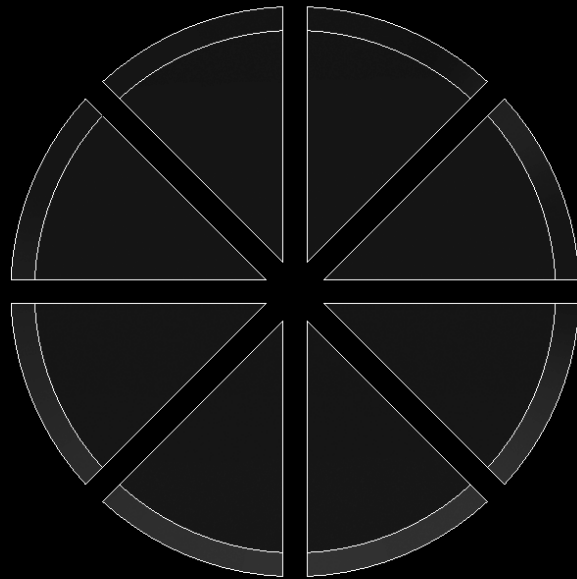# CRYPTODEMOCRACY

JULIAN MERGHART

PREFACE

I am a citizen of the United States and I was born in Boston.   I am writing this book because I have faith in the future.   Ideas are powerful, and ideas can be wrong.   I encourage you to question these ideas, add to them, dispute them, or destroy them all together.   The future belongs to many people we will never meet, but somehow we feel responsible for them.

DEFINITIONS

cryptodemocracy – the creation of a nation state where the native people, regardless of race, creed, or national origin, vote electronically to form and run a new government by means of cryptographic control of the taxation, judicial, legislative and governmental processes - via a means of secure, encrypted, purely democratic, electronic voting where each citizen has a vote of equal value.

cryptographic voting – voting electronically via a mobile phone app with the aid of mathematical software based encryption to verify and secure that 1) votes are unique and 2) votes are counted accurately and 3) votes are tamper proof and verifiable.

THE BEGINNING

Cryptography guarantees many things, but among the most important are accuracy and privacy. It's the ability to keep prying eyes out.   And it's a necessary part of the human condition.

We can't get along.   That's a proven fact.   When Queen and David Bowie recorded their rock anthem "Under Pressure," Freddie Mercury asks "Why can't we get along?"   Well, the answer is simple.

Humans are a competitive species.   In addition to that, we are an aggressive species.   We compete for wealth, resources, food, and mates.   In addition to that, we start wars. But historically, it's powerful politicians from powerful governments who enact war and mobilize soldiers to go to war.   That power needs to be taken away from them, and the only way to do it is with cryptographic voting. In short, the encryption guarantees with 100% mathematical certainty that each vote is accurate, unique, and tamper proof.

So, since some of the more talented members of our species have invented computers, we can

now use them for what is maybe their most important task yet - tracking and accounting for our human population and letting every person on the planet partake in an electronic exercise in directing our species towards world peace... *cryptovoting* for freedom and change. Voting for the future of our species.

Make no mistake about it - cryptographic voting is a form of treason to all current forms of government on planet earth. Am I a traitor for expanding on or birthing such new ideas? I guess time will tell!

Removing the idea of representative government in itself renders politicians powerless. What it means is that their power is not legitimate or even necessary. In this new system, the software code can pass and change the law, or more precisely be the mechanism by which it changes, and the law can be changed quickly and precisely. Gone are the days of filibustering and wasting everyone's time until the next hot topic comes up.

I believe Cryptodemocracy even has the power to eradicate borders between countries. Imagine two great superpowers are neighbors and share a common border. What if the overwhelming view of the citizens on both sides of the border is that joining together would be better than staying separated? If put to a vote some real unity could be achieved.

I can think of many countries that are more divided by politics than by culture. Vietnam, Korea, England, Scotland, The USA and Mexico all come to mind.

POLICE

The first order of business if we are going to discuss new political theories and governments is to discuss briefly the role of police. "To Protect and to Serve" is the motto of many police departments in The United States. Of course, people from all walks of life have differing opinions on how they feel about the role of police. I believe we need police and I believe police are always going to be a part of any civilized society. Moral, rational, and law abiding police officers are the foundation of law. Police must reflect and act upon the will of their local tax paying citizens whom pay their salary.

The police are literally the cornerstone of any civilized nation or state. The police officers are literally the muscle that enforce the law. Control of the police is maintained by two key elements, and they must answer to those two elements - law and fiscal policy. Officers swear an oath to uphold the law, and they get paid a wage to do so.

Making a new form of government does not mean we will change the structure of our police departments, but it does change what laws they will be enforcing. The police exist to enforce

the laws that are on the books, and hence the law must be a manifestation of the will of the greater public at large, or ideally it should be.

The realization of the collective will of the people is the purest form of democracy. How do we find out what the masses truly want? Through secure, mathematical voting with computers.

JUDGES

Would there be a role for judges in a truly cryptographic democracy? Would there even be a courtroom? In short, I think there would be a role for judges and courts. I don't know for sure, but I suspect their role would be mostly to ensure a fair process and to make sure no errors have been made. I believe nothing will change as far as police, law enforcement, and the customary road to justice but what will change is how justice is administered, and to what extent. That job should be the job of the voters.

Crime is something that humanity is naturally curious about, and if people were able to pour through case files, and be involved from the comfort of their homes in the outcome of a particular case, I believe people would weigh in. First they will help determine a margin of guilt, then render a verdict, and finally a punishment. That margin itself needs to be voted on.

