One hundred years after 1917:

Spartacus Ex Machina

In the middle of this century, a new kind of public and democratic information machine will emerge as an invincible weapon in the struggle of the proletariat to break free from the rule of capital and fulfill all the dreams of humankind.

This machine will connect every part of the proletarian mind. This machine will allow the proletariat to make itself conscious, and create a world of peace, abundance, and genuine community for all.

Nov 2, 2017 -- Ben Seattle

This is the last century in which humans will be constantly bombarded with information which is created by slaves, and which is aimed at exploiting them and controlling their minds. In its place will be free information.

As this happens, then it must follow, as night the day, that the proletariat will make itself conscious, liquidate the rule of capital, and emerge from the darkness.

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Join me on facebook or my blog for discussion.
November 7 of this year will mark the hundredth anniversary of the storming of the Winter Palace in Saint Petersberg, Russia. This event kicked off what became known as the October Revolution, which put Lenin's party in power and has impacted nearly every human being now living on this planet.

The European imperialist powers immediately recognized Lenin's revolution as their greatest enemy and were determined to crush it. If the workers and peasants in Russia could get away with overthrowing their capitalists and landlords-then where would this stop? But it was not so easy for the imperialists to attack right away, since at the time they were entangled in a world war with one another. It would have been difficult, for example, for the British and German governments to suddenly order their soldiers in the trenches of the first World War to stop shooting one another so that they could team up and invade Russia.

Eventually, the first World War was wrapped up and 15 countries, including Britain, France, Japan and the U.S., invaded Russia and supported the opponents of Lenin's Bolsheviks in the Russian Civil War.

The Bolsheviks won, but at a terrible cost. Most of the Russian economy was destroyed. Factories and railroads were in ruins. A terrible famine and typhoid epidemic killed 20 million people.

The majority of the population, which had initially supported the Bolsheviks and took their side in the Civil War--became desperate and were ready to support any party which promised to get rid of the Bolsheviks and make all the famine and hardship go away.

1.1 - A new exploiting class

In order to stay in power, the Bolsheviks were compelled to take the desperate and extremely dangerous gamble of suppressing all independent parties and all democratic rights.

This suppression was intended to be temporary, until the shattered economy could be restored. And it would have been temporary--had the revolution survived. But it led to what Lenin had warned, in 1922, was the main danger: the suffocation of the revolution as a new exploiting class consolidated itself within the ranks of the Bolshevik Party.

Activists and academics have all sorts of descriptions of the economic and political system which became consolidated in the late 1920's under Stalin. This regime advertised itself as "scientific socialism". It would be more accurate to call it a mixture of "state capitalism" and "scientific feudalism".

1.2 - Counterweight to imperialism

Whatever we call it, by the early 1930's this regime stood as a counterweight to the Western imperialist powers and ruling classes. It encouraged and supported anti-colonial, anti-imperialist, and anti-capitalist struggles worldwide.

To make a long story short, the response of the Western imperialist powers was to install Hitler into power, so that he could "solve the Russia problem" for once and for all. But this did not work. Stalin's army ended up in Berlin in 1945, and the Soviet example inspired struggle in China, which led to Mao's victory, in 1949, against the U.S. puppet, Chiang Kai-shek.

The cold war contest between the Soviet-Chinese bloc and US-Western imperialism shaped and accelerated the anti-colonial struggles, such as that which led to the independence of India in 1947, and the nominal independence of countries in Africa and elsewhere. It also led to the wars in Korea and Vietnam which blocked the efforts of U.S. imperialism to dominate Asia.

1.3 - Never reached stability, and resulted in confusion

The 1917 revolution never reached the point of stability in which what was essentially martial law could be lifted and democratic rights (essential to protect the revolution against internal counter-revolution, and capture by a new
exploiting class) could be restored.

The original aim of the 1917 revolution was to begin a worldwide revolt against the rule of capital. The revolution pushed history forward with a mighty shove--but in regard to what it aimed to do--it failed.

More than this, it failed in a way that left a lot of confusion in its wake, because under the name of "socialism" it created another form of class divided society, based on privilege for the few and oppression for the many. People were left to argue, as the bitter joke went, whether it would be better to live in a society based on the "exploitation of man by man" or a society in which it was the other way around.

The story in China was similar. A modern form of feudalism was imposed in China's countryside during the Great Famine in 1959-61, which probably killed between 20 and 35 million people.

Today both Russia and China (and other former "socialist" countries) have continued their evolution into a more ordinary economic and political system openly based on the rule of capital.

1.4 - What remains today?

And this leads us to ask what remains, 100 years later, of the original aim of Lenin's revolution: the emancipation of humanity from the rule of capital. At this point, very little is left of the movement which had this aim. What exists instead are:

1. Reformist trends
--various reformist trends which describe themselves as "socialist" (in some form) and are based on making the rule of capital less painful while defending its foundations, and

2. Cargo cults
--a proliferation of cargo-cults, which make a religion out of words, symbols and actions torn from their context in the last century.

3. The crisis of theory
And, on top of all this (and because of all this) all progressive movements are paralyzed and disoriented by a crisis of theory in which it has become essentially impossible to talk about (or even think about) the goal of our movement without resorting to ambiguous words (like "socialism") that no one can really understand, explain or defend.

The core of this crisis of theory is a simple question: How does society provide for everyone's needs if it is not ruled by capital?

1.5 - Capital and its human host
Capital itself, is inanimate. But capital acquires life and consciousness--from its human hosts. These human hosts are a social class (sometimes called "the one percent", sometimes called "the bourgeoisie") whose entire social existence (their prestige, status, rank, respect and attractiveness) is dependent on their relationship to capital.

The overthrow of the rule of capital will require the overthrow of the rule of this social class--and its ideas.

1.6 - Capital based on commodity production
But that is not enough, because the circulation of capital leads to the rule of capital. And commodity production (ie: the creation of goods and services for sale or exchange on the market) leads to the circulation of capital. Simple put, the rule of capital grows, daily, hourly, spontaneously, from commodity production.

