



the money game
and beyond



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With this ebook, we will try to present how the world that we experience today evolved (with its jobs, money, companies, products, property, government, laws, etc.) as well as how it currently operates (distribution, management of resources, values, etc.). We will look at how money was invented, the role it serves, and what we can truly do to evolve into a world devoid of today's major problems.

Here's the thing: we all pretty much agree that the following are huge issues today: poverty, famine, crime, violence, wars, poor education, pollution, climate change, overpopulation, terrorism, social classes, corruption and bribery, water scarcity, environmental destruction, abuse of animals (including humans), slavery and coercion, greed, hoarding of resources, deforestation, massive waste, stagnation of scientific and technological development, lack of healthcare, immigration, territorial disputes, high stress, and so much more. Well, what if I told you that behind all of these, there is only one primary cause? One! Hard to believe? Well, that's what we are going to show, and if that's true, then tackling that single core problem will solve or greatly diminish all of those issues. It may sound too good to be true, but using cartoons, some diagrams, plenty of links to reliable sources, documentaries and videos, and simple language to allow all to understand, we will strive to make this very clear.

THE PARTS:

1 Moving Stuff and People Around:

tells the story of how moving stuff and people around the globe gave rise to the Money Game that we play today, and vice-versa. How simple barter exchanges evolved into a system of exchange that is now fully decoupled from reality. We explain how prices are formed (why some things cost more than others), how the value of a 'thing' is arrived at, how these exchanges are dramatically changing people's values (from education, to goals, families, and more); what is a business and how the economy works today (investments, money, currency and debt, inflation and deflation, credit, and more).

In this section, we also look at what 'cost efficient' means today, as it has become a highly misunderstood notion that creates much suffering and destruction, and we exemplify this by looking at some of the biggest industries on the planet to see how they run their businesses: fashion and clothes, food, jewelry, oil, electronics, coffee and chocolate. You will learn about massive slavery and waste, all created by, and consequently creating, distorted values.

2 Systems to Organize Societies:

Over the last 400 years, humans have tried numerous approaches to try to organize all of this mess created by the trade world. We look at what was proposed, where they failed, what we can learn from them. We take a good look at Feudalism, Socialism, Communism, Capitalism, Free Market, Democracy, Imperialism, Colonialism, Totalitarianism and Authoritarianism, Fascism, Anarchism, Technocracy, Open-Source, and the Sharing and Gift Economies. We explain how each of them viewed the idea of organizing the world, and how each turned out in practice. Along the way, we shed some serious light on many of these ideals that are extremely misunderstood by most people today.

We also show how, regardless of their chosen political system, all tribes in the world face the same issues today. Everywhere you look, at any company or industry in any country in the world, you can find corruption, shady practices, waste, coercion, and more.

But there is something else that you will come to understand from this section: trying to organize a society is not as easy as simply “applying science and technology to solve issues”. We also look at the following myths: technology as a savior, abundance as all that’s needed for making things free or replacing jobs, science as the indisputable tool for social change, and more. Of course, not everything we present in the book is about the negative effects of the Money World, as half of it is dedicated to presenting solutions. We present how the open-source movement and sharing economy both create huge cooperation and collaboration between people, along with high efficiency in the things they create, diversity, reliability and security, and all without the need for money. You will see how we can make the world much safer and create abundance via such decentralized approaches; the abundance that is absolutely necessary for arriving at a saner society.

3 Beyond the Game:

This last section merges all of the previous parts into a detailed presentation of how we can go beyond the Money Game, recognizing that most of the problems today are actually symptoms of trade. We explain how we can go about creating abundance to eliminate the need for trade. More importantly, we define the concept of abundance, as this is one of the most critical aspects to understand. To help describe how we can get rid of most of today's issues (symptoms of trade), we relate it to a bold new approach in healthcare today that is viewing most human health issues as symptoms of aging, and by tackling 'aging', we can prevent most of these symptoms. It is as bold a claim as ours, but both are as real, demonstrable, and necessary as ever. We also provide you with some new insights into aging research, with the intent that it may help paint a clearer understanding of how we need to look at today's problems via the same kind of approach.

We then exemplify how a world of abundance may look like in the future: how you will be able to create your own submersible :) (or whatever stuff you want without trading anything in return), do medical research, prevent dictators from getting into power, eliminate resource abuse, etc.; and how to approach humans to help bring about this change.

By now you may realize how big of a challenge this book faces. But try it and see if it makes sense to you.



**MOVING STUFF AND
PEOPLE AROUND**



Looking around the world, just about everyone uses money; coins and special shiny or pale papers, moving from hands to hands and now mostly moving from computer to computer in their digital, non-physical form, exchanging the limited ownership of goods, accessing services, indeed allowing (or not) individual people to survive, enslave, lie, promote, enhance, motivate, cheat, and feel happy or sad, holding families together or destroying them, modifying behaviors, changing notions and values, or the surface and the climate of Earth. Everything is connected with money. Without it, you may not be able to eat, sleep or, to put it bluntly, even shit.

Money can be both useful and detrimental, and to massive extremes. However, the balance currently seems to be heavily biased to one side and, throughout this book, we will present what side that may be. The journey that we will take here is not one of blame, but of more thoroughly understanding how the monetary system works, and what can be done to improve or change it. Without understanding its core weaknesses or looking at the past and present, with its many rules, rulers, systems, and cultures, we cannot possibly understand why we need a new kind of system, or what a new system could look like.



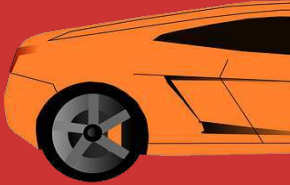
Proposing to replace the global monetary approach with a non-monetary system still seems out of this world, even ridiculous, to many people, but as we will show you in this book, there appears to be no other way forward, and the alternatives we will highlight just might prove to be far better, and very, very different from the world that we are used to today.

Since most books about the monetary system are written for economists, not 'humans', I will strive to make this book completely non-boring, using uncomplicated words and many, many analogies to help put things in a much clearer perspective. I 'hope' I can do that.



the dilemma

I recognize many dilemmas about the world we live in that I suspect many of you have, too.



For instance, why is there such a huge difference in price between these two cars? The \$10,000 car has four seats and more storage space than the other, which only has two. So why is the two-seater much, much more expensive than the other one?





\$450,000



\$10,000

IS A BANANA MORE
EXPENSIVE IN ONE
TRIBE THAN
ANOTHER ONE,
EVEN WHEN IT
COMES FROM THE
SAME
PLANTATION?



When I live in Spain, how come the internet is five times slower and five times more expensive than when I live in Romania? Why is stuff more expensive in one tribe than another?

HOW IS THIS PAINTING VALUED
AS MUCH AS 1,000 OF
THESE HUGE VILLAS?



= x1,000



Can monetary reward properly justify people's work? Who makes all these prices and what do they reflect? If you are as confused as I am about this worldwide money game, then you should take this journey with me, as I am going to try to find all these things out.

To understand all of this, we need to look at how money was invented. As you will see, it is not so much a story of money, as it is a story of moving stuff around: the trade.

frames and pixels

Before embarking on this journey of monetary history, let's look at a map of the current landscape. The colors outline the separation of tribes in our present day, but these colors/borders have changed significantly over thousands of years. They expand, shrink, and are even sometimes eliminated by wars, famine, climate, and ideals (religion, nationalism, etc.). Imagine the changing of territorial borders over time as a movie, with each frame representing several years.

Watch this video to see how various tribe's regions have changed over the last 5,000 years:



*World History
(3000 B.C. to 2013 AD)*





These tribes (called countries today) are basically a bunch of people with similar values and interests, clustered together in small patches on planet Earth's surface. They are able to maintain their tribal status due to many different reasons: differential advantage from other tribes, ideas, ideals, resource availability, laws, military force, etc.. But it is very rarely due to: "Hey man, we seem to think alike. How about we bring all people like us together to make a tribe, so we can drink, joke, have sex and feel good together!?" More modern tribes have been composed of people who worked for the few who ruled them. In the Roman Empire (only about 2,000 years ago), 30-40% of the population were slaves ([source](#)), and that was true for nearly all tribes. Many people living there did not choose that, but instead were enslaved or otherwise coerced in one way or another to be part of the tribe. Many tribes conquered other tribes through war, and then those people forcefully became part of the new tribe.

This leads us to a very important point: the pixel in the frame.

History looks so simple: tribes with borders, tribes with new borders, leaders and regimes. But it's not at all like that. When you see a tribe outlined on a map, that tribe is not a 'thing'. It's a bunch of things: people with slightly different values, regional laws and different law enforcements, different kinds of coercions, businesses, infrastructure, and so on. All of that is spread out across different points (pixels) within that border. So if a tribe seems to be a 'thing' that is somehow significantly different from other tribes, it is nowhere near that simple and defined 'thing'. It's composed of multiple complex and ever-moving parts.

I was born into the Romanian tribe and sometimes people ask: "How is it in Romania?" But what can I really tell them about it? There are many stray dogs, many poor people (by whatever standards), some rich people (by some other standards), some people who are gay, some people who don't like gay people, people who scam other people, many laws that many are not aware of, many different ways of enforcing the same laws based on region and influence, many types of buildings, religions, corruption, kind people, thieves, saviors, and so much more. Then recognize that I extracted that from living in only two cities in Romania, for about 20 years.





It is not possible for me to accurately summarize what “Romania” is all about, because it is composed of a massive number of such variables, and you have to keep that in mind that when people talk about history and tribes and how life was in such tribes, they can also only talk about one or more tiny pixels within the much larger frames: small patches of populations and events within small moments of time, inside a tribe. Ancient Rome was not about Caesar and the Empire, but much more so about the struggle of the citizens with daily life, rapes, famine, different laws interpreted in different ways, thinkers, values, etc..



It is vital to properly understand all of that. All of the examples that you will ever hear, including within this book, are only about pixels inside of much larger frames, and they can only try to target a relatively small percentage of the frames that make up the huge complete movie.



Trying to accurately learn what shaped human civilizations over the years, even for today’s world, is very tough due to so many influencers, but we can group them into: resources and services, and values (religions, rituals, beliefs, and so on). We have already talked at length about values in our special article on [Morality and Ethics](#), so we will focus here on resources and services, and especially trade, as trade is what moved resources from one part of the globe to another, from hand to hand. Trade is also one of the biggest influencer of societies, shaping borders, time zones, roads, as well as people’s values. The concept of trade then leads us to the monetary system, so understanding how it got here will provide with an educated view about the world today, and a more stable projection of what the future can become.

If you’d like to read more about why money cannot properly appraise the value of human ‘services’ or skills, [read this article](#), as we will not be addressing that aspect here.



