce. This is another way of saying that in one setting, people were made into slaves of a system and had nothing to gain from trade; in the other, people were cooperating to their mutual betterment, in an innovative setting designed to serve them.

It's as if commerce sprinkled magic fairy dust over the same population and turned night to dawn, dreariness to sunshine, evil to good. It was absolutely remarkable. Life was no longer a disappoint or a cheat. Life became good, beautiful, infinitely worth living and loving.

This is what annoys me so much about people who put down commercial life, treating it as if it is some kind of hidden despotism or tyranny. And plenty of people do say this. They don't inhabit the same world as I do. For when I look around, I see the opposite. In every sector, commerce is the thing that brings beauty, ebullience, liberation, and true community—indeed happiness itself! It is the State that drains us of all those things.

The most terrifying dystopia is already here. It is airport security, in which bureaucrats manage our comings and goings and stuff us into a system that is ruled entirely by edicts, and we are

robbed completely of our agency and volition. Our job is only to obey. Our personalities, preferences, and ideals must all disappear.

But our utopia is also already here. It is the social setting of free human association, discovery, service, and individual initiative that leads to the beautiful anarchy of production, progress, and inner happiness. You may not always feel it but you would certainly know its absence.

Let the academic psychologists continue to write their books on how free markets don't make us happy. Some people can't be made happy no matter what. It is perhaps true that we will never know total fulfillment outside of Heaven itself. But this much we know from experience. It is possible to make this world a Hell, and only one institution specializes in doing just that.

The New Liberty

The *New York Times* published a pretty solid article on the rise of libertarianism in its magazine section. It had a strong emphasis on the great issues of our time: freedom in economics, civil liberties, and a foreign policy of peace (thank you for including that!). It was a marked improvement over past attempts to characterize the meaning and significance of libertarianism.

One thing annoyed me about the article.

To make it work for the editors and the paper, the writer had to give it a hook about political prospects, which of course is tied up with Senator Rand Paul and his push for the presidency. I understand why the article went this direction—it's true that Americans care most about ideas insofar as they are instantiated in some democratic process—but why must every social movement have an electoral ambition in order to be significant?

The truth is that libertarianism is about much more than that, and its effects are felt most profoundly in areas outside electoral politics. It is about academia, innovation, commerce, social action, cultural change, and personal transformation. Here is where the longing for liberty—which is becoming increasingly impatient—is making a difference in the world. Politics is only a piece of it, and perhaps the least significant part. What really matters is the vast and growing presence of liberty-minded ideas in the social, commercial, and intellectual life of a new generation. Here is where we find the real forward vision.

Politics, we should know by now, is a lagging and not a leading indicator of paradigmatic shifts in history. The real work of social change takes place in human action that is more dispersed, decentralized, and personal.

Wrapping up a summer filled with speaking at many events, my reaction on the quality of young people involved in the project of liberty today is amazement. The dream of a free world—a world beyond the 20th century paradigm of regimentation and control—has fired up a whole generation, to the point that this can no longer be called a "movement," and thank goodness.

A "movement" implies homogeneity of action, anointed leaders, compliant followers, and a unified mission and direction, not to mention discipline and regimentation. This is not the case today as regards the ideas of liberty. The world of liberty today really is a gigantically diverse global society that is permeating every nook and cranny of life itself.

At Acton University, for example, there were some 1,400 people of all ages gathered to learn about and discuss poverty, economic development, the good life, progress, and freedom, and the lectures covered the whole of the social sciences. In the past, liberty-minded events could be uniformly dry and serious but here I saw animated lectures, musical performances, films, and real passion and energy from presenters and attendees alike.

This is liberty with a heart and soul. At a banquet one night with a Gospel singer, I found myself singing and swaying to the music, and eventually tearing up at the storytelling that was part of the dinner.

At FreedomFest, some 3,000 people were gathered together in Las Vegas for so many presentations that it was impossible to keep up. I was in a debate on anarchism vs. minarchism, sat on a film panel, spoke at a bitcoin discussion, and led my own Liberty.me session on freedom as a do-it-yourself project.

At this event, I bumped into an old college friend who now teaches economics in Texas. When we were kids, we were a small cadre interested in some odd books by people like Mises, Hayek, Hazlitt, and Rothbard. Now we were standing amidst thousands of people of all ages who were interested in the same body of ideas.

"What happened to our tiny group?" he jokingly asked.