1.7 - What is our alternative?
If the proletariat is to run society instead of the bourgeoisie, it will need to create an economy that can create everything that everyone needs without relying on commodity production.

A world that is not based on commodity production will not make use of any form of money, barter or exchange. Everything, including labor, will be given freely, without anything tangible, anything other than respect, being given in return, and with no authority higher than your conscience. But, if this is not a fantasy, how will it work? And how will humanity get from here to there?

1.8 - Centralized police state is not an alternative
State control and the "command economy" (such as existed under Stalin and Mao) are often promoted as an alternative to the rule of the market. But historical experience has pretty much proven that this kind of centralized state control is inseparable from the rule of a new exploiting class based on a police state with low productivity.

The resolution of the crisis of theory requires an understanding of how the proletariat will create everything that everyone needs without relying on either the market or on a system of centralized control, as well as understanding the nature of the transition from the currently existing commodity economy.

1.9 - Handwaving and double-talk not an alternative
Until the crisis of theory is decisively resolved, there can be no widespread confidence that the overthrow of the rule of capital is necessary and inevitable. The many millions of intelligent people who will be dedicating their lives to making this happen cannot be given confidence by means of the standard handwaving and empty double-talk that is common on these questions.

As someone who has studied these questions my
entire life, I will add, I have reached my own conclusions on all these questions (please see below "Appendix A -- A world without money or powerful bureaucrats").

1.10 - Emancipation is inevitable

I have concluded that the emancipation of humanity from the rule of capital is inevitable, and is highly likely to happen before the end of this century.

1.11 - All problems flow from the rule of capital

To understand why, consider what happens if we look deeply into any of the key problems of our time, such as:

- economic insecurity, poverty and a precarious existence
- unemployment / homelessness
- drug addiction / substance abuse
- street violence and youth gangs
- crime and incarceration rates
- increasing racism
- increasing murders by police
- attacks on immigrants
- imperialist war, threats of war
- climate change
- toxic pollution / ecosystem loss
- loss of community and increasing social isolation, alienation and depression
- the celebration of all kinds of backward or reactionary beliefs
- a culture of mindless escapism, and empty sentimentality

We will discover that every one of these problems flows from the rule of society by capital.

Deepening austerity, the tactics of divide-and-rule, and the war of the rich against the poor--are necessary to protect and expand capital. Rival national groups of capitalists engage in war--to protect and expand their capital.

Yes, we are deliberately kept ignorant, isolated, alienated and insecure by a view of the world that is forced on us and is engineered to keep us helpless. We are bombarded every day with thousands of competing brands of fake news and false advertising. Most of what we see in the information sphere is either controlled by or acceptable to capital. That is going to change.

1.12 - Transparency - What has been concealed will be revealed

In a period in which transparency is steadily increasing, and in which everything which has been concealed is increasingly being revealed, a core truth stands at the center of everything, and cannot remain hidden. All roads--all human knowledge, every field of culture, every field of science, every field of technology, economics and politics--will lead to this central and inescapable truth:

It is the rule of capital which is blocking fundamental progress in every area--it is the rule of capital which keeps us ignorant and fighting one another--and the only path forward for humanity is to get rid of the rule of capital.

The current problems in our movement, including the crisis of theory, are temporary.

1.13 - A weapon of immense power

What is going to change everything is the internet, which, for the first time in history, will be making it possible for people everywhere to communicate with one another directly, without restriction by gatekeepers who are controlled by or connected to our ruling classes.

The proletariat and oppressed have, in a relatively short period of time, been given, as a result of capitalist economic development, a weapon of immense power: modern communications technology in the form of hardware and software connected together. It is only a matter of time until a section of the proletariat (a critical number of activists with a critical level of clarity and consciousness) learn how to make use of this weapon with skill, determination, and a clear view of what they need to do. When this moment happens, many things will begin to unfold quickly.

Stay tuned.

1917 was only the beta version.

-- Chapter 2 --

The coming century of information war

Humanity has entered what will come to be seen as a century of information war, understood as a war of ideas organized on a mass scale.

Within ruling circles in the U.S., there are today two main information machines that participate in this war: the establishment "deep state" machine covering the spectrum from the New York Times to the late-night comics--and its dramatic foil: the "insurgent" Breitbart-Fox News machine.

Both of these machines represent different faces of the same ruling class.

Putin in Russia has his own public information machine, which includes the RT news service. And China has its own machine, which is highly sophisticated (China even has its own carefully restricted versions of Facebook, Twitter and YouTube). Even the ISIS terror network has a
suprisingly sophisticated information machine. All the class enemies of the proletariat are supported by their own machines. The proletariat, however, does not have its own machine. This is what will change. The proletariat will create its own public information machine. This machine will be the most open and democratic machine the world has ever seen. And, as the proletariat learns to use this machine, it will make this the last century in which humanity is enslaved by capital.

2.1 - A bubble waiting to burst

The entire bourgeois world-view, which evolved to defend the rule of capital, may appear solid. But, as transparency increases, this world-view will become increasingly fragile, like a bubble waiting to burst. And the increase in transparency, which will be one of the signature features of this century—is only getting started.

2.2 - The promise of transparency

The explosion of the internet into public consciousness in the mid-1990’s initially created a surge of enthusiasm about it’s potential to "change everything". The internet was the greatest revolution in communications since the invention of writing. If the invention of movable type and the printing press accelerated the victory of capitalism over feudalism, many thought, then the internet will accelerate humanity’s victory over all the forces of darkness.

Now, more than 20 years later, much of this early enthusiasm has given way to discouragement, cynicism and even fear.