Some of the references throughout this book are sourced from [this](#) and [this](#) lecture about the history of the world, and we recommend that you check them out. All other source reference links are provided as usual.

inventing currency

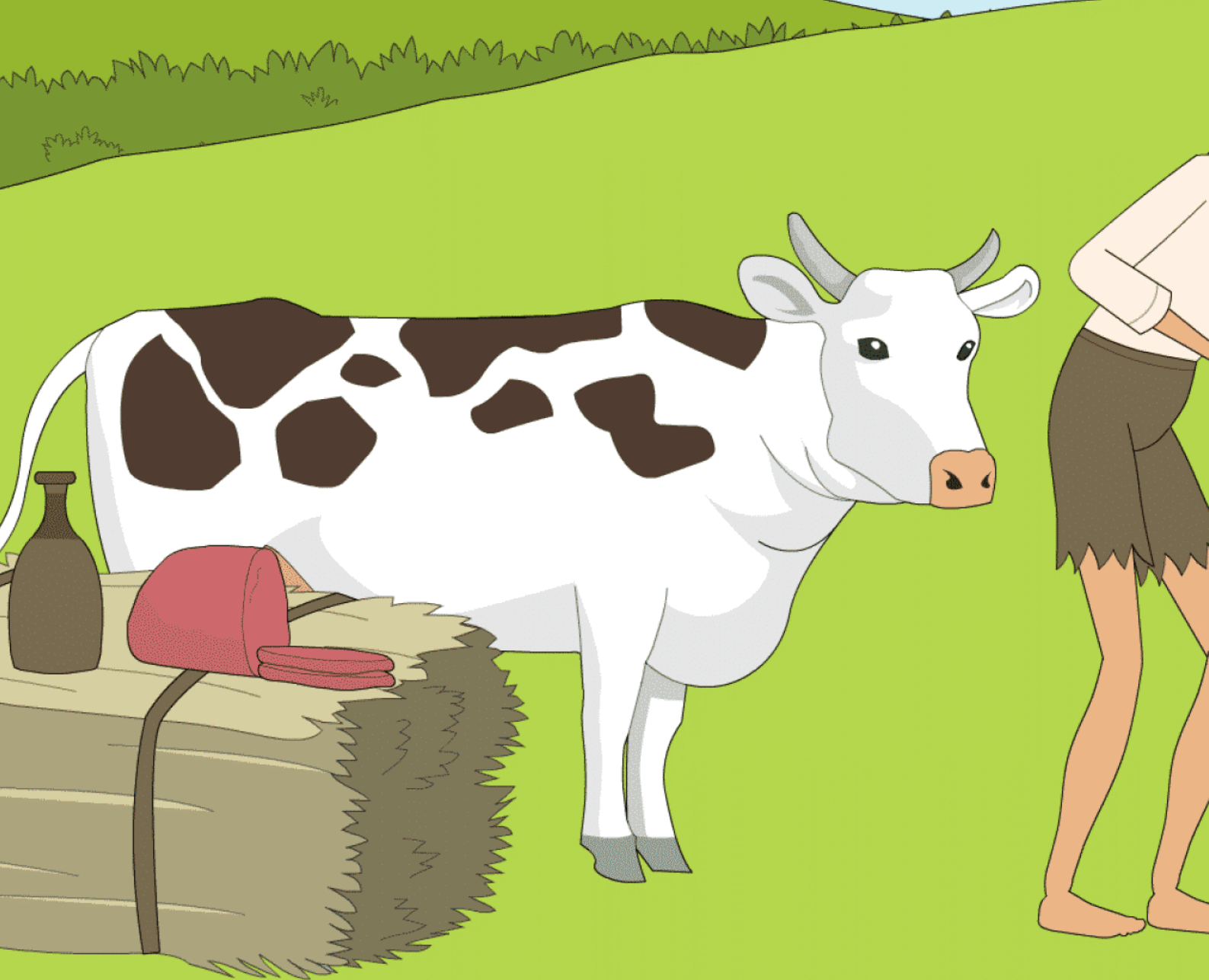


To say that the act of trade began at one point in time is very unrealistic, as people have likely exchanged goods and services for millennia. You have sheep and I can take care of them, then you can give me some sheep meat, or fur, for my service. You have cows and I make clothes, so I get some milk and you get some shoes. You get the point. It's important to mention though that the notion of property varied greatly from one cluster of people to the next. While we can't exactly pinpoint any specific one, there were many tribes who never thought of the land or animals that they farmed as theirs, but more as them simply being there, and being farmed, and all tribes enjoyed the advantages. If you were to ask them who owns the sheep, for example, they would not be able to understand the question.

12,000 YA Cy



When american settlers got 'bossy' with indigenous indians and were attempting to take their land, they were confused as to the borders of the indian land, because the indians just grew their vegetables in open spaces, or farmed in open spaces, not regarding the land as theirs or anyone else's. There are also people who some call 'nomads', who travel all the time, never settling in one place. They view Earth as belonging to no one -it's just there- and they take advantage of it to feed, clothe, and protect themselves. Even today, there are tribes where the notion of property is foreign to them, and trade (if it exist) is unrecognizable. So keep that in mind, as 'trade' is not a 'naturally' occurring thing that applies to all clusters of people (cultures).



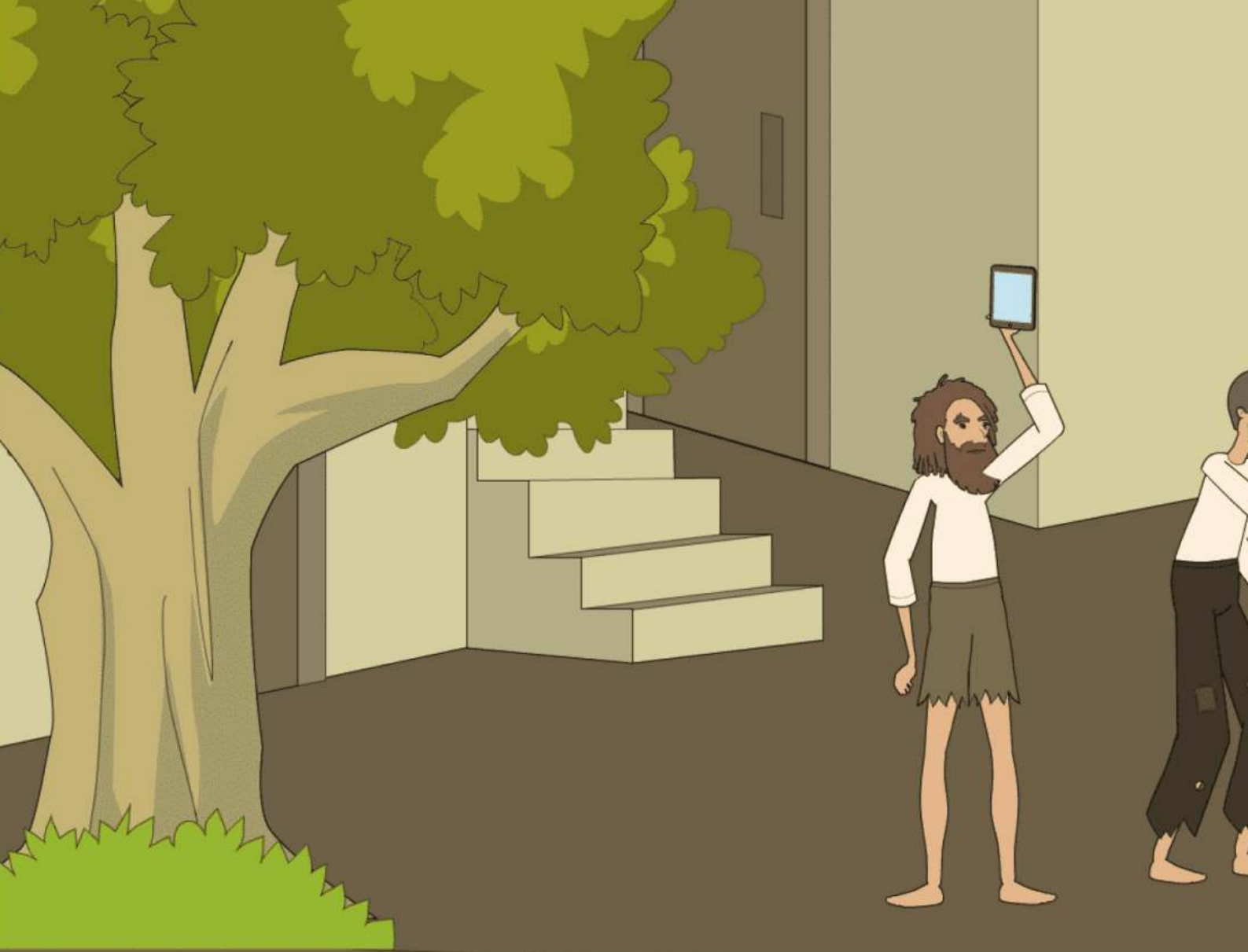
So let's go back to the people who were trading milk for shoes. They eventually invented a rule that we are very familiar with today, but it was "brand new" back then: currency. If I have a cow and want some shoes, it is impossible to quantify that cow for a pair of shoes, unless it is about milk (a cow by-product). If the guy who makes the shoes wants some cow meat in return, I can't just cut him off a cow's leg, give it to him, take my shoes and leave, because then the cow will die and I cannot value it anymore. I lost value.

So, what if we invent a sort of agreed upon 'thing' that we can use to value these goods. If the cow has 4 legs, and other parts that are edible, then it may value as much as 8 pair of shoes. So if the shoes are then valued at one 'thing', then the cow would be valued at eight of those 'things'. They used shells, grain, beads, and other such 'things' to equate for goods and services.



A question is to be asked: was the tribe's fisherman the one proposing that shells be used as currency? Think about that, because he might have had access to many more than anyone else. How in the world did these simple 'things' become currencies? Imagine someone coming to you and say: "Here, I have 17 shells. I want your boat." You are likely to reply back with, "Hell no, crazy guy! I can't do a thing with your shells... can't eat them, can't float on them to leave the island, can't make fire with them... Useless!". But hang on for a minute. Isn't it the same thing with money today? We'll come back to that later in this series, but let's focus on history for now.

So, learning who proposed the exchange currency may be a bit of a mystery, or perhaps it was something emergent from the culture: for instance, shells were used for other things like jewelry before that, so they may have adopted them for exchange because they were familiar with them.



The employment of shells, beads, or whatever 'things' they used for exchange seem to have emerged many thousands of years ago, and it worked only because of the trust people had among each other. You must be a bit nuts to give up your cow for just eight shells, right!? Well, this kind of trade initially worked because it started within groups of people who trusted each other, and it worked so well that it gradually expanded globally. It is interesting to know though that the way they valued goods and services was purely cultural-based. If you go back and try to sell your smartphone in those days, no one would give you a shell for it. People valued farming grains and livestock in those days, plus textiles (clothing mainly) and tools. Perhaps not in that order, but those were the important goods and services back then.



So a cow may have valued at eight shells and a pair of shoes at only one shell, but a smartphone or a piece of gold would be worth nothing to them. If there were more cows in an area and very little shoes, and people 'were into shoes' that time, then shoes would have become more valuable due to their scarcity and the fact that people wanted them. A person selling them could put a higher 'price' on it because the demand was greater, recognizing that people who owned cows could even afford to give two cows for one pair of shoes. It's important to note that all of that could be reflected in a currency system that they had just invented.

To make things more secure, the shells that were used for currency were shaped into beads through a laborious process ([video](#)), and making them was not so easy. So if you imagined going back into the past and just collecting some shells from the shores to buy yourself some pretty cows, a shiny pair of shoes and a boat, then you would be out of luck, as you would have to have some of those special shells in order to do that. It's similar to today, where you can't just make paper money very easily, and even if you manage to, you could face harsh punishments for 'faking' the trading 'things' (counterfeiting money).

From that moment on, it was just as simple as it is today: people would use these 'things' (the shell beads) without wondering where they came from or what their real value is. Of course, this entire trading system is what gave birth to the concept of rulers, and those who were ruled by them. Some would strive to control this 'currency', while others would end up controlled by it.



This kind of market system started with a few basic things that people needed and were able to trade: animals, vegetables, grains. As trade rules developed among tribe members, they were enforced by the tribal leaders and even more by their armies, and were eventually introduced to other surrounding tribes, whether by force (conquering and forcing other tribes to adopt this system) or by need (other tribes had to adapt to this new kind of market in order to exchange goods and services with them).

This entire idea emerged around 12,000 years ago, but it took a while for it to become widely adopted. The more specialized trades became, and the more specialized the people became in offering services, the better this system became (by 'better', I don't mean better for people, but more simply better for trading stuff).

Shell beads were later replaced by a variety of other currencies, such as custom made 'coins' made out of metals. They eventually came to favor coins made out of gold, a somewhat rare material, because replicating gold currency is similar to trying to replicate those earlier 'special shell beads', but only using specific rare kinds of shells. Since people were unable to easily replicate these gold coins, it gave even more power to the rulers. Since they already controlled the means for locating and extracting the gold used to make these custom coins, they could better control the currency.



So, imagine having an army of people, lots of gold, and a trading system that many accepted. You could now 'pay' people some gold coins to extract more gold for you (the ruler), and make far more coins out of those people's work. You are now 'in the business' of making more coins out of coins (and other people's labor). Having an army, you could also enforce rules (laws) upon people. So if you make it a 'no-no' (illegal) for people to replicate coins, you grow richer and richer, as you have control over the coins, the means to make them, the ability to buy whatever you need, including people, and with very little 'work', become more and more powerful, all on the labor of the people you are ruling over.