"I have no idea. I can't keep up any more," I answered.

For two days in the final sessions of the Charles Koch Institute, which sponsored summer fellows for training and work, I heard presentations on government regulation that absolutely blew my mind with that quality of research. And their presentation style was intelligent, mature, and learned—many levels higher than what I had experienced in the past.

We had wonderful conversations about navigating the workforce in a digital age, the special demands on libertarians today, and the best way to advance freedom in difficult times. At the Libertarian Party national convention I had expected politicized activists solely focused on the next election. What I found instead were a thousand people actively interested in ideas and alternatives to political organizing. My speech there was on the technological trends changing the world, and it was so well received. I left with the impression that the LP is doing great work for the cause.

I also spoke at teaching seminars sponsored by the Foundation for Economic Education, and was so pleased to encounter students who were not "old hands" at these ideas but were rather

discovering them for the first time. The lectures covered a full range of topics from the point of view of human freedom, and they showed how freedom and not government was the font of progress. You could see the intellectual light dawning on their faces as the seminar proceeded from lectures to book groups to discussion sessions.

PorcFest in New Hampshire was the most eccentric but also the most delightful in many respects. People came from all over the country, even the world, to experience this microcreation of a free-like society in the rural woods, with camping, dancing, bonfires, lectures, teaching, and socializing all day and all night for a full week.

It was absolutely wonderful! If nothing else, the experience shows that diversity is not a problem for freedom. I've never experienced such a mix of perspectives, demographics, and vocations—and yet it all worked magnificently. We saw a spontaneous community from there.

The national convention of the Young Americans for Liberty was tremendously exciting as well. Here we had many hundreds of college activists who became dissatisfied with the Young Republicans and conventional party politics in general. They were inspired by the insurrectionist spirit of the Ron Paul campaign. And this drew them to political action and, more broadly, a dedication to the broader cause. They have matured beyond politics. But for my part, my talk was entirely about technology, as you might expect, and its promise for the future. I can't remember giving a talk that elicited such interest.

In addition, there were many events around the country, running in parallel with these, sponsored by the amazing network of social connections called Liberty on the Rocks. People meet in a bar, perhaps hear a 10 or 15 minute talk, and then socialize with each other.

Because of social media, it's not as if these people have met for the first time, so there is an element of familiarity even before people meet. No ice needs to be broken. It's straight to the good stuff of ideas and networks and planning for the future. These events are amazing because, again, they dispense with the boring things and get straight to the fun. Liberty on the Rocks is fairly new but it has swept not only the country but the entire world, with ongoing events.

In addition, I attended many events around the country organized around the topic of bitcoin. These events are not necessarily libertarian, but anyone involved in this space becomes aware of the prospects for reinventing institutions on a peer-to-peer basis (excluding third parties such as banks and governments) and the very real threat that regulation represents to entrepreneurship.

The bitcoin space is a place of action, progress, innovation, and commerce. They embody a new sensibility: we can't wait for political change. The change will come from doing, not petitioning. This is an inspiring and empowering message and ideal, one that holds out far more prospects for genuine and lasting success than the hope that we can work to get the right people in office.

The Outlook

Young people today are preparing to navigate an economic and social environment that is so radically different from anything their parents knew. Rather than defeatism and despair about the future of freedom, I detect a strong dedication to creativity, entrepreneurship, and to living a great life despite a system that seems dedicated to bringing them down.

What seems at first to be a political movement is becoming more of a social movement of young people determined to claim human liberty as an operating principle in their lives and careers.

Many of the students I speak with, for example, are thinking very seriously about launching startup companies and actively taking steps to make that happen. They are assembling their networks of talent and sharing ideas. They are dreaming of independent lives and making it big—and on their own terms.

So here is the plan, which many out of college are already pursuing. Their educations and degrees are parlayed into jobs of whatever sort, 9-to-5 things that pay the rent and the cell phone bills but are not their careers or their dreams. They're just something they do. Thinking of it this way, even a terrible job can be endured with a sense of humor.

Meanwhile, on nights and weekends, they work on their real goals. They are writing apps, working on digital services, thinking through new ideas, and cobbling together business models. They are acquiring new skills and filling in the gaps in their education. And they are very careful about money too—all too aware of the dangers of debt from bad experiences in college.