2.3 - Hamster on a wheel

Today, almost exactly half of humanity is connected to the internet. And one out of every six minutes that humans spends on the internet is captured by Facebook, which has earned a market capitalization of half a trillion dollars based on its ability to sell the attention of two billion people to advertizers. Facebook has turned us into obsessive button clickers and a source of free labor that creates content to attract more users. We end up working for human attention, like hamsters running on a wheel to get a food pellet. Facebook has become the largest, most standardized, and most centralized form of attention control in human history.

2.4 - An itch you can’t scratch

Experts design these apps to be addictive so that clicking or sliding has the variable reward thrill of a slot machine, activating the same neural dopamine pathways that humans use when seeking food, sex or drugs, and as difficult to resist as the urge to scratch an itch:

...

He explains the subtle psychological tricks that can be used to make people develop habits, such as varying the rewards people receive to create “a craving”, or exploiting negative emotions that can act as “triggers”. “Feelings of horedom, loneliness, frustration, confusion and indecisiveness often instigate a slight pain or irritation and prompt an almost instantaneous and often mindless action to quell the negative sensation,”

https://www.theguardian.com/technology/2017/oct/05/smartphone-addiction-silicon-valley-dystopia

Facebook also isolates and depresses its hooked "users", as they substitute online "friends" for real ones.

2.5 - Sweep away all obstacles

But the early enthusiasts were not mistaken about the power of the internet to transform the world for the better. They were only wrong about the timescale, and how long it would take for this power to find its home in the hands of a critical mass of determined people who understood how it must be used to deliver humanity from the growing horror of a world ruled by the laws of commodity production.

Such a critical mass of determined and conscious people has not yet come together—but the day that it does is approaching. It is the purpose of this essay to encourage every step in this direction. As a lifelong student of these topics, I intend to list, in a relatively concise way, the main obstacles holding us back, and to offer relatively simple and practical steps to sweep away these obstacles.

2.6 - Knowledge or ignorance?

One obstacle that comes up often is based on the idea that the internet can spread ignorance and stupidity as easily as knowledge and enlightenment--and we therefore need to be afraid of how this stupidity and ignorance will
spread. Do we have any reason to be certain that knowledge will win over ignorance? We do. There has always been struggle in societies over ideas. Over time, some ideas win and become widespread, while others lose and are forgotten. What determines which ideas win, and which lose?

2.7 - Which ideas will win?
We might say that the ideas that prove themselves to be the most useful tend to win out. But, in a class divided society, this raises the question of useful to who?

Karl Marx famously observed that in any epoch the ruling ideas of society will always be the ideas of the ruling class. This is because the ruling class needs to use these ideas as part of its rule. These ideas are used to organize and justify everything—and in this way are part of the essential machinery that creates the goods and services we need to survive and to sustain society.

The ruling class does not want to go extinct—and must therefore use its ideas to defend and justify its rule. And it controls the institutions (ie: the state, the law, the church, the courts, the journalistic, media and educational establishments and the entertainment industries, the corporations and the non-profits) that determine which ideas win. So we are not talking about a level playing field.

2.8 - Knowledge is suppressed while ignorance is amplified
This is key. The ideas which hurt us are only as widespread as they are because they are being artificially amplified by all these institutions which all represent one or another face of the power of capital.

In other words, the source of wrong ideas is our ruling class, which deliberately keeps us ignorant—because it knows that knowledge is a weapon in the class struggle—and is dangerous.

For example, after Nat Turner’s rebellion in 1831, it became illegal to teach slaves to read. Even allowing slaves to read the bible was not safe. Turner had found inspiration in its pages. Asked if he regretted his actions the night before he was hanged, he replied, unrepentent: "Was not Christ crucified?"

Someday, in the South, as a replacement for all those statues of noble slaveowners -- there will be statues of leaders like Turner, Vesey and Jemmy, who proved to the world that the slaves would stop at nothing in their determination to be free.

2.9 - Terrified of knowledge
It is because our ruling class is terrified of the modern proletariat having any real knowledge (other than what is required to do their jobs, get distracted, and be patriotic, god fearing, obedient flag wavers) that most people today have no idea of the class forces which put Hitler into power in Germany—or why—or even the real reasons for the collapse of the Roman empire—because even ancient history—understood in the context of the struggle between classes with opposing material interests—holds too many lessons for today.

Better to feed "Game of Thrones" and similar escapist fantasy to the masses, and turn real history into soap operas or clouds of dry dust.

If the internet is today flooded with ignorance—there are two reasons for this:

1. All the ignorance that has been fed to the masses by ruling classes in the past—is emerging so that it can be exposed to oxygen and corrected, and

2. our ruling class today is determined to flood the consciousness of the masses with as much ignorant backwardness and divide-and-rule racist poison as it can get away with—without going too far and igniting a powerful anti-racist resistance.

2.10 - Thirsty for knowledge
But the proletariat and oppressed are thirsty for real knowledge, and the problem (from the perspective of our ruling class) is that the nature of the internet makes it difficult to contain. Like a river, it can route around gatekeepers, censorship and even stupidity—and will, over time, find a way to flow in the direction of becoming a level playing field.

A level playing field will be public and transparent. Everything about it will be known to everyone. And a level playing field will be genuinely democratic. Everyone will see everything and everyone will have a voice that everyone else will have a right to either listen to or not as they wish.

This is what the masses really want and need—and this is what a critical mass of determined people will figure out how to give them.

2.11 - We need a level playing field
On a level playing field, the power of capital to amplify ignorance and drown knowledge will be cut down to size. On a level playing field the ideas and arguments representing the voice and mind of capital will be defeated, in the public arena, in the light of the sun, in one decisive confrontation after another.

A level playing field will lead to the development of a common language and a common materialist understanding of the world we live in. In more general terms, it will lead to the unrestricted self-organization of, so to speak, the proletarian mind.

What must the working class do in order to create
a level playing field that is not tilted by the power of capital and commodity production? It will create its own machine.