One incredible but predictable thing about earlier tribes is that if you look at the places where they thrived, you'll find it's often near the line where two or more of the planet's tectonic plates meet, where molecules of many shapes are most likely to rise to the surface by volcanic lava, and these molecules form materials that people need to build, feed, and otherwise survive. You would also find some near significant waters (rivers, lakes, along shorelines) for similar reasons, as well as easier opportunities for trading with other tribes. So, tribes clustered around places with significant resources and other advantages (like trade).

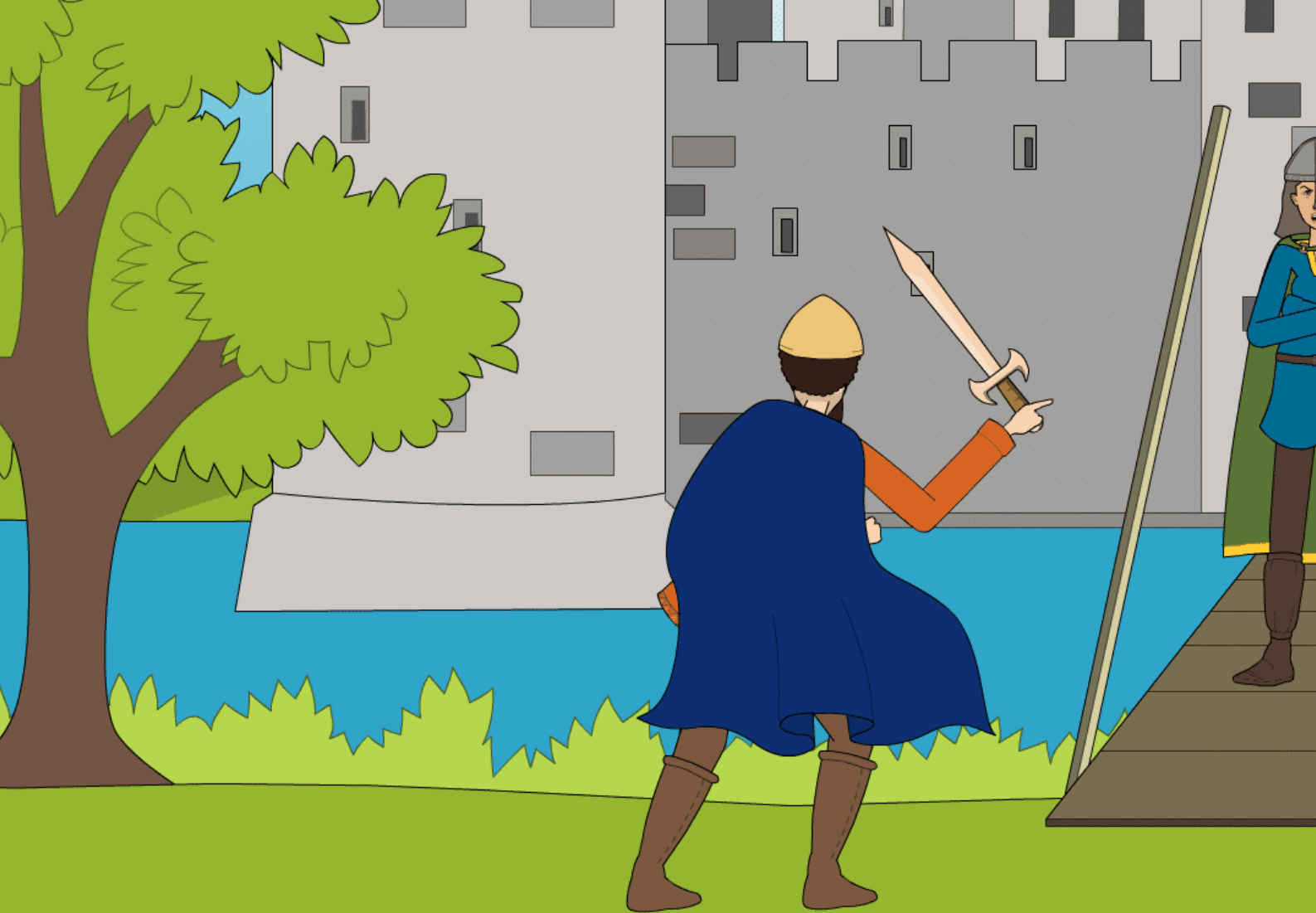
the trust

BY LAND
BY WATER

3,000

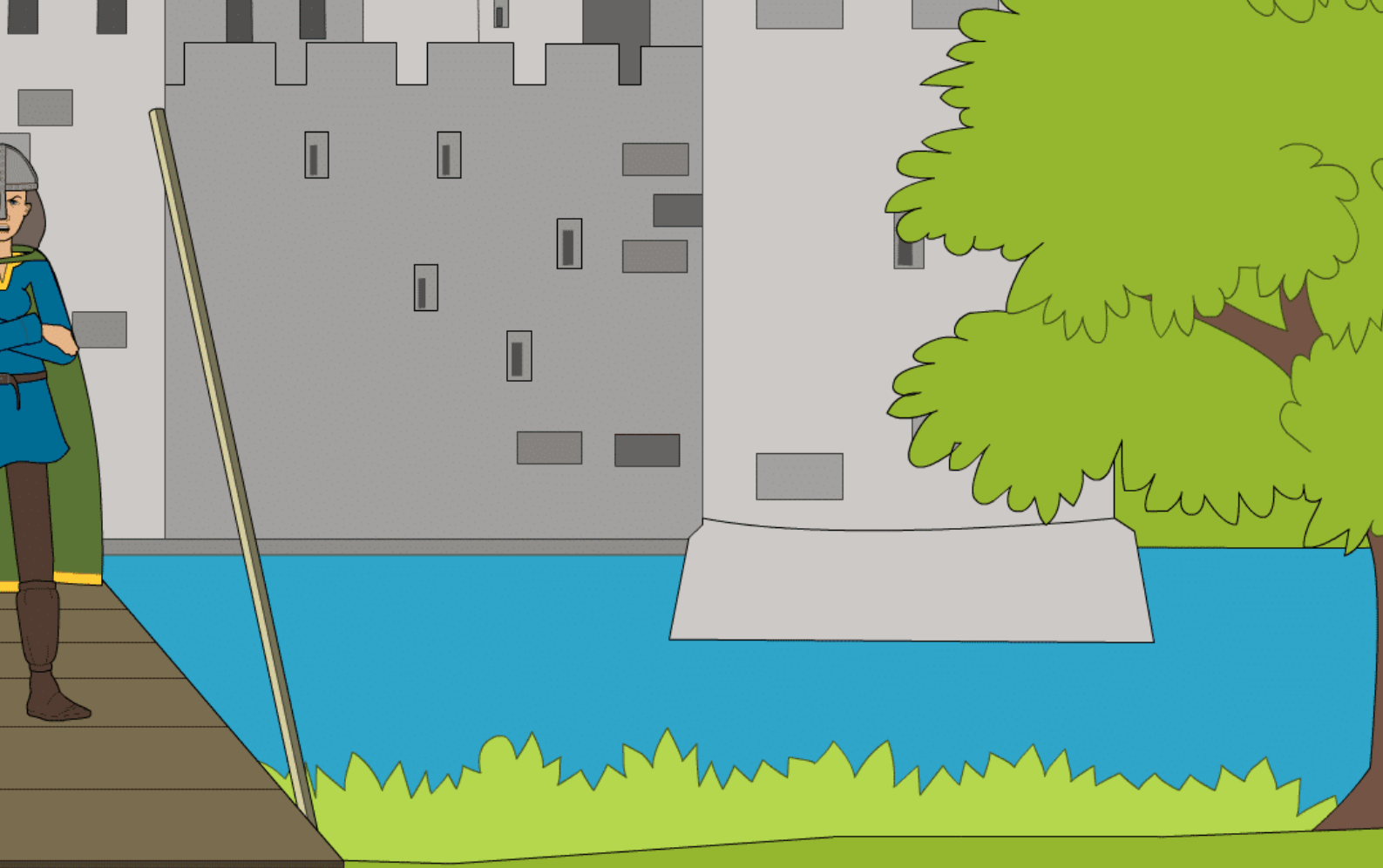
One of the popular routes/roads of trade that emerged was called "the silk road", which gained notoriety some 2,000 years ago, as it was specifically created for trading all sorts of stuff: animals, clothes, textiles, wood, vegetables, metals, etc. The route earned its name because 'silk' was a primary material that the chinese used to create clothes, and it was a very useful material at that time. The Chinese discovered how to make 'silk' textiles some 5,000 years ago by 'milking' insects, but silk did not expand into global trade for another 3,000 years or so. The "Great Wall of China" was built as a protection measure for the growing 'silk road' trade 'system'. But there was a problem with using 'currency' for trading in this period of time: insecurity. It is one thing to use a currency within a single tribe, but it's a different story when you try to use it globally.





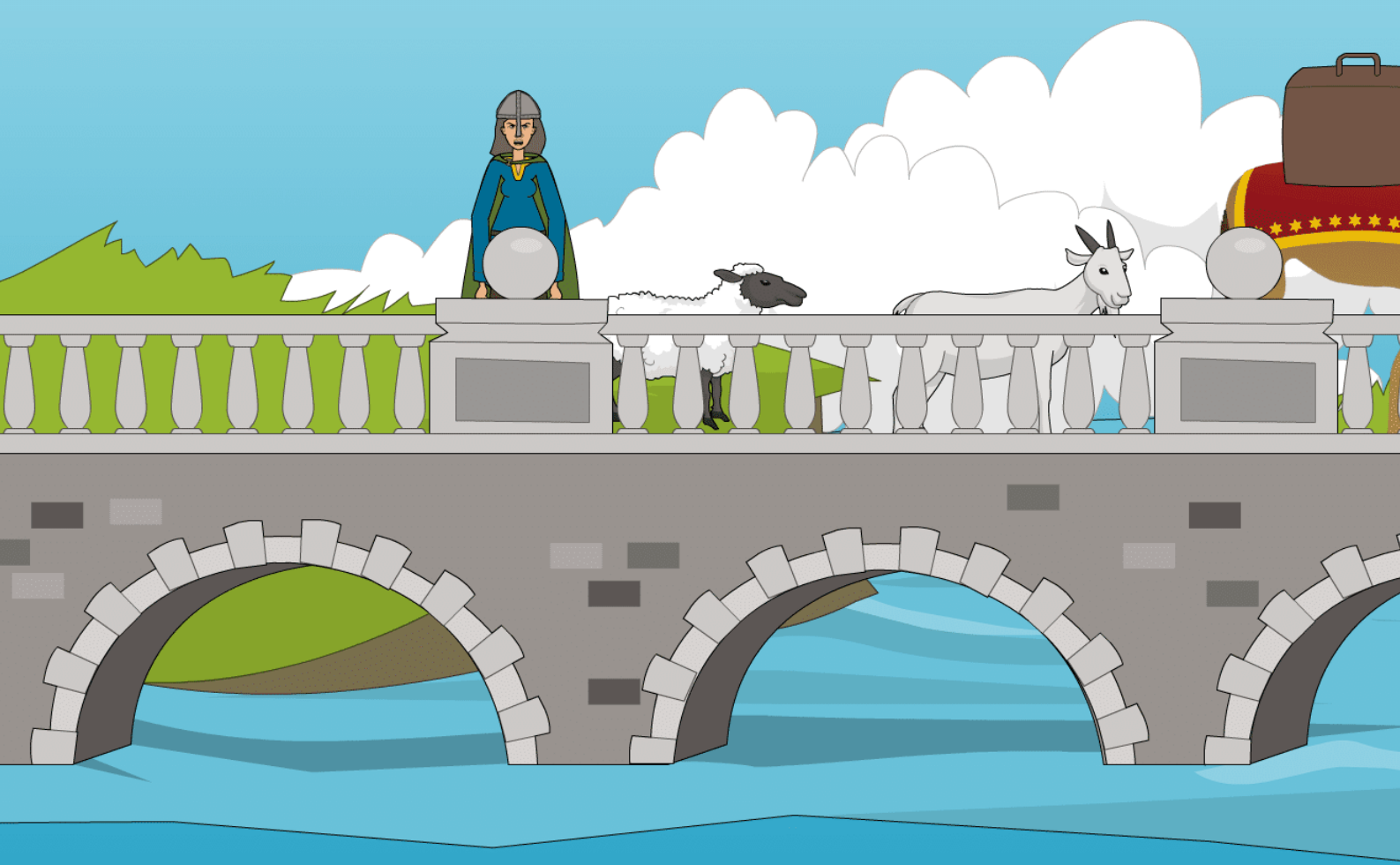
So imagine the scene: in our tribe we have many cows, while the other tribe has lots of silk. We need clothes, they need food. Both of us are unable to grow the 'other stuff' in our tribe due to differences in climate or maybe we simply do not know the technique for making good silk or have the right resources for growing healthy cows. In our tribe, we find it useless to raise more cows than we need unless we are sure that we can exchange these cows for silk with the other tribe. Once that is established and the other tribe says "I humbly swear upon my silk that we will trade with you bros!", you can no longer store value in terms of cows alone.