No one really knows if 51% or 67% is fair – what better to vote on to decide on a state by state basis. So, maybe in Massachusetts, you need an 88% margin to be found guilty, but in Mississippi you only need 66% and so on. Who knows the number may even be 33% - whether that is fair can be changed also. There can be proposals for voting on the same issue again and again, and hence the law changes as votes are tallied.

Let's say a murder is committed, someone in a local community is charged, and the evidence is presented. Rather than going through the trials and tribulations involved in a jury selection, where the results are skewed at best, what if residents of a certain district or even state, or maybe even a country could go online and read through the evidence and vote as to the guilt or innocence of an individual? What would a fair margin of guilt actually be? That needs to be voted on as well.

PRISONS

The verdict for many cases would have been quite different had everybody been voting on it, because it's fair to say that sometimes a jury of 12 gets it wrong. So, there can be a lot of room

for ideas here and I can't possibly think of all of them.   One thing is for sure, prison isn't going anywhere and any civilized society is always going to need prisons.

The sentences should be voted on also to ensure they are not too harsh or lenient.

TAXES

Wasted tax revenue.   It's a real thing with every government.   Imagine how rich we would all be if the government stopped wasting all of our hard earned money?   Our tax money would need to be paid with cryptocurrency, and those funds should only be unlocked and spent with full approval from the voting community.   If a district is spending too much money on schools, that needs to be voted on and adjustments need to be made.

Encrypted tax revenue monitoring is a solution.   Basically, before a town, city, state, or country allocates tax money to a project or endeavor, or even a war mind you, it should be voted on with encryption.

If you live and New York City, and the city wants to use your tax dollars to build a new library, and no one really thinks New York City needs another library, then it can be voted down... immediately.

BIRTH

At every child's birth, that child should be assigned a cryptographic identity.   A blockchain ledger should be started at birth, and verified by the mother, and the father, and the family, at birth.

From that point on, that new human being should carry that blockchain identity until they die.

CONCEPTS

My ideal Cryptodemocracy isn't a place of anarchy.   It is an organized, lawful form of government with real physical boundaries and real cities, and real people.   What makes it different is that it calls for the ability to change the law quickly, and have those votes change the

law, digitally.   The code itself is not law, but it is only *the mechanism* by which the law is changed, and administered.   Like all computer code, it is merely a tool which is used to accomplish a task, nothing less or more.

There should be no more politicians because politicians are people and people make mistakes.   Even large groups of people can make mistakes, but I believe it would be nearly impossible to move an entire country into nuclear war if both sides were able to vote on the issue.

There are no more great politicians who can save the world.   Those times have passed, and we are facing a new kind of problem.   The chaos of overpopulation, conflicting creeds, and a blind path to definitive, unavoidable, cyclical, never ending war.   Citizens of all countries must come to an agreement on how to use simple, reliable computer technology to vote, and by their vote, change the law.

Human trafficking, religious hatred, and genocide are current problems we are facing in the world today.   We see these patterns emerge long after the plagues of darkest events of the 20th Century had ended. The Holocaust, the reign of the Kamer-Rouge, and the Mass Starvation with Mao in China, which some experts agree killed 55 million Chinese.   Vietnam and the War in Afghanistan brought our century to a close.   Make no mistake about it, most countries don't want their people to vote to decide whether or not they go to war.

REAL ESTATE

There might be wisdom in eliminating boundaries between countries all together, and looking into a better way of accounting for property ownership in the form of digital maps, and a reference to them in the block ledger.   The solutions I am proposing outweigh the inherent problems.   Every square inch of the world is currently owned by someone, and that ownership continually changes.   In reality, a title search in most countries is just a simple review of records of ownership all the way back as far as records can go.

Title companies even carry insurance to fight any legitimate claims that may arise from the past.   This is a major area of real estate law in most countries, but the process is always the same.   It's time to rethink the way people verify the ownership of real property, and even cars and boats.   It's much quicker to do it digitally, and much less prone to error.

Furthermore, our current land ownership system is plagued with complications.   The rich own too much land, and it's needed by the poor.   The social problems that arise from homelessness are great and many, and are linked to crime and drug abuse.   A home is the foundation of a stable society, literally.   Because of this special attention needs to be paid to the issue of proper housing, and housing codes need to be more lenient towards the building of new houses that

people can actually afford to own, not rent.

I'm also not convinced that urban sprawl is the best solution to a shortage of housing.   Some people might truly enjoy high rise living, but living in a city has its faults, and planners and home builders should keep investing in the idea of families owning houses in safe, civilized, convenient, walkable neighborhoods all across the world.   What we need is a revolution in home building and design.

OLD THINKERS

Plato, Karl Marx, Bertrand Russell, Machiavelli and all the other great political thinkers could not have predicted the power of computers and the information age.   This means their political thought is now obsolete.   Nothing they thought of back then could have taken into account a digital, fully connected world.   This in turn means all of their political thought is antiquated and no longer valid in my opinion.

DISTRIBUTION OF WEALTH

Bertrand Russell said in his book *Political Ideals:*

"One of the sources of evil in modern large democracies is the fact that most of the electorate have no direct or vital interest in most of the questions that arise."

"Society cannot exist without law and order and cannot advance except through the initiative of vigorous innovators.   Yet law and order are always hostile to innovations, and innovators are almost always, to some extent, anarchists."

Bertrand Russell, Political Ideals, 1912

Human beings may not share the same values, but we share the hope that our values will convene and at some point, translate into a workable solution.   Would life be better without greed?

These are all ideals, but in our society, there can be no ideals.   So voting on something is as good as it gets for our species.