2.12 - The 2011 Arab revolts

Rather than cynically dismissing the potential of the internet—we can consider its stellar role in igniting the popular Arab uprisings of 2011. Information from Wikileaks led to powerful mass actions in Tunisia, news of which spread via twitter and facebook, and eventually via Al Jazeera, and led to similar powerful uprisings in Egypt and other countries.

The 2011 Arab revolts were comparable to the 1848 uprisings in Europe which produced the Communist Manifesto. And, while eventually suppressed, they led to powerful social movements in Western Europe—and the Occupy movement in the U.S.

The Occupy movement in the U.S. escaped the control of the Democratic Party (ie: the part of the bourgeois political machine tasked with capturing and liquidating revolutionary energy) and was a huge worry in ruling circles. And this may explain what happened afterward.

2.13 - Bourgeois reaction to threat of consciousness

We need to keep in mind that every time the proletariat stirs, and threatens to awaken (such as happened during the Occupy movement) the instincts of our ruling class will be to drown us in backwardness and shit. That, alone, may be enough to explain why they dumped Trump on us.

It may be true, as some believe, that social media played a decisive role, in the bourgeois election circus, in giving the nuclear launch codes to a reality TV star endorsed by the KKK. But, if so, what would that prove?

We should not be too quick to assess the potential of social media on the basis of how it is used under current conditions, when our ruling class still has the upper hand--because it has its machines--while we do not.

Let's help the working class build its own machine, and learn how to use it. Then we will see how things stand.

-- Chapter 3 --

We need our own democratic machine

In December 1993, the New York Times wrote about a new software program "so different and so obviously useful that it can create a new industry from scratch":

"Mosaic lets computer users simply click a mouse on words or images on their computer screens to summon text, sound and images from many of the hundreds of data bases on the Internet"

Followers of technology had long been waiting for this day. Mosaic was the first graphical web browser, and its appearance was like the shot from a starting pistol. The race had begun.

In the nearly quarter century since that time, the revolution in communications has found its place as the beating heart of every modern economy.

But the political impact of this revolution, in terms of giving the proletariat the ability to become conscious of itself as a class, has been modest at best. This raises a question: Why has this been taking so long?

And can we speed things up?

3.1 - Why is this taking so long?

There have been untold thousands of attempts to use the internet to organize activists and advance the struggle against capital. These efforts have all either stayed small, evaporated entirely, or merged into the standard, watered-down reformist focus on partial demands and "what is possible" when you restrict your efforts to jumping through the hoops to nowhere that our ruling class has built to safely liquidate our dangerous revolutionary energy.

3.2 - What are we missing?

Sometimes, new things cannot appear in the world until they undergo a leap in development. If something important is missing--then very little can happen. A plane missing one of its two wings, for example, will not travel half the distance to its destination. Rather, it will never get off the ground.

3.3 - Our machine must be democratic

The machine we need must be democratic or it will be like the plane described above, unable to get off the ground. Our machine must be democratic in order to be deserving of the attention, respect and support which it needs.

But what does it mean to be democratic?

You won't easily find a good answer to this question. We live in a society, after all, that calls itself "democratic", even though it is always ruled by the exact same one percent of the population, no matter whether the winner of their fraudulent election circus turns out to be the ringmaster—or the clown. So the question of "democracy" is not one that most people have a good handle on.

3.4 - No salvation from the organized left

One might think that some organized force on the left might create the democratic information machine the working class needs. The left, after all, is always talking about the working class.
But the democratic information machine the working class needs is not going to come from the organized left. The organized left is a stinking swamp dominated by reformist trends and cargo cults. And the reformists and the cults are both afraid of democracy.

Authentic democracy is inseparable from transparency. Transparency leads to exposure. The reformists fear exposure as junior-partners-on-a-bourgeois-leash. The cargo cults fear exposure--as the die-hard sectarian cults they are. The reformists and the cargo cults hate and fear transparency because they know, at a deep level, that it will do to them what it did to Harvey Weinstein.

The working class has the opposite attitude. We need transparency like we need oxygen. Transparency is oxygen. And oxygen creates consciousness. We need it, and we will have it.

3.5 - Nothing today is more democratic than facebook or twitter

It is a sad and ironic fact that the most democratic information machines that exist at this time--are probably those that are most well known: facebook, twitter and youtube. These platforms are the most democratic because they allow any two people, A and B, to freely (more or less) exchange ideas.

It is true, of course, that these platforms are undemocratic in many important ways (which I will talk about in a bit) -- but, sadly, these platforms are more democratic than anything created (so far) by the left.

3.6 - Everything revolves around the signal-to-noise ratio

The left forums have a major problem--which is why they do not attract more people. If you go on them you will either get flooded with clueless and highly argumentative people--or you will find that the most clueful people have been kicked off. What is hard to find in the left forums is a sufficiently high ratio of signal to noise. There is either not enough signal--or way too much noise.

A low signal-to-noise ratio will waste people's time and drive them away from a forum. If a forum drives you away like this, by wasting your time, then in defacto, practical terms it has created an undemocratic barrier that blocks your effective participation.

Facebook solves the problem of signal-to-noise ratio better than other platforms by giving users the ability to select "friends" with whom they can have an elevated channel of communication.

Many on the left will disagree with me, and point to some left forum they may consider more democratic than the major corporate platforms. But the bottom line is that facebook is more democratic than the left forums because on facebook--at least I have a chance to talk to almost anyone. I cannot talk to most people on the left forums because most people are not on those forums. Rather, most people are on facebook.

But we will need to do better than facebook.

3.7 - Facebook is not democratic

Google and Facebook, as part of their efforts to combat "fake news"--have modified their secret search ranking and newsfeed algorithms to reduce traffic to anti-war, left-wing, and progressive websites such as Democracy Now, Counterpunch and the Black Agenda Report. These and similar sites have reported a sharp and sudden drop in readership.

Facebook requires its users to use their legal names. This means that if you engage in serious public political discussion, you are vulnerable to retaliation by employers and landlords. This puts a chill on public speech.