Keep the phrase "stored value" in mind. All extra cows that your own tribe doesn't need become a stored value, which then means that you have that value available to your tribe to get other stuff, like silk. That stored value can also be reflected in some kind of agreed upon currency (we have X gold coins, which means we have stored value in those gold coins - and can 'buy' stuff with them). Both tribes then set up some sort of farms, with ours specialize in raising cows and theirs in making silk. As soon as the two tribes trust each other, they can store value in their tribe (cows, silk, or just gold coins).



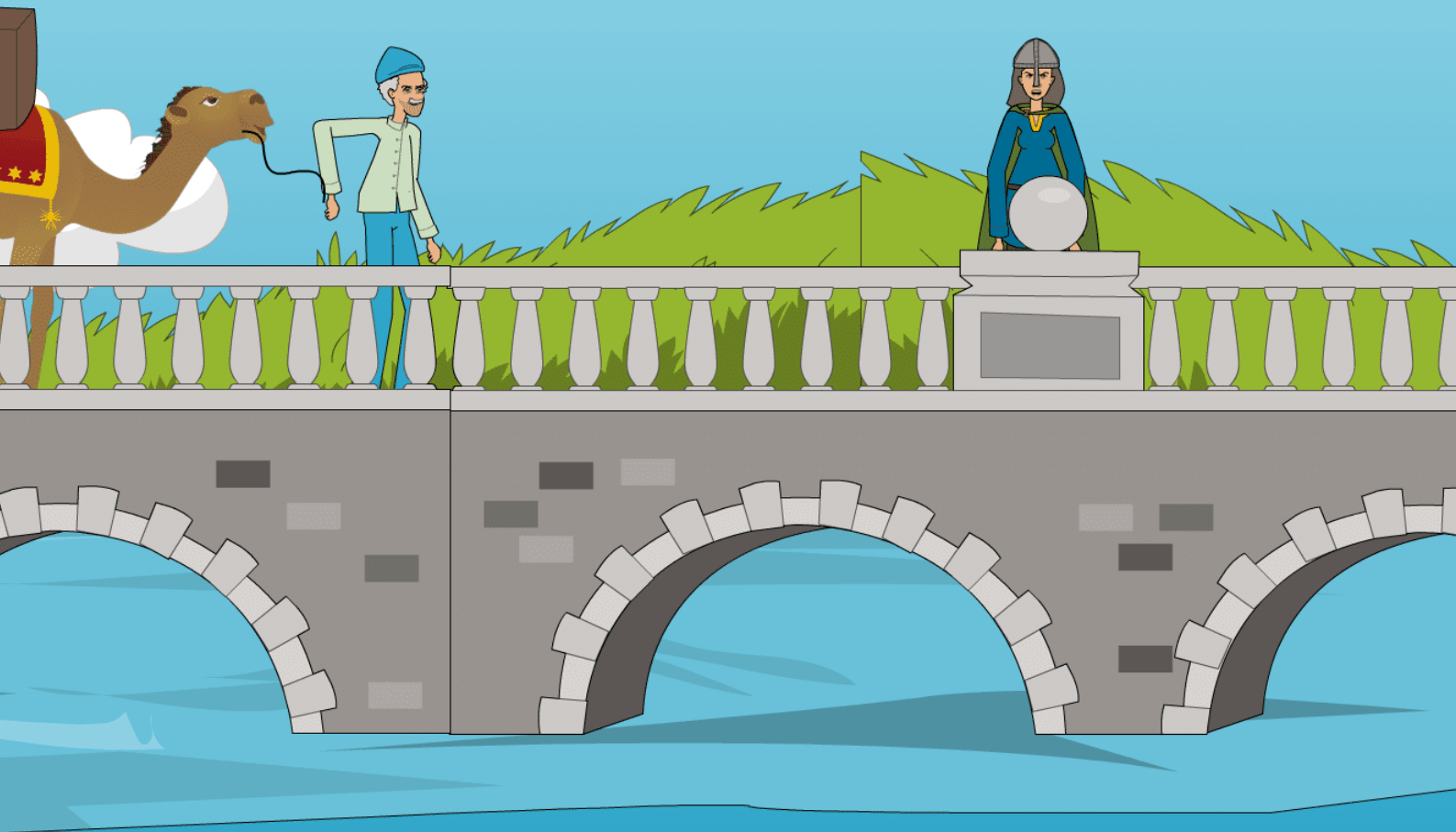
How did they come to trust each other, though? Fear. First of all, we made a deal. If you refuse to give us silk for our cows, then we may kick your ass with our army and just take your silk. But it wasn't just about this kind of fear. It also included the fear of losing the advantages that the other tribe was offering in return. When currency was used among tribes, then the mutual benefits kept them more 'trustful' of each other. When both tribes depended on each other's supplies and services, they had to respect each other or else risk losing that advantage.

That worked, but not all of the time. If we have many trades where we provide food supplies and spices for your weapons and textiles, but we eventually 'feel' like it would be more advantageous for us to invade you with our purchased weapons, take your food supply and force your people to keep on making us clothes and weapons, then we might do that. Indeed, many have done exactly that, all throughout history.



So gold coins (and other types) began flying around the continents, followed by moving stuff (goods purchased with the coins) from tribe to tribe. The tribes with bigger armies and more coins were the ones with more advantage. But here's where trade had to 'evolve', not only the trust between tribes, but also the trust of physically moving 'stuff' around. If we are happy with the proposed trade agreement between our tribes, then we must make sure that the silk textiles that you send from China to Europe will reach us. If we send the cows to you, but the silk textiles are lost or stolen on their way here, that would mean disaster.

To help make this more secure, they added a security system to the silk road: armies/people who made sure the stuff would not be stolen, and this is how taxes were invented. If you want protection for your stuff to be moved around, pay us a percentage of your stored value (in coins) and we will protect you. The same thing applied to land. Around 1,500 years ago, half of Europe was not 'owned' by anyone, but then people with coins (and the power that gave them) had fences constructed around pieces of land, declared them as their own and then said to other people "Do you want to farm your cows safely where no one can steal them? Then you can use our protected and maintained land, but you first need to give us a percentage of your stored value (your cows or cow by-products)."



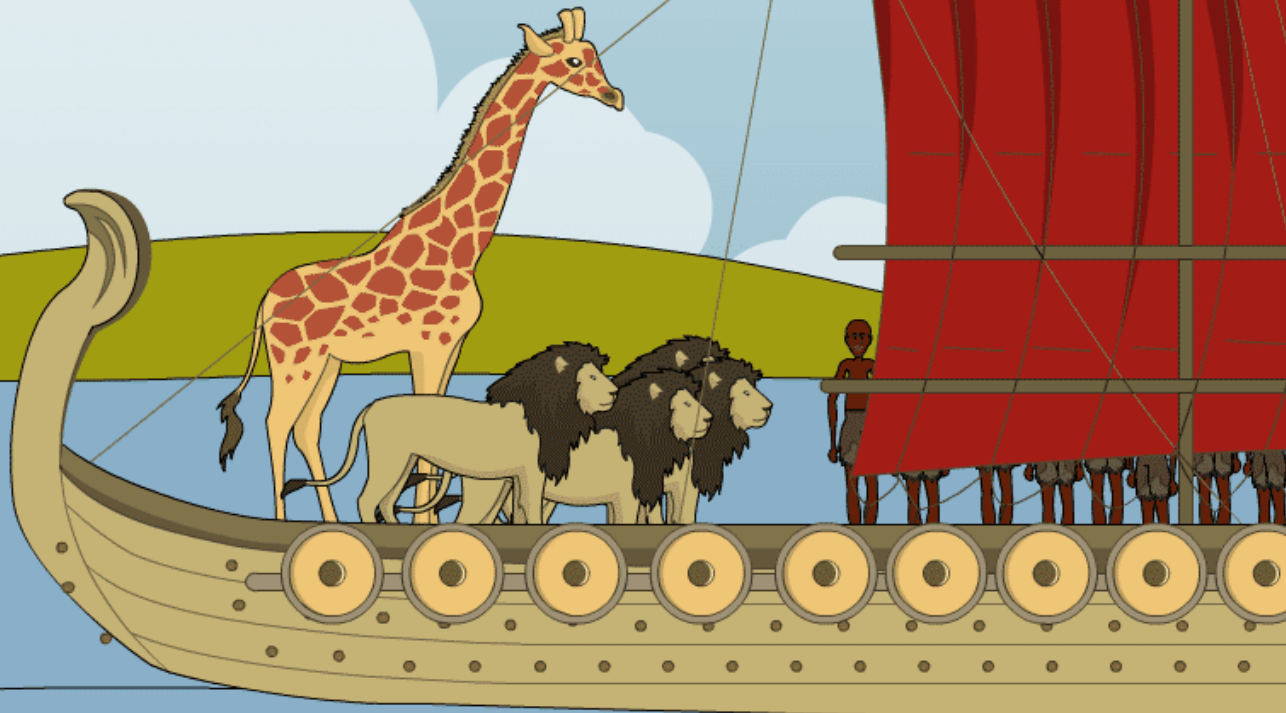
These taxes were a way of making trade safer and agriculture more useful. Once this “protection” became available, people could grow and produce more without fear of it being stolen. Back then, people were ‘stealing’ all sorts of things, and for basically the same reasons they do it today: lack of access to food, shelter, and other needs. Consider then how the notion of ‘stealing’ seems to apply only to some, but not to those who took land that did not belong to them, fenced it in and put a tax on it. Interesting...

Anyway, these taxes evolved as part of a provided service for protection, quality, safety, etc., but also as a mean of controlling people and society as a whole, in addition to making them more gold coins.

You can read in more details about the history of trade [here](#).