10 people are in a room.   This means we need 10 votes.   It sounds too simple to be true but if people could vote with their mobile phones, almost everyone would vote.   It's a fact.   And if

people could understand what they were voting for, things would change.

"You can't fool all of the people, all of the time."

CURRENT GOVERNMENTS

To understand governments on planet earth, one only needs to try to visit a country through customs.   All passports look the same and share a pretty similar format.   Most countries allow people to visit for only 30 days, and after that you need permission.   That permission to stay is called a visa.

John Lennon talked about a world where we should imagine no countries.   In a lot of ways he was very correct, if not a little naive.   Does cryptography have the ability to free us all as people?

There's room at the top they are telling you still.

But first you must learn to smile as you kill.

If you want to be like the folks on the hill.

~John Lennon

The bottom line is that we have to start looking at planet earth as one large container that supports us all.   We are all human, and we all need the same things.   Many of us want different things but our needs are all the same.

As long as human beings cannot vote in unison, we will be at the mercy of false political actors and demagogues.

99% of people on this planet just want to live a normal life.   The other 1% want to control us all - and they do.   If the human race could come to an agreement that our data should be represented as a citizen of planet earth, and not this country or that country, then we could all vote on things that start with our planet as the main foundation.

This doesn't mean we could not vote on things that are local to us, but let's admit right now that most people on earth have a life that revolves around less than 100 mile radius.   For others it's less than 50 miles or even 25.

Most people don't know people in every corner of the world.   So, this is where geolocation tracking comes in handy.   If you are known to be in a certain area for the past 5 years, then it's fair to assume you are a resident.   Who cares if you are part of a certain state or country?   If

you have been living in Mumbai for the past year, you should be able to vote there.

I believe a one year minimum should grant someone the right to vote.

Sometimes people want to move.   People should be able to move.   The fact that people cannot move wherever they want is a disservice to our world.   The only fair system is a system where a city or area has to work to attract new citizens by having good schools, good housing, good food, and good entertainment.   If an area is a desert or climate or culture, it should be abandoned. There is no hope for humanity without cryptographic law.

HISTORY

All law comes from religion.   Christianity destroyed the Roman Empire.   Catholicism challenged the power of the Kings of England.   Protestants came along to fight the Catholics.

Islam came along as an alternative to Christianity.   Karl Marx had in mind the goal to destroy Christianity.   His philosophies founded Russia, China, North Korea, and Vietnam among others. Nietzsche came along and decided that God was dead.   Scientists have been trying to destroy religion and God since the dawn of science.   They even try sometimes to prove the existence of God.

These ideas are about power and they always seem to come back to human domination over others, and that is something I am trying to avoid here.   Law is powerful and can be manipulated in a fair way, and fairness only comes from math.

FAIRNESS FROM MATH

To share a pizza among 8 guests, it must be cut into 8 slices.

Law has to be administered in the same way, and the only way to deal with the breathtaking enormity of our earth's population is to vote with computers.

A WORLD WHERE ANYTHING CAN BECOME LAW

We already live in that world - make no mistake about it!   Look at the countries of the world

and examine their laws - and you will see that lunacy already prevails as law!   Law is created by people who are in a position to change it.

90/90 BENCHMARK

Cryptographic voting won't change that at all - it will speed up the process.   We are not in a world yet where all cell networks can adequately handle all traffic for all cell phones - but we will reach a point above 90% reliability someday for over 90% of the world population.   I call it that 90/90 benchmark.

When that becomes reality, which I believe it will by the year 2050, I believe that our human society will shift more into unison if we are able to vote with a system like this.   I may be naive and who knows we may all be wiped out by nuclear war by then, but as I said earlier I am an optimist.

DEATH PENALTY

The death penalty shouldn't be allowed and voting on whether someone should live or die for a crime definitely should not be considered.   Criminals have a useful role to play for society.

I am a huge proponent of giving jobs and privileges to prisoners.   Prisoners should have free access to the internet and should be able to go to school online and earn their degrees.   People in prison should be able to have the opportunity to get their lives on track and not be a drag on the tax system and society in general.

THE APP

Some serious consideration needs to be given to the validation techniques used in a voting app like this.   Beyond everything involved with blockchain, the most important aspect would be biometric facial and retina scanning.   All scans would need to be cross referenced to ensure the same eyes didn't vote twice, or that the faces involved were not voting twice, even if different phones were used.   An imperative idea would be to let one family vote with one phone. People who vote might want to share phones to vote so that should be considered.

The app would need to be able to verify the unique identity of everyone that votes.   Ultimately, I think the simplest way to verify someone will be with a blood sample and DNA verification, but if that isn't possible than we can use data and probability to decide the potential that a vote is accurate and unique.   One way to do that is via location proximity, and time. A small family can't vote 1000 times in the same place so the app can cross reference this data.

Below is what the tech industry calls a UI/UX.

I designed it myself and I believe it's pretty close to the way the app should look and work.   I believe it should be easy to use, fool proof, and have a minimum of complex language.   I believe the app to propose new legislation should be a separate app that should feed into this app. The reason is simple: most people just want to vote.   For those that want to seriously propose new laws, more rigorous standards should be created to prevent poor writing, ill intent, and general fake proposals from gaining any traction.   On top of that, there should be a limit on the choices to vote on during one voting cycle.   So if people are trying to ratify the founding of a new nation, the habitants of that country need to validate each issue with a minimum of choices to avoid confusion.   The results of an election should be accessible and viewable at any time, and they should be saved to the database permanently.