For this reason, of course, some users maintain facebook accounts using pseudonyms. But then they are vulnerable to having their account (and their access to the contacts and readers they have accumulated over years) deleted the next time some asshole who does not like what they say accuses them of not using their real names.

And these are not the least of facebook's many undemocratic practices.

3.8 - Mysterious robots

I have about 600 facebook friends. Most were friended because they liked something I wrote. In practical terms, however, my ability to communicate with my "friends" is blocked by an army of software robots that implement facebook's algorithm.

These robots obey commands from facebook to copy information from one place to another. But exactly what these robots do is "proprietary information", and deliberately concealed.

For example, I posted the previous draft of this essay on my facebook timeline, and a few copies of it were placed in the newsfeed of some of my friends.

But how many of them? All 600? Or 60 of them? Or 6 of them? The answer is that I don't know, and facebook will never tell me.

In a similar way, I have no simple and practical way to specify that the final version of this essay, when I post it, will be more important (and should be seen by more people) than the draft. Nor can I specify, for example, a category of people who I will allow to put one (and only one) post per month on my newsfeed.

These people are supposedly my friends, but every information channel between them and me is either leaky, or clogged with unwanted crap, or
distorted in some way over which I have no control.

3.9 - Democratic robots

The working class needs an information machine where, so to speak, it controls the robots. This means, in practical terms that the software that runs this machine will be "public domain" and can be freely and easily looked at or modified by anyone at any time.

In other words, these software robots must be democratic robots. They must serve and obey the users (ie: the people who use this machine, and work tirelessly to build it) rather than any manipulative corporation, or self-serving cult or bureaucracy.

The democratic machine we build will be served by democratic robots that carry information from one part of this machine to another--in the same way as neurons carry information in the brain. We will need to make everything about this machine open and public and democratic--so that this machine cannot be captured by capital and the forces of commodity production--or by any combination of manipulation and treachery.

Is this possible? Will technology give the proletariat a way to create a machine that cannot be captured by its class enemy?

Yes. It will.

I will make an effort not to get too technical, because I want this essay to be readable by anyone who wants to understand the nature of the machine we need. But I will need to touch on one or two technical ideas.

4.1 - Nothing can be erased

To start with, I will talk about the idea of a pile of information which is "immutable". This is just a fancy word for something that can't be erased.

To understand what this means, we can consider the example of wikileaks or bitcoin. Wikileaks is a pile of secret documents that have been leaked to the public. Bitcoin consists essentially of a record of transactions, or a ledger, that allows people to trade things, and in this way performs a function similar to money.

In both cases, the information on the backend is stored in a large number of identical databases. So if some person, some hacker, or some government wants to destroy these systems--it would be very difficult.

4.2 - No central authority

The bitcoin database is stored in identical copies on more than 6,000 machines distributed in almost every country on earth. In order to destroy bitcoin, a hacker or a government would need to destroy every single one of these machines and all their backups. If even one machine survives, the entire bitcoin machine would be able to regenerate itself from the surviving copy.

Bitcoin is based on an algorithm called the "blockchain", which is essentially a mathematical formula that verifies that a block of information has not been altered or counterfeited.

The interesting thing about what the blockchain makes possible in the case of bitcoin--is that the bitcoin machine operates without any central authority that would have the ability to fuck things up if it wanted to.

4.3 - Permanent public record

And that is how the public information machine we need will work also. Our machine will be based on a single, simple database, distributed in a large number of identical copies, and protected by mathematics to verify that the copies are genuine, rather than fake.

There will be no central authority (or any kind of authority) that will be able to censor or shut down this machine once it becomes sufficiently established.

Each user will be able to add an equal amount of information to this database every day. But no one will ever be able to erase anything. Ever. This means that everything that is written will be permanent and public.

4.4 - User will be the final authority

Users will view the information in this database by using public domain software that they, or anyone, will be able to modify. So we are talking about a machine where there will be no restriction on what you, as a user, can see.

Because anyone will be able to modify the display functionality of the software that lets the user view the immutable data--everyone will have the ability to organize their own personal view of the information in this machine however they damn well want.

This means that the final authority on what the user sees will always be the user herself--because there will be no way to prevent any user from doing what he or she wishes with the information.

4.5 - Summary of the basic plan

Summing up what I have outlined, the basic plan for this machine is simple:

(1) This machine will be based on a growing,
public, immutable pile of information hosted on a large number of computers with identical copies, and with no central authority that would have the ability to sabotage or liquidate it. (2) Everyone will have the right to add a fixed and equal quantity of information to this pile on a daily basis. (3) Everyone will have the right to use or modify public domain software in order to look at, organize and share this information, as they see fit.

4.6 - What about the problems?

Now anyone who carefully thinks about what I have described will be able to easily imagine about a thousand things that can (and will) go wrong. I certainly have. Because of the importance of this information machine, there will be no shortage of clever and resourceful people who will make every possible effort to cheat it, own it, fuck with it, sabotage it, counterfeit it, profit from it, or simply shut it down.

In Appendix B (below) I describe how one particular prototype, which I call the "post-it note machine" could work to make it possible for a community of dedicated activists to solve important problems related to filtering out stupidity and building a solid signal-to-noise ratio, as well as protecting security, transparency and democratic rights. It is important to understand that the working class has no need to sacrifice these vital principles in the name of practicality.

Without getting into the details here, I will just say that within the basic outline I have described, every potential problem that could come up will contain within itself a solution, based on the principles of:

1. free information,
2. self-organization,
3. class consciousness and
4. the recognition of necessity.

-- Chapter 5 --

Likely stages of development

The machine we need will only begin its real development when a critical mass of activists recognize the need for this machine, and become determined to bring it into existence.

5.1 - Principles and prototypes

The first stage of development will likely be what I call the "principles and prototypes" stage.

My guess is that this stage is likely to take between 10 and 20 years, although that is only a guess. It could be less than 10 years, or more than 20.