Think of dumpy apartments with four or five people living off ramen noodles and cheap beer. This is where the mega-businesses of tomorrow are being hatched. Like superheroes, these young people seem to live on two levels: their conventional lives, which they see as temporary holding points, and their revolutionary lives, which they see as their real passions and their actual paths to the future.

I can't remember anyone doing this when I was in college. We trusted that the system would take care of us, and our job was to fit in. These young people do not have this view. The existing system is something they will use, but only on the path to bypassing it with new innovations and businesses to change the future.

To be sure, this is a very commercially astute group. They see business as the way to change the world. The tools they use every day to navigate the world—buying everything from coffee to concert tickets, getting around cities, planning trips, talking to friends and family—came to them via the private sector. Government contributes nothing to their lives apart from annoyance.

What's more, among these libertarians, there is very little hope that political change is a viable option. What would be the mechanism of change? The two-party system? The trends in politics

are inexorably worse, regardless of the promise. The trends in commercial life are toward progress every day. Which seems like the better path?

Having been around this world some time, I see the emergence of a new form of libertarianism—something more intellectually and strategically sophisticated than forms from the last century.

First, among these young people there is a vast openness to radical ideas that rethink the relationship politics has to the world. Rejecting the old-style collectivism of the prevailing regime is only the beginning. What about anarchism? If the State is useless and decaying, anarchism becomes the operational intellectual tableau through which to understand the world. This is a contrast to previous generations who romanticized some mythical past of freedom as guarded by a constitutional State.

As the hope that the State can ever purify itself has faded, a new hope in freedom has emerged. In the same way, edgier thoughts about production without intellectual property, Internet-based monies and cities, and new patterns of global social engagement are on the table. These visions are not dark, but hopeful: at once bourgeois and breaking bad, principled but broad, literate but also intuitive.

Second, there is a new pattern to learning among this generation. Whereas libertarians of the past learned from classic texts, large books of integrated but contained theory, these young people extract information from an hourly blizzard of news, memes, videos, social media threads, texts, forums, tweets, and group hangouts. There is no such thing as a protected sector of ideas, much less an information cartel. This setup produces broader and more agile minds with a less defensive posture.

For this reason, the ideological leanings borrow rhetoric and language from many sources. The most popular T-shirt among the Students for Liberty reads: "Peace, Love, Liberty." My own shirt that came with the conference is a blizzard of short words: Tolerance, Compassion, Entrepreneurship, Love, Reason, Trade, Wealth, Freedom, Creativity.

So you can see what's happening here. It's finally dawning on libertarians that they have no model to impose on the world, no preset formula to improve society, and, therefore, no strict dogmas on how things should or should not work in a world of freedom. The point is to free themselves and the whole of society from the shackles of statism and regimentation to allow for experimentation, evolution, and trial and error—an agenda that stems from the conviction that only a free people can discover the right path forward for themselves.

Third, liberty for these young people is not just a political ideal, something that pertains to the State and civic affairs but otherwise has no personal application. As with the old classical liberals, these young people are dedicated to discovering the relationship between the political ideal and their personal lives. They want to find ways to actually implement an ethic of liberty and live with character and an entrepreneurial drive.

So, for example, if you can use a free-market cab service over a government one, you should. If you don't believe in "intellectual property" you should publish without it. If you believe that cooperation with others is the essence of social flourishing, you should seek to be a cooperative person. If entrepreneurship is the primary force behind economic progress, you should seek to make a contribution to that end.

Fourth, there are some non-negotiables, and they aren't only about the ban on the use of power. As an extension of the above point, this generation puts a premium on civilized thinking and behaving that includes absolute exclusion of bigotry in all its forms. Racist, misogynist, and anti-gay attitudes are not only tacky, but embody the opposite of the tolerance that old liberalism identified as a main bulwark against State oppression. This necessarily means a special identity with groups that have been victims of State oppression and remain so in many parts if the world.

It is true that in our time many feminists look to the State for privilege, but it is also true that many racial minorities (and people of all races and classes) look to the State. But the fundamental history and drive of feminism and the anti-slavery movement, historically understood, are about empowering every member of the human family with the freedom that is his or her right.

Fifth, there is a generation of liberty-minded thinkers who are filled with hope about the future, and rightly so. The digital world has opened up new frontiers for them to make a difference in their own lives and the world at large. The space in which this is allowed to happen is limitless, and so are the possibilities. Despite all the despotisms in the world today, the digital cloud makes possible a new path of progress in which individual and community expression can take new forms outside the reach of power.