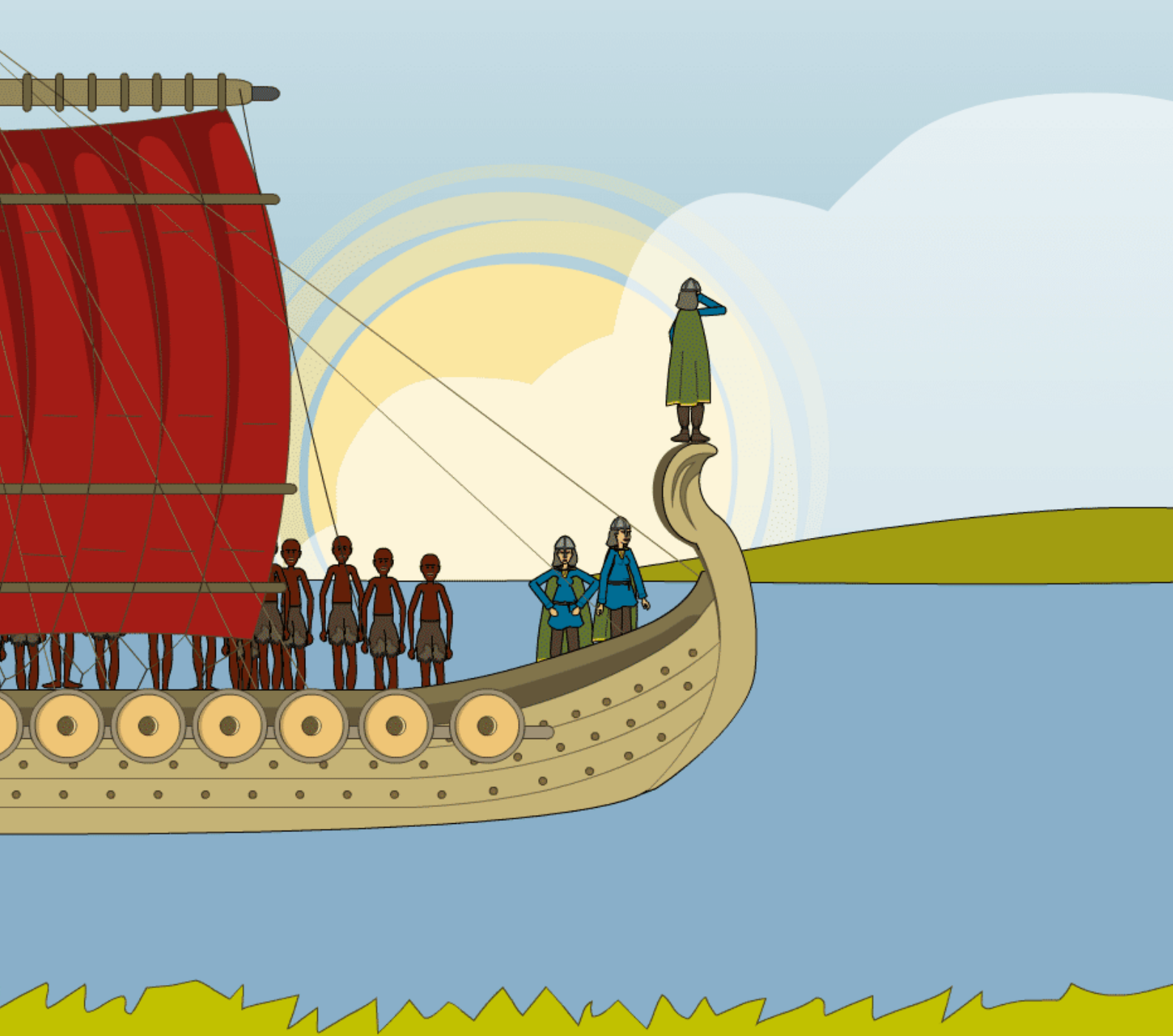
the frenzy



The trading of goods and services gradually became a frenzy:

materials moved from Norway to Australia, foods grown in one part of the planet were moved to another corner, African elephants and giraffes were brought to China. As long as you had an acceptable currency and could pay for something to be done, it would probably be done. As a result, the primitive values of a relative few became able to spark worldwide disaster. Why? If King AssWhole the 3rd wanted a giraffe, four lions, 45 personal slaves, and 22 wives, then it was now easier than ever for him to get them, as he had the coins and others would agree to 'satisfy his wishes' in order to gain those coins for their own personal benefit.

1.000 YA TO NOW

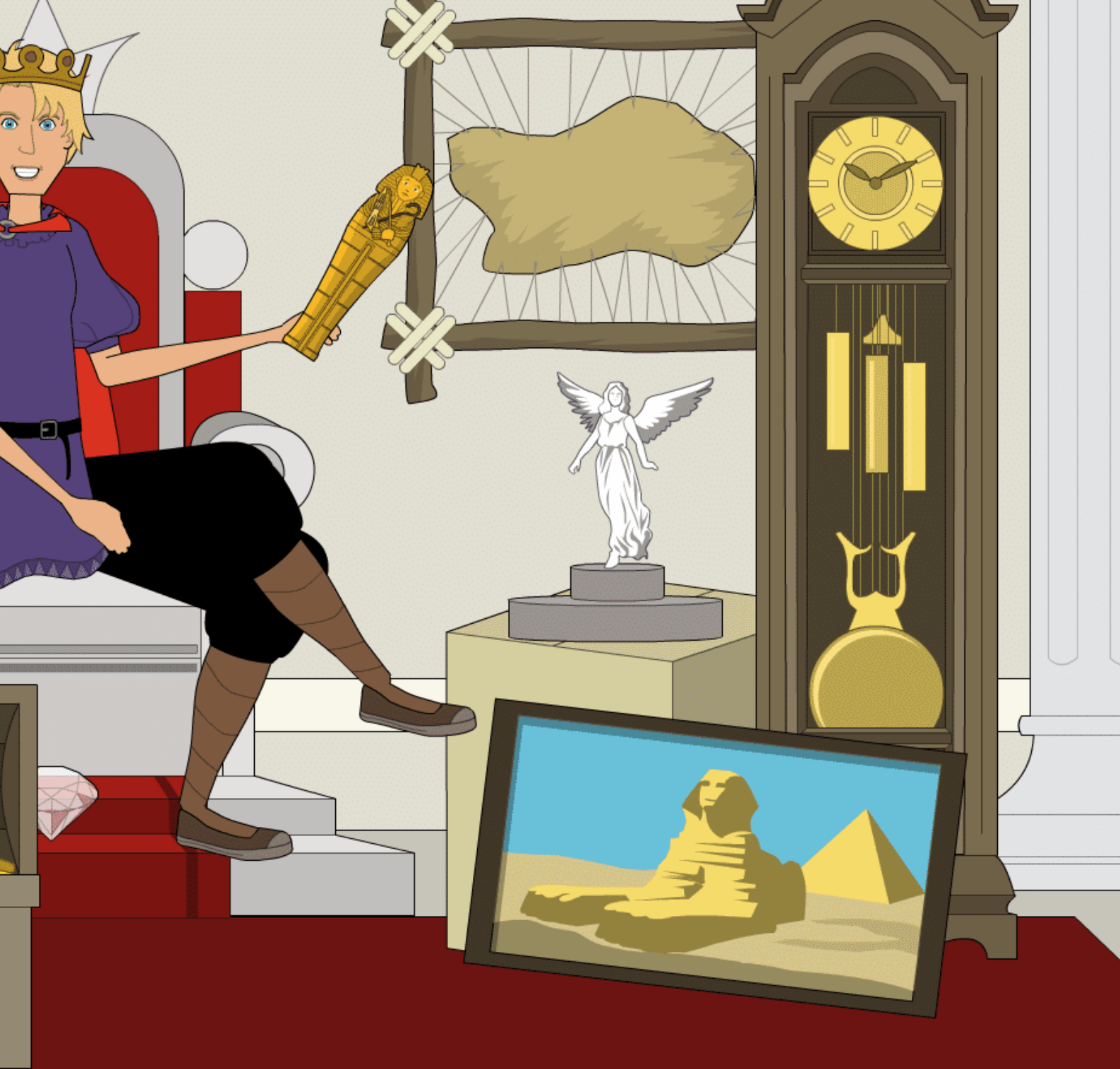


If King AssWhole the 4th later wanted a huge palace built in the shape of boobs, just because that's how he felt, then he could easily 'buy' 300 slaves to build it for him. Millions of slaves were kidnapped into this trading system and sold to many kings and tribes. They became the 'pillars of creation', as they were worked to produce the stuff that tribes then used or traded.

As a further example of where this craziness could go, over 12 million people were brought from Africa to America to work as slaves to produce sugar, coffee, and tobacco, resources that are not necessary for anyone's survival, but important to the world wide trade frenzy ([source](#)). The thirst for 'consumerism' even made some slaves capture other slaves and sell them for money.



The trade of goods and services may have started as a reasonable means moving stuff around and providing greater access and abundance for more people, but it quickly escalated into an absurdly deranged world wide 'trade anything' system, changing nearly all people's values from working to survive and make a better life, to making more and more coins, to have more and more stuff. Billions of people and animals have died directly due to trade, often by being worked too hard to produce or carry stuff from one place to another, trying to protect stuff from others, their inability to 'afford' stuff that was priced too high, and many were tortured, raped, enslaved, coerced, and even executed in the name of this system.



All of that, for little more than filling up the stomachs of some, and satisfying the body: food and comfort. By growing up within a primitive value system that says making more and more golden coins is 'the goal', people never thought to consider the impact of what they do. They just had that goal of making more and becoming more powerful.

Trading stuff became like a drug, and people quickly became addicted to it.

The trade system also created the notion of 'jobs' (as people had to sell their skills), and that led to the creation of 'schools' to train people for becoming workers.



School was made mandatory in some parts of the world, but not so much in others. However, the result of not attending school was to face social rejection, stigma, and, more importantly, to lose your advantage of being 'employable'. Schooling was later confused with 'education' by the public, with people starting to think that, ideally, the school system was there to teach them about the world, instead of preparing them for a job.



No matter how boring or hard jobs happened to be, it became the only way to make your way on planet Earth, as the resources and services were already owned and operated by those who were there before you. People had to work in order to access them or otherwise gain the privilege, as their very survival depended on it.

Of course, these interconnected self-serving systems still existent today.

OVER 60 MILLION PEOPLE WERE KILLED IN WORLD WAR 2



Most wars (if not all) were about gaining resources to feed their tribe's crazy 'wants' and many of their needs, and because of the thirst for power. But when people were sent off to war, that meant that even more resources were needed to support their troops, while starving even more of their own 'civilians'. They fought for resources, but also realized that many died due to the further reduction of them induced by being in a state of war.

The background of the entire page is a stylized illustration of a war-torn city. In the foreground, a green tank is partially visible, with bright orange and yellow flames erupting from its side. To the right, a soldier in a khaki uniform and helmet stands with his hands on his hips, looking towards the viewer. The background shows grey, damaged buildings and a hazy, orange-tinted sky, suggesting a scene of destruction and conflict.

AROUND 21-25 MILLION DIED OF
STARVATION AND DISEASE AS A
DIRECT RESULT OF THE WAR

HUNGER AND DISEASE
KILLED ALMOST HALF AS
THE WARFARE ITSELF
DID. (SOURCE)

When Hitler 'started' the war some 70 years ago, he also had a 'secret' plan for invading neighboring tribes to take their land and use it for agriculture (source). The Japanese were also considering this approach. So, huge wars are influenced by a lack of resources, and these conflicts are very recent. Smaller conflicts (compared to world wars) are continuously going on today for the same reasons.



Even more goods and services are produced with the rise of mechanization, which allows people with distorted values (the termite-consumer) to hoard and consume even more, as if the planet's resources are infinite. Since a hundred or so years ago, advertising has played a key role in this massive consumption. At its start, advertising looked something like "Very good coffee", plus some details about what it is made of, a subset of what you find on the back label of today's products. Today, however, advertising is about almost everything but the product, and it is so abundant that it is nearly impossible for anyone (including you) to effectively escape it.

Roughly \$500 billion is spent on advertising - nothing more than promoting products - year after year after year ([source](#)). In contrast, only about \$200 billion is being invested on renewable energies each year, in a situation where experts say that if humans do not raise the investment to at least \$1 trillion per year by 2030, we are screwed by the accumulation of climate change effects brought about by our fanatic use of fossil fuels ([source](#)).



In effect, moving stuff around became decoupled from reality long ago, with near zero concern for the environment or the people, but plenty for a functioning trade system.

We have been taught to call all of that 'the economy' (dictionary definition: careful management of resources to avoid unnecessary expenditure or waste), and it's something that we very much take for granted today. We give these systems far too little thought, mostly because so-called experts say that the way it works is very complicated. They are right, of course, because of the massive amount of rules that have been applied to this world wide trade system.

the business



In addition to the many taxes imposed (on land, safety, etc.), scenarios like this one began to emerge: My buddies and I provide armed security (protection) for a port where ships come and bring goods. Another group protects another port. To get more ships to 'park' at our port, we announce "Instead of ships paying the standard 12% tax for protection that other ports charge, we're only asking for an 11% protection tax." Out of this new practice, the mighty world of "business" was born: competition and differential advantage arising from playing around with the rules.