There will need to be discussion of the principles that must guide this project. There will be lots of disagreements.

The most important disagreements will likely concern how to protect this machine from being captured by the forces or representatives of commodity production. Many will not understand why it will be necessary to protect this machine, and will likely only be educated by bitter experience.

5.2 - Centrifugal forces

During this lengthy period, it is reasonable to expect that there will be competing functional prototypes of this machine, based on opposing views concerning which principles are most important.

5.3 - Centripetal forces

But there will also be powerful forces that will compel the competing prototypes to connect to and mesh with one another. These forces, representing the demand of the proletariat for oxygen and consciousness, will eventually lead to the integration of the various prototypes into a single machine combining the best features of the competing prototypes.

The end result will be a single unified public database that will be the foundation of the machine we need. It will function as a news service, a social media site, and a highly flexible tool that makes it easy for users to organize any form of information, including their accounts with the well known commercial sites, such as facebook, twitter and youtube.

5.4 - Capture and re-creation

It is possible that, once such a machine is consolidated, it will be captured by the commodity world, if there is not a critical core of activists with sufficient determination and experience to prevent this.

If this happens, then some kind of branch from the captured project will need to be created, and after some time, an independent project will emerge guided by activists who recognize the need for an independent machine.

This may happen more than once, or even many times. Some people are slow to learn. Some people do not want to learn. And many people who work to build this machine will not start out with the perspective of working to overthrow the rule of capital. Rather, they will help because they recognize that this machine is necessary, and they will become class conscious as they gain experience in struggle.
5.5 - The core will emerge

My conclusion is that the core which does the most to guide and build this machine will be activists who recognize the need to overthrow the rule of capital.

It also appears likely to me that the core which comes together to create this machine—will also be the core that creates the class independent party of the international working class—because I believe this party can only emerge in connection with this machine.

This machine will evolve into, so to speak, an operating system that creates and then executes the collective democratic will of the proletarian mind.

Eventually a machine will emerge which is unified, stable and has the ability to defend its integrity.

5.6 - Expansion

The next stage of development will be expansion. A prototype project may have tens, or hundreds, or thousands of users. Once design principles are tested, and a public consensus of guiding principles established, and the integration of the competing prototype systems takes place—then expansion will be possible to millions and billions.

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This machine will attract consciousness, and reflect it back, in a coherent, refined and amplified manner, like a laser of remarkably power with a high signal-to-noise ratio. The best and most farsighted will dedicate their lives to forging this common channel that will lead to the liberation of all humanity.

As this happens, and many tears are shed, path to the development of capitalism.

Humans become more productive when they have access to information which allows them to raise their consciousness concerning their real needs—and how to meet these needs.

This century will be characterized by the free flow of information and, flowing from this, a war of ideas organized on a mass scale.

We can best understand the war of ideas which will dominate this century by considering all information as being divided, roughly, into one of two categories: (1) commodity information, and (2) free information.

1. Commodity information

Commodity information, or proprietary information, is based, one way or another, on exploitation. This kind of information comes with restrictions, and it is based on lies.

Commodity information is created by wage workers. This is another way of saying it is created by slaves, to serve the needs of capital.

For example, when I opened my browser recently, the article that popped up at the top was titled: "These Are the 5 Youngest Billionaires". As if this is news that is important to me. As if I have nothing better to do than daydream about owning a pile of money so I could enjoy the comfort, status and recognition that might bring me. But humans had comfort, status and recognition before there was money. It was their birthright. So, at a deep level, this article is based on a lie.

And we are bombarded, on a daily basis, with hundreds and thousands of such lies, in the form of advertising, in the form of news, in the form of entertainment, in the form of much of what passes as "education". This is the nature of commodity information. It is not our friend. It is based on exploiting us, and controlling our minds.
2. Free information
Free information has no restrictions. It can be organized by people as they damn well please. And it can be created to serve people, not corporations, or the rule of capital.

No machine can be authentically democratic unless it is based on free information.

6.1 - The culmination of an ancient struggle
Humankind is approaching the culmination of a lengthy period. Modern humans first walked the earth two hundred thousand years ago. During most of this period, human relationships were based on sincerity and sharing.

About ten thousand years ago, the development of agriculture and metal tools changed everything by creating the foundation for class society, divided between exploiters and the exploited.

A few hundred years ago, feudal society was overthrown by rising capitalism, which created steel, the steam engine, electricity, microchips and the internet.

In this century, it appears, the proletariat is set to inherit all this by overthrowing the rule of capital and bringing an end to class-divided society.

The democratic information machine will make this possible.

This machine will be created in this century because of the intersection of two factors: (1) the need for this machine will become more obvious with every passing decade, and (2) with every passing decade, the difficulty of creating this machine will be reduced.

As the recognition of this need becomes high, and the difficulty of creating this machine becomes low, the demand for this machine will become irresistible.

My humble conclusion is that this is the last century in which humans will be constantly bombarded with information which is created by slaves, and which is aimed at exploiting them and controlling their minds. In its place will be free information.

As this happens, then it must follow, as night the day, that the proletariat will make itself conscious, liquidate the rule of capital, and emerge from the darkness.

It has been a long time coming.

Ben Seattle
October 2017
► http://struggle.net/ben
► https://warforquadranttwo.wordpress.com
► On facebook as Ben Stevens

Join me on facebook or my blog for discussion. If you like this essay, consider passing it on to one or two thoughtful people you know.

-- Appendix A --
A world without money or powerful bureaucrats

I have written at length about how economics and politics will work without the rule of capital, commodity production, or an all-powerful centralized authority.

Economic activity will be based on the principle of "pay it forward" rather than "pay it back" (ie: exchange, money and the market).

A good place to start is: "A Better World Is Possible • What will it look like and how will we get from here to there?"
I also recommend:

(2) "Politics, Economics and the Mass Media when the working class runs the show"
(3) "The Ascendency of the Self-Organizing Moneyless Economy (Appendix F)"
(4) "The Self-Organizing Moneyless Economy" and
(5) "The Laws of Commodity Production for Dummies".