In the United States, I think people would need to provide a SSN, a driver's license or state issued identity card, and also some kind of biometric facial verification which does not include fingerprints because those alone are not reliable enough, something more like iris scanning is in order.   In instances where governments are not yet formed, I believe it would be good to have an app simply take a facial picture of voters, and commit their faces to a database, and from there just log their voting preferences into that database, verify with the blockchain, and show the

results in near real time.   People can stop voting for politicians and start voting for issues.

The app would need to be very powerful and very well organized.   The blockchain type would be of the consensus type.   The UX would need to be simple, and intuitive.   It would also need to be color coded and easy to use.   Sections would need to be clearly laid out.

I personally don't have the ability to code an app that accomplishes the many elements that would need to be present for an idea like this to work, but I can tell you that the app itself would have to work like a hierarchy of proposals.   So for example, marijuana is not currently legal to smoke in Texas.

In order for it to become law, a person would have to draft a piece of "proposed legislature" and craft very simple wording explaining what law needs to be changed, and what the criteria are.   So it would read something like this:

Proposal To Legalize Marijuana in All Forms for Medical and Recreational Use in the State of Texas

Majority: 50%

Voting Starts: May 1, 2020

Voting Ends: September 1, 2020

As people vote, they can see the results in real time on a graph.   People can also propose amendments to the legislation or attempt to strike it down altogether.   I don't know exactly how that would work but I am confident some talented coders can figure out some rules to govern a system like this.   I have read on forums that an idea could be to randomly select 1000 "gatekeepers" for each new proposed legislation and have them vote yay or nay to allow a law to live or die.   This way absurd or immoral legislation will die before anyone can see it.

Also, the rules at play need to be higher than 50% and there could be some wisdom to the 2/3 majority rule.   But, in certain cases and issue is so closely divided that the only fair way is by 50% majority.   It would be tempting to try to pass a proposal with a 25% majority but I think someone else could easily prove that is null and not lawful.

States would need to set a standard of what they believe should be a good measure of enacting a law and by what percentage of majority, and go from there.   This means that in Texas, for example, people would need to vote on:

Proposal for a 88.8% Majority Vote with a 6 month Polling Period In Order for a Law to Be Valid, True and Enforceable in the State of Texas

Majority: 88.8%

Voting Begins: Jan 1, 2020

Voting Ends: April 1, 2020

Voting on things is the only way forward, no matter how small a detail it is.

RELATIONSHIPS

If the relationships between people in general are only transactional and based merely on leverage, and not decency or basic human rights, when the facilities and laws that create that leverage finally decay or break down, only chaos and hatred can erupt.   Hence, nothing but hatred can be born out of leveraged relationships.

In war, there is only leverage, and the only guarantee is death.   The only hope for a world where never ending war will cease to exist is through cryptographic law.   In addition to that, there must be cryptographic control of the weapons themselves, and the military must be heavily reigned in.

CONTROL OF THE MILITARY

Generals, admirals, officers, and soldiers fight wars.   The chain of command, which usually consists of about 25 ranks in most armies, actually guarantees war more than peace.   The decision of one sitting President or leader to enact war, or a bi-proxy war, or any kind of armed conflict, needs to be voted on 100% by a population of a country.   War is by far the most important subject to actually vote on.

Currently in the USA, taxes fund the military.   From that point on, citizens really have no say in the autonomous movements of their Marines, Army, Air Force, Navy, and Coast Guard.   That also includes the Federal Government, CIA, FBI, and NSA in general.

That in itself means the fate of our country rests in the hands of The Pentagon, and the ability of our war hungry admirals, which to them a hammer only sees a nail would be the most apt comparison.   Armies dream of war, not because they love war, but because it is their chosen profession and specialty.   A country that has no control over its military has no control at all.

Cryptographic control of our weapons and nuclear arsenals has to be the next discussion.   The discussion needs to come before a discussion about gradual disarmament.   The debate needs to be held quickly also.

I am talking all the way down to the software activation level.   We now live in an age of robotic, software controlled weapons.   It's a great time to talk about making sure that the military cannot

activate them without the say so of our citizens first.   They can dream about it, but only we can do it.

I don't believe a military can be controlled without cryptographic and democratic control, not from representative government which in my opinion is a false idea, but only by law that is cryptographically locked, protected, and monitored for accuracy in terms of actually reflecting *the will of the people*.

The time of hoping that our politicians will accurately reflect our values is long gone if it ever existed at all.   In my opinion, the United States in particular needs to vote on drawing down its active duty military by more than half and start thinking less about war and more about peace. We need to let the other countries in the world create their own destiny and shape the world as well.

Some critics may falsely argue against cryptographic democracy because there could be a concern for intrusion, hacking, or even worse complete digital dictatorships or accidental destruction of the blockchain record.   I am convinced that nothing could be further from the truth.   In my opinion, neither is a valid concern because any question about the accuracy of a blockchain ledger can easily be scrutinized and analyzed by any group of independent and competent programmers, and even individuals.   We can scrutinize code.   Good code makes good government.

Strangely enough, the largest barrier to *cryptodemocracy* is established governments and politicians.   The current politicians of the world won't give up their laws, constitutions, or political power, without war.

This new system doesn't need them to sign the checks, make their speeches, or tell us how to live.   An emerging government whose citizens find themselves in the midst of a war anyway, would be wise to adopt a system like this as a goal because ultimately instead of battling to hold a vote for political leaders, the system would be voting on political ideals and immediate laws. A digital system of leadership and law will prevent future wars.

In an emerging government, I think *cryptodemocracy* could possibly help secure the existence of law and a new government that is fair and impartial because quite literally – the law would be directly tied to majority will of the people, as opposed to the views of the representative politicians involved.   The amount of time to promote, run, nominate and elect them is nothing but a waste of time and an exercise in political conjecture.