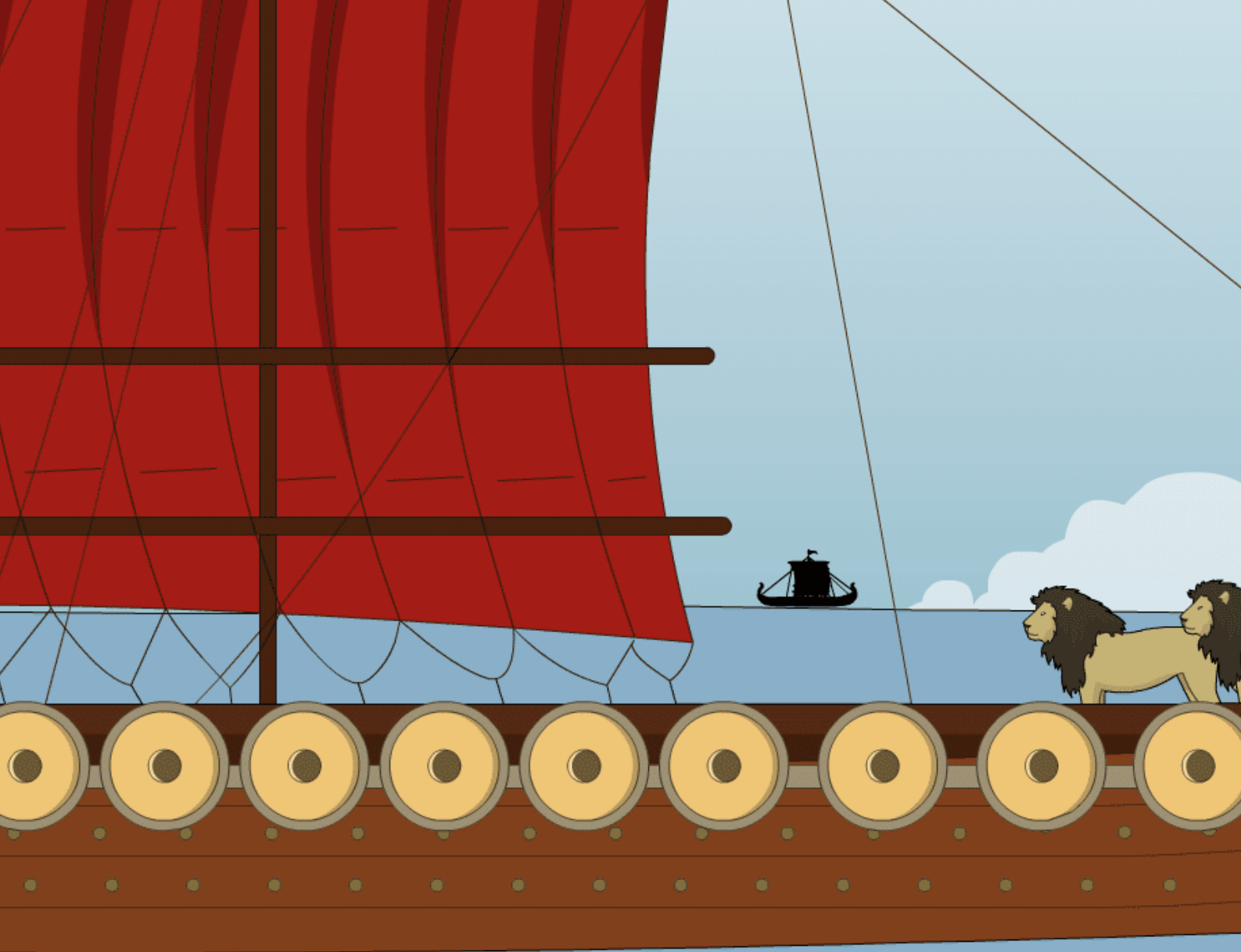
Now try to imagine how these rules quickly evolved, and in so many different directions. For example, we can heal you for only 3 coins, but we can only do it that cheaply because the tribe we are in offers protection for our services at only a 2% tax. Health providers tax the people, while the tribe taxes the health providers, but for different reasons. Some of these taxes became mandatory, some not, all so that they could use the collected taxes to afford more stuff to 'sell' to the tribe, or improve the army, or whatever. It basically evolved into taxes on taxes on taxes on taxes, applied to rules that applied to other rules that applied to yet other rules... and that maze was made by people or groups to create advantage for themselves.



That is still the idea behind taxes and businesses. These days, you may be paying for your health insurance as a tax (not as a service - which means 'mandatory'), where you are basically coerced to add coins to the tribe's master coin bag, a little bit each month, and from these coins the tribe can pay the health providers to get you healthier without you paying them directly, or the tribe may do something else with your tax money: build roads, different kinds of buildings, organize nonsensical sport events, 'ghostly' invest in themselves, and so on.

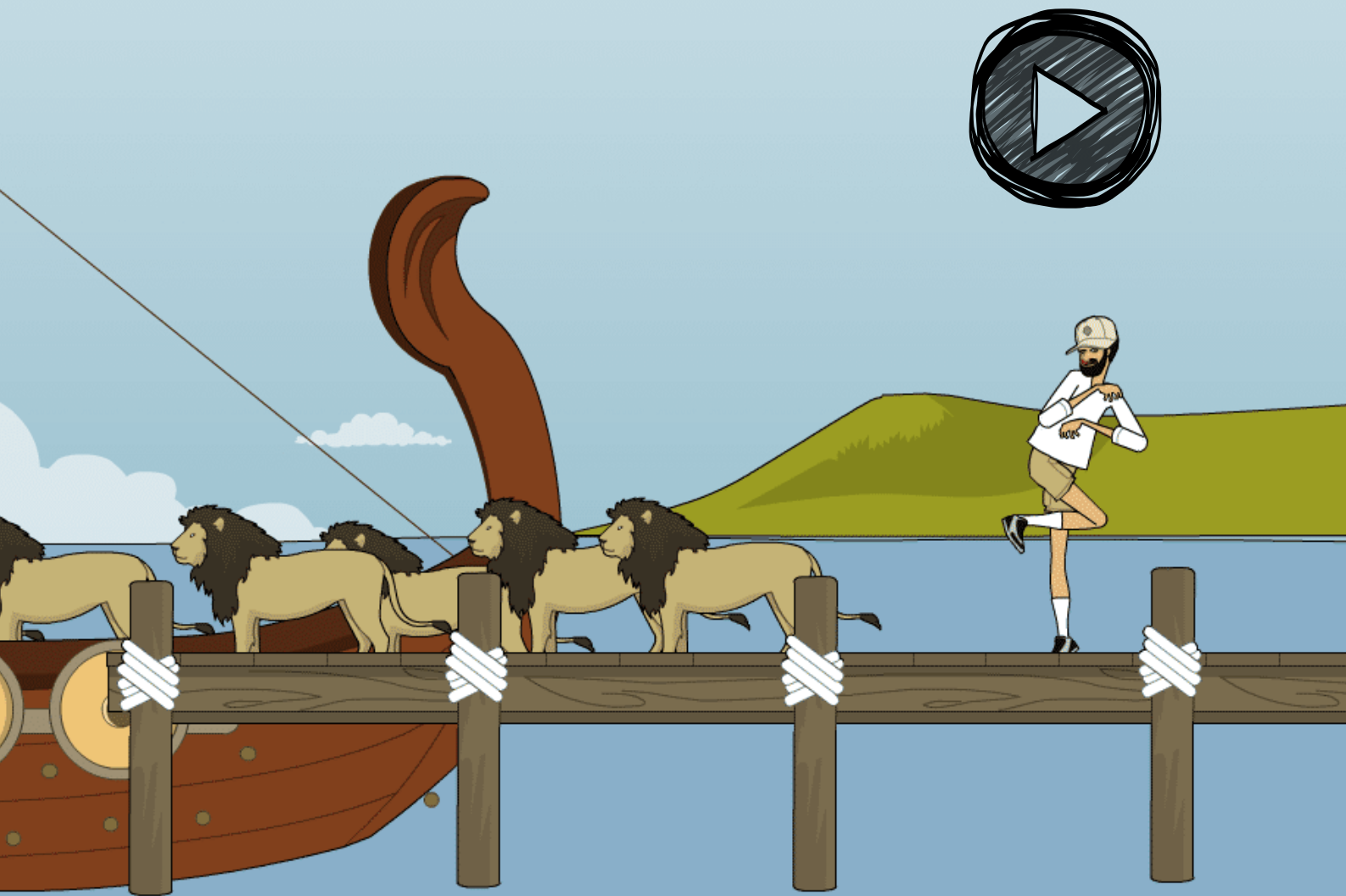
Interestingly, health providers also pay taxes to the tribe for using space that the tribe 'owns', equipment, etc., even if the tribe pays the health providers for servicing the tribe, so the tribe ends up regaining some of the money they pay to health providers, as more taxes. Don't get lost in the details, though. Just keep in mind that all of these complex taxes and rules have more to do with "how we can make more money" than anything else.





Investing is another example of 'business'. If a cargo ship transporting lions from Africa to China costs 5,000 coins (cost of building the ship, loading the lions, taking care of them, other services, etc.), then my buddies and I can invest a small percentage of our coins on the project, let's say 2% each. Then, we get a small percentage back for every profit the ship makes while delivering those lions to their destinations. If the ship sinks or otherwise fails, we lose a very small amount, which is much better than me paying for (and possibly losing) everything.

This allows us to 'invest' in many things worldwide, gaining investment returns while minimizing large risks.



That's what most people do today. If I have coins and I see some people making a new thing called Facebook, then I can invest 1% of my money into the business, controlled by certain rules that vary depending on how I invest. In one scenario, I can 'lend' my 1% to Facebook, which translates into FB owing me that 1% + interest. That's the simplified idea, and we call that a 'bond'. In another scenario, I can actually buy a part (a 'stock') of Facebook, and that allows me to partake into FB ownership, which means profits from the company will come to me as well ([source](#)).

This is what "Wall Street" does. Many people look at how monetarily valuable each company is (lots of graphs showing statistics from the worldwide market), and then buy or sell 'parts' of them or invest in them through bonds. This is how companies can grow, or even lose value. If a rumor is heard that Facebook's membership is declining and moving to another social network, then people may decide to invest less in Facebook, and possibly more in the new social network. The value of Facebook will drop when this happens.

coins out of coins



That leads us to the next point: making money out of money. We've already seen how people became decoupled from reality by taking this trade game too seriously, but making money out of money? Coins out of coins? How's that?

Say a guy called GoldBoss has a big safe and guards, and I'm not able to keep my gold coins safe at my house because others may steal them. GoldBoss tells me: "Hey, we can protect your gold coins in our safe, if you give us 3% of whatever you want to store there." This is similar to making money from offering protection for resources and services, but this time it's offering protection for money. They make money out of protecting money from being stolen (how does that sound? :)).

However, the interesting part is yet to come. GoldBoss now has lots of other people's gold coins in his safe, but those people generally hold out some of their money for short-term spending (not spending all that they have stored in the GoldBoss safe, so a good amount of gold coins will always be there). So, he invents a new business: what if I lend some of these gold coins to others who need them?



If I provide 400 gold coins to a person, with a tax stating that they must pay back 140% of what I gave them, I (GoldBoss) will make a profit. In other words, a poor guy takes the 400 golden coins, but then has to pay back 560 golden coins, all because of the rule GoldBoss just invented. GoldBoss relies on a 'trust' that the poor guy will be able to pay him the 560 golden coins within a previously agreed upon period of time. The agreement may have poor guy paying back 10 gold coins a month. So in 56 months, he will have paid back the loan (the 400 coins he took, plus the 140% interest).