These are all on the web at:
(1) https://warforquadranttwo.files.wordpress.com/2013/01/2012-08-12_ben_leaflet_4.pdf
(2) http://struggle.net/ALDS/essay_153_content.htm
(3) http://struggle.net/ALDS/part_7_F.htm
(4) http://leninism.org/leninism/some/
(5) http://struggle.net/alds/locp.htm

-- Appendix B --

Some ideas for the "post-it note" machine

I will sketch out here some ideas for a small-scale prototype project.

I have created software prototypes of various kinds in the past. One prototype used a web page to update an online database. Other prototypes experimented with ways to display and move information on a screen.

B.1 - the "post-it note" machine

Some readers may get confused between:

(1) the small-scale prototype I sketch out here and
(2) the very large machine I believe will eventually emerge from the consolidation of competing prototypes.

So I will call the prototype the "post-it note machine", and I will call the much larger machine, which I believe will come later, "the channel".

Of course, the machine which comes later may not really be called the channel. That's just a guess as to what it might be called. People at the time will call it whatever they damn well want.

B.2 - Use your imagination

The relationship of the post-it note machine to the channel--is like the relationship between a toy airplane (made with balsa wood and a propeller powered by a rubber band) and a real airplane: it illustrates the idea, if you are willing to use your imagination.

1. The Channel

The channel will connect millions and emerge as a social and political force capable of organizing the working class to storm heaven.

2. The post-it note machine

The post-it note machine, on the other hand, might be practical for several hundred people to use (if my written description here was used as a guide to creating functional software).

But some of the ideas in the prototype, if they prove themselves to be sufficiently useful, might conceivably find their way into the channel. So this may be a good reason to pay attention.

The post-it note machine is based on a universal and simple principle: "a common interface to a common memory". In simple terms: the library belongs to everyone, and everyone has the right to look at (or not look at) anything in the library.

So let's talk first about the interface, which I call the note. The note can be a word, or a picture, or something more. But we can think of a note as an approximation of a single thought. We will then combine notes, so to speak, in the same way we combine thoughts.
B.3 - The Note
The basic idea behind the post-it note machine is a square note (like a post-it note). This note can contain words, images, tables, and other notes. It can also contain clickable links to any other note (or any content on the internet).

B.4 - Notes can reply to one another
It will be easy to create a note that replies to another note, or that will "like" (or a "not like") a note. To see how this could work, let's look a little deeper.

B.5 - Public margins
Usually, when a reader looks at a note, she will also see information about the note in a "public margin" which will display a list of replies to that note, as well as ratings for the note, for the author, the history of previous versions, etc.

Readers will be able to change the size and features of this public margin, or eliminate it completely, but the most important thing is that they will have complete control over the filters that the margins use.

B.6 - Notes can be filtered
This public margin will make use of a filter, which the reader can select. Filters will always be necessary in any system with lots of users, because many people act like time-wasting jerks.

Anybody will be able to create their own filters, and anyone else will be able to use those filters. Let's consider how this can work.

B.7 - Notes can contain #hashtags
Anyone who creates a note will be able to add hashtags to that note. These hashtags will then be used for many purposes related to searching, selecting or filtering the notes that appear in a table or in a public margin.

A reader will also be able to add hashtags to any note. In the example in the graphic above, Jane has "liked" the note, and Bob has "not liked" it. Bill has added a hashtag also. They can do this by creating a note that contains a hashtag and that also replies to their target note. They will be able to do all this just by clicking a button. Software will do the rest.
B.8 - Tables can be generated using combinations of #hashtags

We can combine software with the hashtags to create remarkable power and flexibility to display information. To illustrate this, consider how we could use hashtags to automatically create a table.

As a user, I could command the software to create a table of all recent notes that meet the following criteria:

(1) The author of the note is someone who has "liked" one of my notes, and
(2) The author has added the #pol hashtag to their note. (In this case, this hashtag is being used to denote that the content of a note is heavily political).

I could then use this table to generate a newsfeed that would show all political posts created in the last week by anyone who liked something I wrote.

But what if this list of posts is too long to read? Then I could modify the table so it only includes posts by people who have liked 3 of my notes. That would narrow it down.

But what if there are too many posts by time-wasting jerks in this list? Here is where it gets interesting.

B.9 - Jane's list of jerks

Suppose a reader named Jane sees a note created by some jerk. Jane adds a tag to this post (for example: #jerk, or #racist, or #anti-women, etc). In this example, Jane is someone I have interacted with, and I have developed confidence in her judgement, and she has earned my trust. It would be easy for me to create a table of people who have earned one of Jane's jerk tags. Then I could use this table to filter out these jerks from anything I see.

This would mean that I would not need to go through the time-consuming, fruitless and sisyphian task of making my own evaluation of each and every jerk under the heavens who is active on the platform. This gets awkward in communities of thousands or larger--because you don't really know who you are speaking to.

Lists which exclude people are traditionally called blacklists. The opposite kind of list is called a whitelist. Anyone would have the ability to create blacklists and whitelists of any kind. (In fact, that is what I just did in the example above.) As a reader, I would have the ability (and the right) to select and combine these lists however I wanted.

These kinds of independent, collaboratively created filters illustrate how communities will protect their signal-to-noise ratio in a collective way, without the need for a paternalistic central authority.

What does that mean? It means if you want my attention, if you want me to see what you have written--then you damn well better be polite and respectful to Jane and her network of friends.

B.10 - Just the best

There is no end to the innovative ways something like this could be used. For example, I could reduce the table further by requiring a #monthly_best tag, which authors might put in what they consider their best post of the month. This would mean that the newsfeed generated by that table would only include the best post of the month by each person.