"Politics is the realm of conjecture."

Reliance on the whims and generosity of politicians and various political actors and contributors with hidden agendas is stale, old, and unwise.

A WORLD FILLED WITH COMMUNIST GOVERNMENTS AND DICTATORS

A world with communist regimes and dictatorships cannot and should not be tolerated. Capitalistic governments, though they have their own merits, also have their downsides as well. The solution is not complete eradication of one or the other, but modification of all.   As I sit here at a Starbucks in a quaint New England town, it's currently May 2019.   Life is the United States is fractured.   As is the same with the average citizen of China, they as most Americans are just busy with daily life.   Most people are trying to get their kids to school and plan dinner, never mind dream of political ideals and fantasies.   The topic I overhear today at this fine coffee loving establishment is "How will Game of Thrones end in the Final Season?"

It is hardly their fault that most are blissfully unaware of the aggressive military campaigns that both of their countries are waging around the world.   At this time in history, the only country more fixed upon world domination than The United States is China.   Russia is all too happy to stand by China and support them just like a watchful parent, because they have been there since the creation on Mao's Communist Dream.   It's now inevitable that the United States and China will go to war.   These Great Powers are locked in what the United States Navy calls "The Great Power Struggle."   It is not merely a question of naval superiority either, however that question seems to be on the front lines, quite literally.

The Chinese people don't love their government, and neither do we.   In the United States, we may love our country, our flag, our ideals, our history, and our customs, but to use the word "love" for our politicians would be a stretch for most I think.   We hope that we have control of our government.   Most Americans would agree that politicians waste their tax money on both a federal and local level, and most politicians don't represent their hopes, dreams, and aspirations. The idea is flawed – how can one person embody so many ideals?

As I write this, Venezuela has erupted into civil war and they are literally fighting the government in the streets.   Donald Trump is currently threatening Iran.   The Chinese people, the most populous nation on earth, have little or no say in the future or inner working of their government.   They have no future for themselves.   In fact, peace on earth revolves around a peaceful, democratic - cryptodemocratic - China.   Unfortunately, these kinds of governments will never change, or fall completely, without violence against their own people.

I wonder if the same is true for the United States?   Only time can answer these questions.

CRYPTODEMOCRACY IN PRACTICE

Revised definition of cryptodemocracy – the creation of a nation state where the native people vote electronically to form and run a new government. Day to day governance is administered by strict digital control of all governmental processes. This includes but is not limited to taxes, courts, legal statutes, licenses, contracts, crimes, enforceable laws, education, civil, monetary, postal and any other general governmental processes. This is accomplished via a means of secure, encrypted, purely democratic, digital electronic voting where each native citizen has the ability to vote. Each citizen shall cast a vote of equal value. No person shall be denied the right to vote for any reason. No person will be a politician or political representative of the state.

One of my largest concerns is that history will remember me as a traitor to my country. I certainly hope that is not the case. I honestly don't believe the United States will ever embrace cryptodemocracy in the form I proposed. First, it's against the Constitution, and secondly it's too radical. That being said, I also don't believe Americans are ready to embrace change, and we will pay dearly for this. We are not ready for real change, and hence it will never come. What I can hope is that the United States will be looked upon favorably by the rest of the world and lead by example. If we don't, we could very well meet our demise.

But I would like to remind my readers that the possibility exists that the ideas I have proposed could make our country stronger – maybe the strongest in the world, if we have not already lost that title. While that is not a question I am interested in debating, I can tell you that in life, flexibility is one of the keys to success. That's what my proposed system is. It's swift and powerful – and flexible. All complex machines need adjustment – and so does the law.

It should be noted that there is great wisdom in the "old fashioned" process of voting – it's reliable, and trustworthy for the most part.

The problems that plague our system really don't have anything to do with the way we vote – the problems are endemic - they come from our laws and our ideas. I firmly believe that the idea of representative democracy is flawed at its very core. I believe people are naturally biased towards not only their skin color, but towards their heritage. I think the race or sex of a politician is enough to bias a voter – even a blind voter – simply because we all share bias in some form or another. Judges are not blind, and neither is justice. Representation becomes its own issue – and it creates its own natural problem.

The 2nd Amendment is far and away the most serious problem facing our country today. The United States is over-run by guns – and it's not helping anyone. As far as I am concerned – the minimum age to own a gun should be 40 – and you should be required to have a college degree to own one. The police should be able to strip anyone under the age of 40 of their weapon – on the spot – with no questions asked.

A gun is too dangerous of a tool to be given to a young person. To make matters worse, you don't even have to be able to read or have graduated high school to be able to buy one – it's a really stupid idea to let virtually anyone own a gun and countless people have lost their lives, or spent the rest of their lives in prison because of this. Cops should be able to say to young people with guns "Go to college and wait until you are 40." It's really about maturity and life experience. Plus young people should have to have a few good fist fights to keep them young! You can learn a lot from a good fist fight in my opinion.

I want to start the first chapter by looking at what a Cryptodemocratic Constitution would look like for Libya.   I have chosen Libya because they are currently locked in a civil war.   It is a unique country both geopolitically and socially, not only because it is part of Africa, but also because it has great oil reserves.   It's interesting to see the different players involved in arming and funding one side against the other.   Of course the people have suffered the most, as is usually the case when men with shiny ropes and trinkets hanging from their suits – badly tailored usually and terrible in styling I might add – claim their power as legitimate.   I want to preface this chapter by saying that my book is just an idea, and if it offends you then I am sorry you are unable to open up your mind.