Consider that none of these groups of liberty-minded people would be nearly as successful without all the organizing tools of social media. It is a gigantic departure from the darkness of the past and a new paradigm for the future. It reflects a confidence that liberty is right and effective, not only as a political philosophy, but also as a personal principle that helps us achieve new heights of personal accomplishment and well-being.

The New Secessionism

Defiance, decentralization, and communication on the level that we are seeing today has a long history and represents the fulfillment of a long struggle. What is the world's smallest country? Monaco? Nope. Malta? Too big. Even Vatican City with a mere population of 770 is huge in comparison.

It's called Sealand, founded and ruled by Paddy Roy Bates, a remarkable man who died in 2012 at the age of 91. He was the original pirate-radio operator and the Prince of Sealand, a tiny barge six miles out of the east side of Great Britain, outside the territorial waters of the UK.

From his self-created nation, Bates broadcasted Radio Essex in 1965 and 1966, playing rock music at a time when the BBC frowned on it, and generally showed the world how to communicate beyond the bounds of what the law allowed.

We are talking about a serious pioneer here, a man who showed the way toward the Internet of today. In those days, doing this took real guts and vision. He effectively seceded from the nation-state to establish his own as a way of guaranteeing his freedom to speak and make a contribution to life in his times.

His new nation had a constitution, a flag, a national anthem, and he did a brisk business in passports (apparently 150,000 have been issued!). The nation's motto: *E Mare Libertas*. From the Sea, Freedom. As a self-appointed Prince, he was once arrested by British courts, but the courts threw the case out because his barge was outside UK territory. He won his freedom through serious trial and effort.

Reading through a 2011 interview with his son Michael, we find not wackiness but entrepreneurial genius at work here, a real legacy. For example, I had no idea that Sealand had been represented at hundreds of sporting events all over the world! This is because athletes the world over have elected the affiliation at fencing events, minigolf, and even football. There is even a Sealand coin.

It's the real thing. I know what you're probably thinking: make me a citizen now! Well, you can actually go the website and buy a title for yourself such as Lord, Lady, Baron, Baroness, Count, and Countess. This is capitalism at its best: marketing royalty!

It's hard for us to imagine what was required in those days when Sealand was first founded. Nowadays, anyone can broadcast to the world just by talking into a smartphone and using the right podcasting software. We think nothing of it. We take the right to be heard for granted and use every technological means to see it happen. I can broadcast live from my office and show you in real time everything that is happening (presuming that you really want to see what kind of coffee I'm brewing right now).

But back then, it was by no means clear that individuals had the right to just broadcast what they wanted. Television and radio were government monopolies. Governments controlled the content. Nothing unapproved was ever heard over the airwaves. It took pioneers like Prince Bates to show us the way and prove that the world would not fall apart if people could say stuff and hear stuff that the government had not authorized.

We got over our phobias about pirate broadcasting—everyone is a pirate broadcaster today and the world hasn't fallen apart—but what about the larger point of this entire episode: political secession?

That's what Bates had to do in order to push the world forward a step or two. Today people recoil at the very notion of secession. But why? If the costs of being governed outweigh the

benefits, why should institutions and individuals be forced to maintain the relationship with their governors?

If the government is truly confident that the services it provides are just fabulous for our well-being, why not put it to the test and let people opt out if they regard the costs as too high?

We do this all the time with other services. Let's say we contract for a pesticide service for our home and it works fine for a time. Then suddenly bugs start appearing all over the place. We call but the bug guy doesn't come. They don't return your phone call. The bug situation gets worse and worse. You try to give the company the benefit of the doubt. But at some point you throw in the towel and cancel the contract. If enough people do this the company's bottom line begins to suffer. It either has to change its ways or go out of business.

We should have the same system for government. Under the current system that doesn't allow us to cancel the contract—even worse, there is no contract!—the government has no reason to improve. It just keeps dinging our credit card and ignoring our protests. We try to cancel but no one listens. This would never fly in the commercial sector and yet we put up with it every day in the government sector.

The old classical liberals, most famously Thomas Jefferson, saw the right to secede as a matter of human rights. People should not be forced into association with government that does not serve their interests. But there is also a practical matter here. We need some way to check government's power.

Nothing else seems to work. We've tried constitutions. We've tried "checks and balances." We've tried the whole voting thing. Nothing works. The right to pull away and seek out other arrangements to protect human freedom might work where everything else has failed.