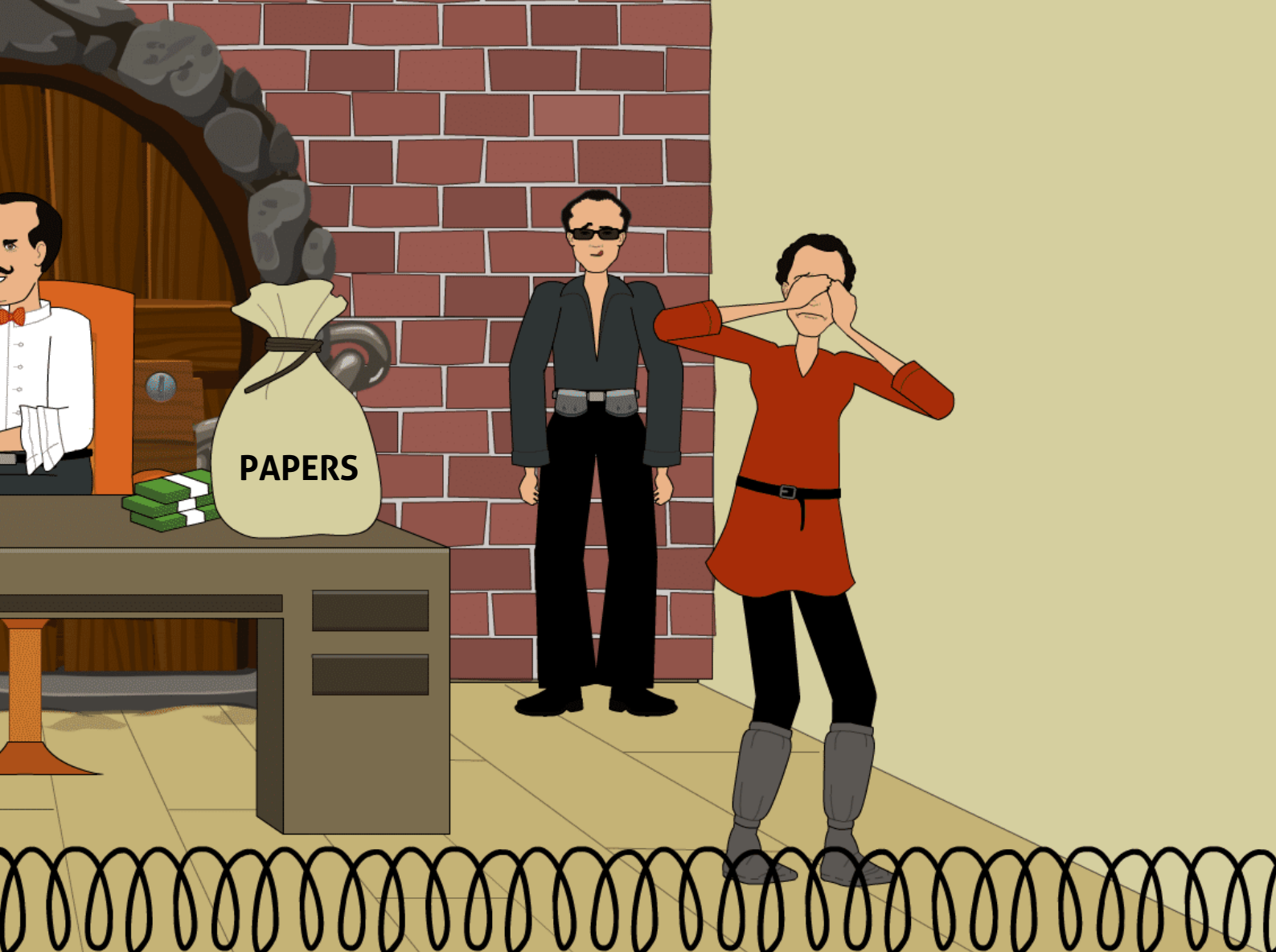
There are two huge issues with this way of taxing/making business:

1. As you may have noticed, GoldBoss never had any gold coins to start with. He is using other people's coins to start his business. Son of a bitch right there! :)
2. He asks for more coins than he lent, so he takes back more than what he had. Those gold coins that he accepts as 'interest' must come from somewhere. But from where?



Well, it's not hard to imagine GoldBoss making so many of these loans that he runs low on gold coins to keep his business growing. Making gold coins is really hard, especially since you need raw gold to even consider it. So, he invents a new type of 'official note' to represent multiple coins: paper money. Similar to how earlier people had invented special shells for currency, this guy invented paper currency, but this time it was not to represent real things (resources), but other currencies (paper to represent gold coins), using fancy, unique paper that no one could replicate easily, yet made of non-scarce materials so those who know how to make them can make as many as they want.

GoldBoss can now give some papers to people who need gold coins and says: "This paper is worth 400 golden coins. You use it the same way that you use gold coins, but without having to haul around all of that weight.". This way he no longer has to give out gold coins, but his safe still has to contain all of the coins that the papers represent, right? Right! He has a 'budget' within his safe that he now represents with these papers. It's not a big advantage for now, as he still relies on gold coins to represent his invented papers.



However, as soon as these papers become popular as a currency unit, he can pretty much print this paper without having the golden coins that he started with. Really? Really! And it's still being done this way today ([source](#)). Remember the first guy who deposited gold coins into GoldBoss' safe? He now wants them back, but they are physically spread around the world, and have even lost some of their value as there are now more paper currencies than the gold coins they supposedly represent. Give that guy some paper and let the party begin!

GoldBoss can now print papers and give them to people as debt (as he did before with coins), and people must give back even more papers (the interest - again, as he did before). The only difference is that GoldBoss can now print new currency whenever he needs more to lend.

It should be very easy to see that this is not a sustainable system, as it creates something that we call "inflation".



EXPLANATION OF INFLATION:

When gold (not necessarily gold coins) was used as a base for measuring value, and people discovered a new gold supply (perhaps deep within a cave), the additional gold made the already existing gold less valuable. The initial happiness of new gold discovery only lasted until they realized its devaluation effect. If it were to rain gold for 40 days, people would be sweeping it out of their homes.



If we had a printing machine right now that could print as much paper currency as we want, and everyone else in the world did that as well, we would no longer be able to properly use them, because their value would quickly decrease to zero. I might decide to buy 55 jets and 34 yachts, but if everyone else can also now afford that, there would not be enough for all. It's also probable that very few, if any, would report to their jobs, since they could all print their own currency. So, no one works, no new stuff is being produced, and no one would be able to buy anything with the now massively 'inflated' currency.

EXPLANATION OF INFLATION:

In ancient Rome, they used gold coins to pay their people. At one point, they wanted to build stuff more rapidly, but they didn't have enough gold coins to pay more people to make that happen. So, they melted down the gold coins already in use, and combined the molten gold with other metals so they could make many more coins with much less gold in them, but still representing the same 'stored value' (they were the 'gods' of coins, so if they said it had the same value, it did). In this way, they were able to 'inflate' their economy with more coins, allowing them to pay more to get their stuff built faster. However, they quickly realized that having a populous with more currency to spend was creating new challenges, and the people who were selling things were having a hard time with it.

For example, a guy who worked on building stuff for Rome, and was paid lots of new coins for that, could now go to the pasta store and buy up all of the pastas. Even if the pasta maker was temporarily happy to make all of those coins, when he later went to the woman who sells chickens, she said: "We have no more chickens, because some people who came before you bought them all." So, the Roman leaders realized that, because people suddenly had more coins to buy more and more stuff, they had dramatically affected the way that stuff moves around and there simply wasn't enough for all.

Supply could no longer satisfy demand.



The pasta maker says, "Damn! No more chickens! Now I can't buy food with all of the coins I made... pointless!" The gal growing chickens is also pissed off because she can't buy repairs for her barn. And so on. Eventually, one of the vendors thinks, "Aha, the demand for t-shirts with Caesar's portrait has increased much since people have gained so much coins. Instead of quickly selling out my entire stock to all of the demand, what if I raise the price of Caesar T-Shirts? With so much demand, I will still sell them all, but closer to the speed that I can make them, and with higher profit, too." (similar to the earlier shoe maker who could charge two cows for them, remember?). So, he raises his prices, and the chicken grower does the same, and the pasta maker does it as well, and so on. Eventually, everything will cost more, but since people now have a lot more currency, the effect of these higher prices will be almost like it was before the new coins came into existence. In other words, the market re-stabilizes. They have more currency to play with, but the stuff they can buy with it now costs more.

An important thing to consider here is that the workers who got their hands on the new coins before the 'inflation' were the ones who profited the most out of this (e.g. lots of pasta and chickens for them, all at the lower prices). Thus, at the start of any inflationary period, the ones who get their hands on the newly minted coins (or newly printed papers) first are the ones who profit the most.

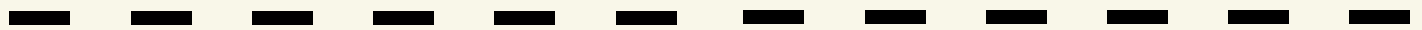
Since today's governments, national banks, or both in cooperation are like the ancient Roman leaders and GoldBoss, and can create currency, they give rise to these inflationary periods that affect all of us, but mainly makes some rich people, even richer.



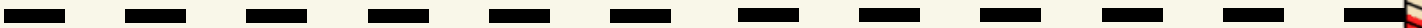
If we were to count the total coin, paper, and digital currency in the world, the number would be somewhere around \$5 trillion.

But that only represents less than 10% of the total money in the world.

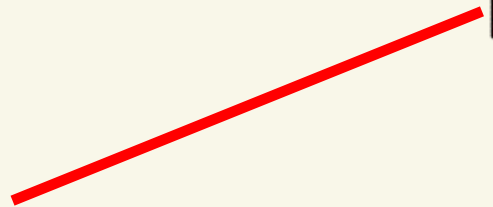
Whaaat!?



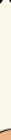
'IMAGINARY' MONEY



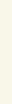
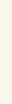
'REAL' MONEY







\$103



BANK M

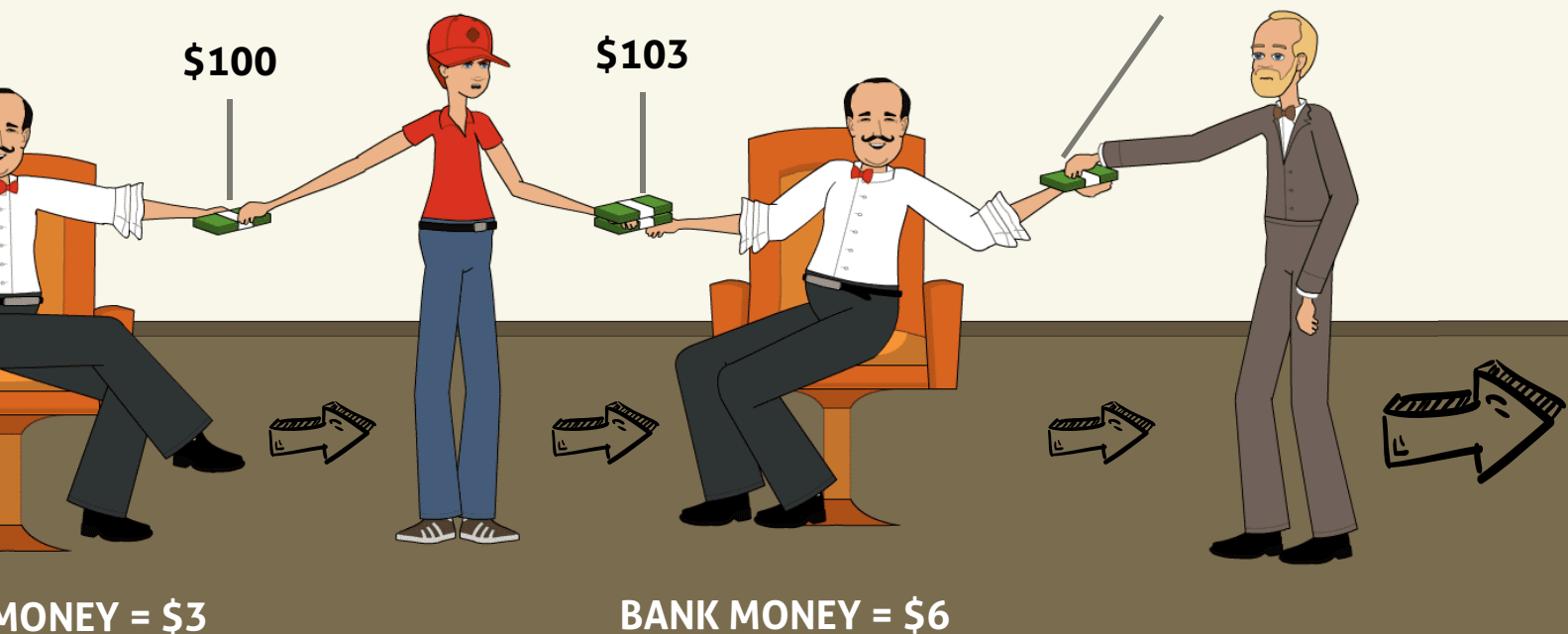
Note that the person who borrowed the \$100 and I each have \$100 worth of consumption power at the same time: I have it stored in the bank, while she has it in her pocket. From a very simple transaction like this (in reality, money rules make it much, much more complex), the consumption power doubles. However, we can't spend the \$100 at the same time, since there is only \$100 of actual physical money. The bank relies on me keeping my money stored in the bank, while the other person needs to spend that amount, so the bank 'lies' to me about having my money. In fact, the bank does not need to create any new money, as it just spins the same money around, making profits out of it all, and the whole time 'promoting' false purchasing power. Of course, there are more rules to this transactional game as you can see [here](#), but this is the basic idea.

e'
00 +

The bank gives another \$100 as credit to someone else, with an interest rate of 3%.