The content below is purely *fictitious* and is in no way an actual proposal.

We the People of Libya

The Great Citizens of Libya hereby declare our nation the first Cryptodemocracy on Planet Earth.

The laws that govern this new nation shall be hereby ratified under the following principles:

1st Amendment

No person shall be a politician or act as a representative of the state.

2nd Amendment

Freedom of speech and the freedom of the press is sacred.

3rd Amendment

All law will be voted upon by cryptographic means – via means of an independently studied and verified application where the accuracy and integrity is not in question- and all results will be independently verified – before being deemed valid and enforceable by law.

4th Amendment

All votes and laws must be verified and scrutinized for numerical and mathematical accuracy.

5th Amendment

Capital Punishment is illegal

6th Amendment

Torture is illegal

7th Amendment

Slavery is illegal

Rape is illegal

9th Amendment

Bondage is illegal

10th Amendment

Religious Freedom is Sacred

11th Amendment

Murder is illegal

12th Amendment

Fraud is illegal

13th Amendment

All profit from natural resources and oil shall be divided equally among the citizens of Libya.

14th Amendment

All oil workers are employed by the Nation of Libya.

15th Amendment

All construction workers are employed by the Nation of Libya.

16th Amendment

No foreign oil companies will be allowed to operate business in Libya.

17th Amendment

Theft is illegal

18th Amendment

The military will be directly and strictly under the control of the citizens of Libya.

19th Amendment

The military has no autonomous power.

20th Amendment

The financial budget of the military will be under direct control and supervision of the people of Libya.

21st Amendment

Prisons shall be run only by the state and not run for profit but for rehabilitation and reintegration.   All prisoners will be granted access to an education and rehabilitation programs if they choose.

22nd Amendment

The court and judges answer only to the people and are there strictly for the protection of the society.   The court has no authority to render verdicts or pass law. The sole purpose is to conduct trial.   The verdict in all cases, criminal and civil, shall be voted upon by the people – electronically - and with cryptography.

23rd Amendment

The right to assemble and protest is sacred

THE RESISTANCE

Of course, the idea of people forming their own government and deciding on the rules won't be popular among the elite of the world.   Wall Street won't like the idea because how can they protect their investment if there is no human suffering?   Not all investment is based on human suffering, but in my opinion most of it is.   So we should not try to consult Wall Street bankers and financiers about what they think about a democracy where votes can easily change the rules for them.

Changing the rules in their favor is what their legal teams do all day long – and if we try they will want to stop us because the world is run by the elite.   If you are young, that truth will be hard to understand.   The finer things in life are not meant for you and they never were.   Of course, every once in a while some lucky fool hits the lottery, but usually that money finds its way right back into the system.   That lucky lottery winner might buy an overpriced house with a huge tax bill – that property is only yours to care for and maintain temporarily.   The same with a great car like a Rolls-Royce – it's yours as long as you pay for the plates, taxes, gasoline and mechanical maintenance to keep it on the road.   If you don't have a son to pass it to – chances are it will either end up in a junk yard or just get sold when you die.

Everything is a cycle in life and nothing is immune.   The only way someone can truly make a gain is from some great leap forward in technology, but on the other side there is an immense profit to be made from human suffering.

WOMENS RIGHTS AND REPRODUCTION

The birth of new human beings is a celebrated event for a family and even for a village, town, city or nation.   Or is it?

What motivates a woman to become pregnant and what factors are involved?   What are the circumstances?   The truth is bleak – there is a darker side to how many people on earth are born – many times a woman has no choice but to create life – it is forced upon them not only by rape, but also by financial, social, and cultural means.   All women naturally understand this conundrum better than any man ever could.   Yes, some women genuinely want to become a mother and raise a child or family, but as an economic question – a necessary predicament that concerns the production of soldiers – the issue becomes relevant to many factors including military strength, financial markets, and future growth.

Is the future growth of financial markets tied to birth rates?   I am not a financial expert – or population scientist – but the question itself poses some deep problems.   I have always believed that the abortion question in America is not about religion but more about the needs of the military and the need for population growth or reduction, whichever the government deems appropriate.   I believe abortion laws are not designed to protect women, but instead are designed to reduce the proliferation of poor people, or people that the government deems undesirable.   As a military question, I believe the Supreme Court will overturn Roe v. Wade when the US Armed Forces deems themselves to be in short supply of future prospective soldiers.

In less developed places in the world – women don't have access to birth control or contraceptives.   So many times a pregnancy is an accident.

A LEADER IS A TYRANT

I downloaded "Without The King" which is about Swaziland and it's a great movie that I recommend for everyone to see if you can find it.   Of course it highlights the kind of thing that my system was designed to prevent or eliminate.   My system argues that politicians (and Kings) are utterly useless for the most part.   All they do is meet up and shake hands and make deals.   My system points to anyone that claims to be a "leader" and then you know you have a "tyrant."   A leader is a tyrant.   That's my slogan.   The King of Swaziland sits around and lives nice and meets the Pope but his people are seen eating intestines – not the kind that we make sausage out of either.

So maybe I am wrong but as far as I know "power corrupts" and so almost no one can resist the temptation that comes with power.   And it's not good for any man to have too much power.   You could say it's unhealthy.   That's what bothers me about Marx is he never pointed the finger at "power" or "politicians" and he got caught up in means of production - which is economic - and factories can be a very good thing - a matter of fact - they are one of the keys to ending starvation and poverty.   A mechanized factory can make hot dogs - one of my favorite foods - and feed a ton of people on the cheap.