Even if secession doesn't accomplish this goal, at least it achieves another main objective. The seceder is rid of the problem of paying for a service that doesn't live up to its billing. That alone serves the cause of human dignity.

Does that mean that we would need to go live on a barge in the ocean? If we choose to do so, that's fine. But digital technology has actually gone a long way toward breaking down physical barriers that separate us.

Today I can enjoy mutually productive associations with people from all over the world. We are all finding out that we have much more in common with each other as people than any of us have with our governments. We can work with this model and, if we were allowed to, accomplish secession without ever leaving our chairs.

Secession is more technologically feasible than ever before—witness Liberty.me, the social and publishing platform founded in 2014. In fact, people are working toward secession in many ways today—which is to say, people are struggling to get out from under the boot on the neck.

Government's laws have become so burdensome and ridiculously cumbersome that billions of people the world over have decided to go around them in the interest of making something of a life for themselves. This is a safe form of secession.

Secessions have been an important part of the history of liberty. People who break away give liberty a fresh start. That's what happened to end the Soviet Union's stranglehold. And it's what happened in 1776 with the establishment of a new nation called the United States of America.

The only problem with secession is that the idea is rarely taken far enough. It's great that the South seceded from the Union, for example, but so too should the states of the Confederacy have been allowed to secede from the new central government and, in the same way, slaves should have been allowed to secede from their masters. The right of secession is an individual right.

The most brilliant moment in the life of the "founding fathers" was the moment they imagined that they could get rid of government and live a better life. Their preferred method was secession, which is what the Declaration of Independence was all about. It was about the elusive ideal of self-determination.

Their mistake came when they created a new State too much like the one from which they seceded. Had they stuck with the first idea, and carried it out, the U.S. might still be a free country, not unlike Sealand today.

Governments organize themselves based on geographical jurisdiction and use compulsion to achieve their aims. That is their structure and nature. Societies, on the other hand, organize themselves based on mutual interest and employ individual human choice to achieve their aims.

In so many ways, public policy in the 20th century glued the world down to a pattern of living that is no longer working for vast numbers of people. It's the risk takers and dreamers who are finding the workaround, creating new commercial institutions for the 21st century. For those fortunate enough to know about the alternatives and those brave enough to try something new, a freer life awaits.

We finally have the tools we need to build a new world, peer-to-peer, based on choice and not coercion, driven forward by the longing for a better life, and unbounded by accidents of geography. It's the realization of the dream of a self-determined world. The magistrates and mandarins can slow us down and distract us. But they can't stop us.

The Revolution

We are in the transition phase from one type of technology to another. The old world survives but a new one is being born by virtue of our technological preferences.

What is the consistent theme that is driving this?

In the past, to make a video for public release, I had to have connections, capital, and deals with third parties. There was no choice. Today, I can open my laptop or smartphone and go to work, posting the results in minutes for whole world to see. I'm the producer working directly for consumers. Or I can be a consumer of other people's direct production for me.

It's the same with publishing. I can write a book and make it available directly, peer to peer, or download and read books others have written directly from the author. I can do the same with housing when I travel: I can contact the owner and make a deal without having to rely on an intermediary. I can rent out a room in my house to someone else on the same terms. I can summon up a ride by broadcasting out a signal that drivers can respond to directly. I can become a driver myself and accept such signals from customers.

Our P2P dealings are so habitual that we don't even think about them much any more. Last night I was listening to some bands cover the music of big-time pop stars. I heard them while using Google Play, and they were just as accessible as the originals. The difference is that these covers were essentially home productions by regular people, not well-funded, well-connected artists. The producer-consumer relationship is direct, or, at least, much more so than in the past.

Anyone can be a news broadcaster. If you don't like what that news broadcaster is saying, you can make a response news broadcast and post it right where it can be seen by the same people.

We can safely predict that under Obamacare, P2P relationships in health-care provision are going to become more common. With insurers under ridiculous amounts of pressure to provide every conceivable service at controlled prices, service is going to decline, giving rise to direct fiduciary relationships between patients and caregivers. We are going to be cooperating directly.

The most radical application of this idea concerns money and finance. After one-hundred years of government production of currency, and government sponsorship of banking institutions, P2P networks are now providing payments systems, loan markets, and even currency units. The implications of this are of course remarkable to consider. It's one thing to dispense with the need for film processing; its something else entirely to toss away central banks, regulated stock markets, and departments of treasury. These are the heart and soul of political power itself.