Facebook's secret algorithm does some things like this. But we need to remember that Facebook's algorithm is designed to keep you clicking buttons for as long as possible so your time and attention can be sold to advertisers. Remember, we should not be working for the robots. The robots should be working for us. We need our own algorithms, just like we need to have the right to make our own choices of what to read.

B.11 - Easy organization of any kind of information

Some of the most important uses of tables will be to collect organized information about people, projects and organizations. And you will be able to create a table of notes for your "To Do" list, or for notes to which you are planning to reply, or your most liked notes on a particular topic.

Also, the system will generate a Note for each user at the time they register. If you are interested in the reputation of anyone on the system, you will be able to go to their page and look at the associated public margin. You will be able to see what kinds of tags (good tags or bad tags) they have earned, and from who. In political struggles, it will be valuable, for example, to see how someone is rated, or how many tags or tickets they have accumulated, as a #reformist or a #sectarian.
There are many ways that the public margins will be able to display information about a post, and about the discussion and activity the post is part of, or that it generates. Software can make this information interesting and valuable.

For example, there could be an option to represent each reply you have filtered out as a small gray dot. That way you can get an idea of what you might be missing--and whether it is time to explore changing the settings on your filters. There could also be the option, when looking at a particular note, to make use of the filters recommended by the author of that note. As always, the user is the final authority concerning what she will see in the public margins.

**B.13 - Contested terrain**

The graphic above helps to illustrate how the right algorithms enable us to quickly see and understand key patterns. I want to illustrate this principle with another example featuring a dispute concerning the content of a wiki page.

Wiki's are interesting and useful information machines, based on the principle of a single page, edited in common, on any relevant (and often irrelevant) topic. But sometimes the interpretation of a topic is in such heated dispute that there is little real consensus for how to present it.

Consider (as an example) the wikipedia page on what is called the "Israeli Palestinian Peace Process". There are opposing world views involved. How could they share a single description they all consider accurate--without the page becoming essentially flat and lifeless--as it is drained of the ability to really say anything?

When two or more schools of thought are so far apart on an issue, it may be better to give them each their own page--and to link to each of these pages from the page in common. That way, the nature of these contending schools of thought (and the size and support of each school) becomes easier to understand--at a glance. And more information --is readily available from the school which wins the competition for your click.

Key notes will, in effect, be fought over, and considered more valuable than real estate. For some notes, with high traffic and a high sense of purpose, each inch of terrain will be fought over.

Each note originates as a reply to something. In a sense, we can speak of the node that is being replied to as being the "parent node". We can also call this the "attachment point".

**B.14 - Parent note**

Each note will be given 6 "key links". The author of the note gets to decide what notes to link to for these key links. The software will give these links privileged status in various ways. Users viewing a note in the "hex" configuration, for
example, will see the 6 key nodes in miniature on the right side of the main node.

B.16 - Delegation of authority
Notes originate with a single author. But an author will have the right to give one or more people the right to edit his note. An author will also have the right to transfer "ownership" of a node to a fellow activist or to someone else.

B.17 - Interaction with facebook, twitter and blogs
Without getting into too much detail, I should add that the post-it note machine would be able to extract public info from your facebook account and organize and display this information in ways that is useful to you. It should also be able to do the reverse: allow you to create posts on the prototype platform and use robots to publish these posts to your facebook account. It should work in a similar way with your twitter and blog accounts--if that is what you want.

B.18 - Security
The post-it note prototype will encourage people to use a pseudonym, and to build their reputation on the basis of this pseudonym. Of course, government intelligence agencies have the ability to tap nearly every phone, and so forth, so this is not so much to protect activists from government spying or harassment as it is to provide a minimal layer of protection against employers, landlords and racist gangs.

B.19 - Casual and formal identities
When you register, you will be assigned both a casual and a formal identity number. You will be able to attach a display name to each of these identities (and to change these names as you wish). But if you act stupid and someone gives you a tag or a ticket, this will be attached to one of your two identity numbers--not your name.

The use of two distinct identities is intended to allow users to engage in online activity in a way that carries with it a lower level of expected accountability. Sometimes this can be useful. Maybe you want to post late at night, when it can be difficult to think clearly, or when you are angry, drunk or high? In these situations, you would be wise to use your casual identity. That way, if you say something thoughtless or stupid, the loss of reputation or visibility will not accrue to your formal identity, where you are expected to choose your words with greater thoughtfulness and precision.

Serious forums will arrange their display of posts so that only posts from people using their formal identity will have high visibility.

Any user will be able to discover the linkage between your casual and formal identities--as this linkage cannot be hidden. The distinction between your casual and formal identities is not enforced by secrecy--but by the development of healthy habits based on recognition that such a distinction is useful in the development of online communities and personalities.

B.20 - The base layer
What I call the "base layer" is the universal library--the common, immutable memory--the growing and permanent stack of information; available in multiple identical public copies distributed in various places.

In the graphic below, each person has the ability to add up to 100 packages of characters each week. Each package can be up to a thousand characters. The data in these packages is used by the software to create and edit your notes.

Such a method will allow users to add text, but not images. Graphics could be handled by adding a centralized bank of shared images, to which each user would be able to upload some quota of megabytes each week. The images would need some kind of review process that could delete images that create unacceptable legal problems, or are highly racist or offensive.

Such a review process for images stands in contradiction to the goal of immutable memory. The post-it note machine I have described--immutability would apply only to text, not images. But this would probably be **good enough for a small project** aimed at being useful to several hundred people. **We will not solve every problem at once.** Prototype projects will gain experience, and freely share their solutions.

B.21 - An organized microcosm of the internet
In some ways, the post-it note machine I have described can be considered a microcosm of the larger internet. But there are important differences. Not only will it be a billion times smaller than the internet--it will represent a level playing field, in which each post and each person is indexed and tracked in such a way that we have control over what shows up on our screens.
I have been writing about these topics for more than 20 years. I created a lot of graphics as I developed my ideas. I include some of these graphics here. In order to read some of them, you may need to view the PDF version of this essay using high enlargement.