Why everyone in Africa doesn't have access to hot dogs has always been beyond me - how tough could it be for Oscar Meyer to put a hot dog factory in every country in Africa?   I just have never understood that.   That is a practical interpretation of a problem but I have always heard that places in Africa just don't have infrastructure.   Maybe some experts can weigh in on that.

IF THERE ARE NO LEADERS, WHO IS IN CONTROL?

People are in control because people vote to control the law.   The law will always be a cornerstone of any society – even the most barbaric society will have laws – so yes culture is different everywhere you go.   So in India many people don't believe in eating cows and in Africa many people eat bush meat – so people are different everywhere.

People should be voting on literally everything – even the smallest issues.   Villages should vote – towns, cities, and countries should too.   In practice it may not be perfect but we cannot continue down the path that "leaders" have "led" us.

EAT THE RICH?

Are all rich people evil?   Are all rich people tyrants?   There is a saying:

"All great wealth stems from a crime.   The greater the wealth, the greater the crime."

Saw it in some movie when I was young.   Maybe true to some degree – but not entirely.

There are some very innovative people who have become wealthy by helping humanity. Innovation is important and it takes money to do it.   Mass production of anything is a science – and a very difficult one.   Robots are amazing machines that can do a lot of work for us.   They can help us farm, live, eat. The Unabomber was a fool of the highest order.   Nothing he said or did made any sense.   He hurt many people and accomplished nothing.

Technology has the potential to free us all from menial labor and unrewarding work.   Robots make our cars now – what could be better than that?

LAWS ARE JUST RULES

And hence they can be boiled down to changes in code.   In fact, the courts in the USA and Europe have already mechanized code to enforce laws.   The traffic lights and camera systems all have logic and laws behind their inner workings so why would we think that a system of code, that changes with votes, be any different?

PEOPLE WON'T VOTE UNLESS THEY CARE

That has always been the case – and that will never change.   Some people just don't vote.   This won't change the outcome any more than it ever did so it's a non-issue.

NOT A WEIGHTED SYSTEM

In the United States our current form of democracy could be described as a weighted system. Not all proposed legislation gets voted on, and some bills die before they get to the house. Some legislation makes it far enough for a vote, only to die in the upper house.   Even so, a law can go in front of Congress and die there as well.   The process is slow and grueling, and nothing is certain.   Why not speed up the process?

The Electoral College is made up of 435 representatives and 100 senators plus 3 votes from Washington, DC which currently does not have status as a state.   So all in all that's 538 votes, currently to elect a leader.   We have all seen that the popular vote does not win the election because in the United States, people technically don't vote for candidates, they vote for electors, who are sometimes faithless and vote against what the people want!

But what happens to a country with no sitting President?   Would that country not fail?   Who would the ambassadors be?   Who would lead such a country?

A country with no sitting President – in most cases – would be lacking a polarizing figurehead – someone that does a lot of useless talking and someone who serves to divide people.   That's what politicians do – they polarize issues.   I believe politicians breed dissent between people because that is their nature – it's their job.

Humanity seems doomed to be stuck with dictators and oligarchs – and there seems to be no way around it.   Someone always ends up sitting at the top with all the power.   Why?   I don't claim to know why it happens – I can only guess.   Your guess is as good as mine – but I think it has a lot to do with the rules that are laid out.   The Constitution of each nation dictates the "big rules" and from there are the little ones grow.

HOW WILL THE CODE BE WRITTEN?

This has been a matter of much debate among myself and my fellow colleagues.   I have written some of the code based on probability.   I am not convinced that one approach will work better than another but of course I want people to be able to use their mobile phones.   One of my biggest concerns is that certain phones won't be able to update or have the correct memory requirements to host the app.   I am also concerned about the availability of internet access. What good is CxD without reliable internet access?

If it's an app for iOS and Android then it will need to be super reliable but also efficient.   Then the app will need to be ready to scale.   I believe that each new government will need the solution to be custom tailored to their needs.   I think governments will be highly skeptical of any software company that tries to sell them an app like this.   I like the simplicity of voters recording a video statement of their voting preference.   I think an advanced algorithm could detect their preference and the video itself would be proof enough of a valid vote.   This is not a simple problem to solve.

If cryptodemocracy is nothing more than a computerized platform – much as Facebook or Twitter is – then who is to say it won't be saleable?   Then does the purchasing power of the government in question violate the sanctity and the soul of the app?   What if they request features that undermine the voting process?   What if the code is malicious?

These are serious concerns.   Any logical thinker would need to weigh in on these potential problems.

WILL THE SOFTWARE BE ROBUST?

I believe Android and iOS will need to build in system level code to address the need for people to vote.   I do not believe an outside app developer will be able to implement this without the help and oversight from Google, Microsoft, and Apple.

SOME PSEUDO CODE

I great coder I am not!

```
// GPS BOUNDARY CONSTRAINT OF COUNTRY (WAS VOTE PLACED INSIDE LIBYA?
CROSS AGAINST KNOWN MAPS) = BOOLEAN gpsbounds YES OR NO
// FACIAL IMAGE
// FACIAL SCAN
// VOTE STARTS = TIMESTAMP start
// VOTE ENDS = TIMESTAMP end
```

// VOTE IS CAST WITHIN VOTING WINDOW = BOOLEAN window (BETWEEN START AND END)

// TIME WHEN VOTE WAS CAST = TIMESTAMP INT VOTETIME

// IRIS SCAN IS COMPLETE = BOOLEAN IRISSCANCOMPLETE

// IS IRIS SCAN UNIQUE?