The term P2P originated as a description of file-sharing systems — used popularly only in the 21st century — in which each party has the capacity to be both a consumer and producer of the same good or service. I can download music and seed it. I can host or consume or both at the same time.

Neither party has to rely on some third-party trust relationship or external intermediary to achieve the aim. There is no disproportion in available tools. There are no external rule makers,

rule givers, or rule enforcers. Its structure evolves organically. When big shots try to get their way, they only incentivize entrepreneurs to find new ways to do the same thing.

Now we are seeing the term P2P being used to describe not just distributed Internet networks but social and economic systems. There is an emerging literature on the democratization of innovation, the makers movement, the open-source revolt against patents and copyrights, the movement of hactivists to bust old-style regulatory structures, new patterns of economic development, the sharing economy, and even the end of the nation-state in light of global P2P relationships.

Free enterprise in the digital age is taking on a different form than in the past; or, at the very least, the trajectory toward connecting us ever more directly with each other — with equipotency as producers and consumers — is accelerating dramatically thanks to digital technology. And this could really matter for the future of how the debate over government control takes place. The institutions that people inhabit on a daily basis dictate their self-interest, and that in turn influences the type of impositions on their freedom that they will and will not tolerate.

We are gaining new types of tools that underscore in the most salient possible way that a free economy really is about relationships between people. It is about much more of course — property rights, prices, large-scale production, capital, free information flows — but most fundamentally the free economy is about mutually beneficial exchange.

How will this affect our future? There are three main implications.

First, this inaugurates a new political dynamic. P2P systems give every person a direct stake in free economic structures. It makes a liberal economic order more obviously in everyone's self-interest. We've seen this already when city officials try to shut down things like Uber taxis or Airbnb rentals or marijuana dispensaries. Those who benefit from these services — not via giant corporate third parties but directly — can get quite annoyed. The case for reigning in the supposed power of private parties is not as compelling when these relationships are P2P. They resist and stand up for their rights.

Second, there are implications for the effectiveness of the state itself. Distributed systems have no central point of failure. Government can regulate only that which it can control, and it cannot control a distributed system. It is far easier for politicians and bureaucracies to make a deal with General Motors than with a network that lives on millions and billions of servers, and can move and be adapted to conform with market needs that are ever changing.

Governments are good at the physical world, but not so hot at managing the distributed digital world and its P2P energy.

Third, P2P systems care nothing for the nation-state. Think about the latest apps from among the millions available that you might have downloaded for your smartphone or your tablet computer. What is the nationality of the maker? You don't know and there is no reason to care.

In a P2P world, we are all citizens — consumers and producers — of the world. Economic relationships delineated by arbitrary lines on a map, as drawn by politicians, just don't matter as much.

Murray Rothbard wrote that after industrialization, humankind would never tolerate going back to a world of feudalism, poverty, and dependency. He was right, despite fits and starts on the way toward the gradually emerging anarchist world order.

What he said is even more true of the P2P world. We wouldn't tolerate going back 15 years ago before file sharing was invented. We wouldn't tolerate going back 10 years ago before open-source software development came to fruition. We wouldn't tolerate going back to 5 years ago when we couldn't video phone with anyone in the world or share images instantly with the globe with the push of a button.

The P2P economy is the next stage in the great march of history away from despotism toward freedom. It's all happened without much mainstream attention and virtually no public consciousness. The emergence of it has been spread out over some 15 years, too slow to notice with full awareness and too fast to fully dissect and understand. It is now a fixture and a foreshadowing of a world to come.

That doesn't mean we don't have to fight for it. But this fight is no longer about muskets and barricades. It's about innovation, cleverness, and being the revolution in our own lives and economic relationships.

Books To Read

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F.A. Hayek, *Law, Legislation, and Liberty*, volumes <u>I</u>, <u>II</u>, and <u>III</u> (University of Chicago Press, 1978, 1981).

Ludwig von Mises, Nation, State, and Economy (Liberty Fund, 2005 [1919]).

Samuel Paterson, *Up and Running with Bitcoin* (Liberty.me, 2014).

Peter Surda, The Economics of Bitcoin (Master's Thesis, University of Vienna).

Nassim Taleb, Anti-Fragile: Things That Gain from Disorder (Random House, 2014).