CROSS REFERENCE AGAINST ALL OTHER IRIS SCANS

NOTE: THIS WILL TAKE A LOT OF PROCESSING POWER AND A DISTRIBUTED BLOCK LEDGER ON EACH PHONE = BOOLEAN UNIQUEIRIS

// IS FACIAL SCAN UNIQUE?

CROSS REFERENCE AGAINST ALL OTHER FACIAL SCANS

NOTE: THIS WILL TAKE A LOT OF PROCESSING POWER AND A DISTRIBUTED BLOCK LEDGER ON EACH PHONE

BOOLEAN UNIQUEFACE

// VOTE IS VALID = BOOLEAN VALID

// VOTE IS INVALID = BOOLEAN INVALID

// PROBABILITY SCORE = A SCORE BETWEEN 0-100 THAT ATTESTS TO THE MARGIN FOR ERROR

// PROBABILITY FACTOR = A BOOLEAN

maybe the code would look something like this in C:

// GLOBAL VARIABLES IN C

```c
int gpslocation;

var face;

var iris;

int start;

int end;

int votetime;

bool window;

bool gpsbounds;

bool window;
```

```
bool uniqueiris;

bool uniqueface;

bool valid;

bool invalid;

int probabilityscore;

bool probabilityfactor;

bool yes;

bool no;

//PROBABILITY CLAUSE

if{probabilityscore == 95}

probabilityfactor == TRUE;

else probabilityfactor == FALSE;

//the important part is below

processvote

{

if {gpsbounds && window && uniqueiris && uniqueface && probabilityfactor == TRUE}
valid;

else

invalid;

if valid {record gpslocation && iris && face && votetime && probabilityfactor to database}

else

{do not record to database}

}

//PROBABILITY SCORE CODE IDEA

placescore = gps data from votes will be matched against all votes.

timescore = timpestamp data from all votes

if the query finds a match of place and time of a vote – a value of 0 will be assigned to the place
variable
```

No 2 votes can be placed at the exact same place and time

Any 2 votes that are cast at the same place and time must be possibly fake or made by the same person or in question

probabilityscore = placescore + timescore   / 2

//probability should be 100 points if no other votes are cast within a 10 foot radius at the same time so algorithm should check if any votes have been cast at the same gps location at the same time within 30 seconds

//if sharing a phone the other voter should wait at least 1 minute before casting a vote

//FOR EACH VOTE – ONCE THE VOTING SESSION IS DONE – THE RESULTS MUST BE TALLIED.   I DON'T KNOW IF THIS SHOULD BE DONE SEPARATELY FROM THE PHONE OR BE DISTRIBUTED.   I THINK THERE SHOULD BE A SOLID WINDOWS PROGRAM THAT LOOKS AT AN EXCEL FILE OF THE VOTES AND SEES A CHART FOR EACH VOTE TO CHECK FOR UNIQUENESS. WHEN ALL OF THE VOTES ARE CERTIFIED INDEPENDENTLY TO BE UNIQUE THEN THE LAW IS VALID.

//EACH PROPOSAL HAS A UNIQUE ID

A WEDGE AGAINST DYSTOPIAN AI

China has social credits and tracks the movements of its citizens with facial recognition.   Data never forgets.   And that's a big problem.

Data needs to forget.   Forgetting is as important as remembering.   Actually that's what a database is – a machine that remembers.   To delete is to forget.

If we want to avoid the kind of dystopian future we are already in – we need to put down rules now about forgetting data.   Since the technology has become part of us – we now need to think about how to control it and live with it.   And we must think deeply.   Or it will claim more lives than it already has.

Make no mistake, data can be dangerous.   It's all around us, recording us all the time.   Quickly changing the laws will help us control this giant memory machine.

TRUTH IN AN AGE OF PROTEST?

Will this system protect minority issues?   In short, I don't believe it will unless the larger group is in favor of the cause of the minority struggle.   I am not talking about racism here either – I am

simply referring to a minority versus majority issue.   So, for example – let's say there are 1000 people who will attend a banquet.

At this banquet, there is only room for 1 choice on the menu.   The catering company needs to know in advance if the crowd will want salmon or steak.   Let's say 82% of the people vote for steak.   This means the other 18% will not have their preference.   I believe that is the price of a true and fair democracy and I honestly believe the other 18% of the people should not attend the banquet or just eat the steak.

There is not always room for compromise.

HACKING DEMOCRACY?

I don't believe hacking will be a problem because hacking is always verifiable.   No election will be valid if it can be proven that a hack took place.

CONCLUSION

I believe I am at the end of my theoretical journey.   I don't have much hope for the application of this idea because I don't believe people will have the willpower to overcome and fight the current systems.   I don't believe my system of ideas will ever be tried.

The problem with Marx and The Founding Fathers is that their systems were unjust right from the start.   For Marx, to much faith was placed in the mechanics of ownership, and the laws that supposedly govern production.   He gave no credit to the advancement of production techniques and the potential of where innovation would intervene.

As for the Founding Fathers – they incorrectly assumed that a balance of power is equivalent with justice – or more specifically that it naturally makes order out of chaos.   In many ways, The Founding Fathers came close to perfection in government, but even they saw the potential for faction.   Faction is what we live with today.

Of course the Chinese Communists are not pure Marxists and neither are the Russians.   And the United States has never really been a government by the people, for the people.   In truth, it's much more complex than that.   I wonder how creative, crafty humans will find a way to even distort and corrupt a system like mine?   I am sure there is a way because that's what our species does well – lie, cheat, distort, corrupt, and kill.   I go back to the original idea that ultimately we are a competitive species, and I assert there is no escape from that natural state.

Farewell my political apes, may you evolve to use better weapons.

J.A.M

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