That 'someone else' gives back \$100 + \$3 as interest.

As the story repeats, the bank makes more and more money out of the \$100 that it did not own.



Imagine how much money the bank will make after years of loaning out the same money with interest....

In our simplified example above, the physical 'money' was \$100, but the 'total money' (purchasing power) quickly became \$200. This example helps in explaining how 'total money' is always much higher than the 'real' (physical) currency. If an alien species could look at us financially, they would see that we have purchasing power of around \$60 trillion 'on paper', but in actuality, there is only around \$5 trillion to spend ([source](#)).

If everyone in the world were to go to their bank tomorrow to withdraw their money, they would find that the banks don't have it. However, if the people who owe money to the banks were to pay back their debt to the banks tomorrow, the banks would have plenty of money to pay everyone's withdraw demands. So, just keep in mind that there is a huge difference between the physical money supply and purchasing power (total money). The money that physically exists, the 'real' stuff, is called 'currency', while the total money supply is more simply called 'money'. It's important to understand the difference, because the terms are often misused interchangeably and it's quite difficult to avoid doing that even for this book.

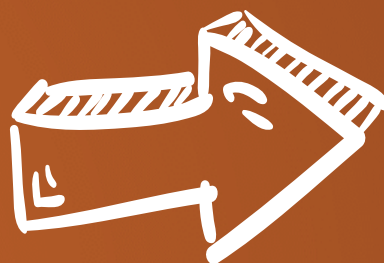


Things get much more messy when new currency (remember, 'real' money) is created via the 'central boss-like banks'. These banks create new currency (digital or otherwise) and 'inject' them into its children banks. Those banks now have more currency available for their needs, which will indeed 'inflate' the purchasing power because now both 'that girl' and I can have our \$100 to spend at the same time, as the bank suddenly has the extra currency for that to happen. The banks can also lend even more money to new creditors. Resultingly, this new currency promotes the creation of even more 'money', the non-real stuff. Central banks (boss-banks) create currencies, and the 'consumer'-level banks create money out of that currency, all while that entire money creation is triggering inflation across the entire system (rising prices, reducing the worth of your stored values, pissing people off, etc.) ([source](#)).

Just as boss-banks create this kind of inflation, they are also in a position to 'stabilize' it. To cope with inflation, the boss-bank has the power to intervene by declaring to all banks: "Starting today, the interest rates on new loans (credit) will be higher!", and thus the banks will begin advertising to people: "Instead of charging you interest of 3%, we are now charging 5% interest." This causes people to borrow less money, thus spending less, and so works to stabilize inflation as it reduces the overall flow of money. It is similar to how earlier people raised the prices for their pastas and chickens in order to slow down consumption/demand.



GO AND SPEND!



If you think that's crazy, you'll probably love this. When consumption slows down too much due to the boss-banks' games, it creates the opposite of inflation, and you probably already guessed it: deflation. When people consume less, they move less money around the system, and since everything is monetarily interconnected today, that negatively affects salaries, employment, and production, brought about by the resulting decreases in demand, and so on. Of course, this is a bad thing because we live in a world where we **MUST** consume like crazy or else the money game will break down and fail. So, when the boss-bank sees that potential growing, you may be able to guess what it does. It simply creates yet more currency, and reduces the interest rates for banks so that more money can enter the system. This back and forth loop continues again and again and again. These cycles generally occur every 5-8 years. Like the Roman Kings and merchants of the past, today's 'kings' may successfully stabilize the economy for a while with each of these cycles, but since it invents money all the time, and people rarely succeed in becoming debt-free, the entire world is in a perpetual state of increasing consumption and growing debt that perhaps can never be paid off. **Now THAT'S crazy!**

I highly recommend that you watch [this 30-minute video](#) explaining the entire maze of complicated rules of the economy, just for the sake of getting a taste of how complicated humans have made these rules.

Again, please don't get lost in these rules. The important thing to recognize is that it is all about moving stuff around and taking advantage of services. This has all become incredibly complicated because they continually add so many new rules that are very dependent on other rules, people's behavior, resource scarcity, and so on and, of course, more and more of these rules have become decoupled from reality.

As mentioned earlier, with the advent of mechanization, people found themselves able to produce even more stuff, thus allowing a growing amount of stuff to be moved around. Today, your food plate may include five items from five different tribes. It looks like a great system that allows us to enjoy luxury/comfort/opportunity, but it's quite naive to ignore two very important aspects of all this:

1

Remember the AssWhole king the 3rd and 4th. They wanted slaves, lions, or whatever exotic dishes or woman. They were able to express their distorted values because of the market place. Same goes today. The more AssWholes, meaning people with distorted values created by a frenzy of consumption, the more such ways to satisfy these 'clients' because satisfying them means profit for others.

2

I think it is right to say that the only reason you might find a certain wine from France amazing, or a food dish made of five different food types from five different tribes as delicious, or a 'rare' painting as gorgeous (aren't all paintings, good or bad, rare?), is all due to today's consumerism culture. It is the advertising; the ideas created in people's heads to want these 'exotic' things. We are used to thinking that the ability to see some polar bears in a warm climate (zoo) is such a great advantage, for our own entertainment or whatever, but these are nothing more than projected values from a consumerist world.

today:

COST EFFICIENT AND THE REAL VALUE OF THINGS

LET'S CONSIDER THE FOLLOWING LIST OF ITEMS:



NEW
IPHONE



TASTY HAMBURGER



YUMMY CHOCOLATE AND
DELICIOUS COFFEE



SHINNY JEWELRY

FASHIONABLE CLOTHES



We are all familiar with those, and most of us have all of them (some on a daily basis), but what most of us don't know is the story behind each of those products. Learning the story behind them and how they are made provides a much clearer portrait of today's system, because the list covers the largest industries (trade 'movements') on the globe today: textiles and rare materials, electronics, food, and one more (as you'll soon see).



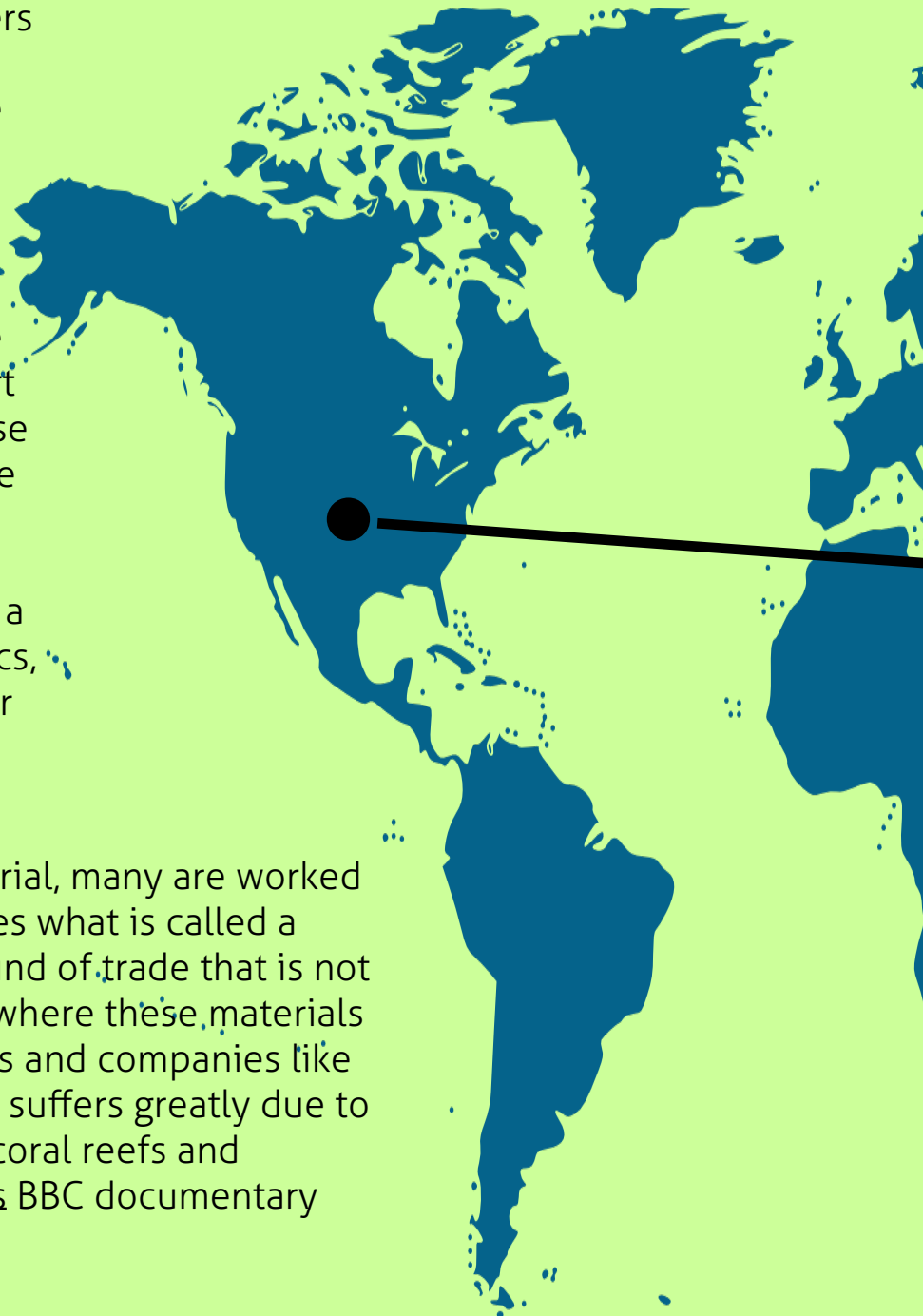
IPHONE



Let's start with the iPhone (or any smartphone). This is a product made by the US tribe, but it's only designed there and primarily manufactured (assembled) in China. Why? It would cost Apple 4.2 billion dollars each year to move its business back to the US. They pay around 2% in taxes for their phones in China, while that jumps to 35% in the US. They outsource because it's very profitable to do so.

Chinese assembly line workers are also paid much less than US workers, and under worse conditions: with exhausted employees falling asleep on their 12-hour shifts. Most have no other options but to accept these conditions. The assembly line is only one part of the story, however, because the materials needed to make these phones are also employing a series of destructive processes. Tin is a material used in all electronics, and it's mined mainly by poor people working under very dangerous conditions.

Many die extracting the material, many are worked to exhaustion, and that creates what is called a 'black market' (just another kind of trade that is not 'acceptable' to some tribes), where these materials are sold to various individuals and companies like Apple. The environment also suffers greatly due to this extraction, endangering coral reefs and creating water pollution. This BBC documentary showcases all of that.





Microprocessors, camera lenses, and iPhone displays are made in Japan and Taiwan ([source](#)), but that's the story with most smartphones out there, and perhaps all electronics. They are made from parts, and these parts are made from different materials mined or made by multiple tribes. Once you secure the needed materials, you typically construct the parts in other tribes, and then assemble those parts into products in yet other tribes, to then be shipped and sold to consumers around the world.

All of this insane movement of resources and services is done because it is cost efficient; not resource or energy efficient, but money efficient.

Workers in China and Taiwan working on the new Iphone 6 could easily be replaced by automated machinery, but using human labor is still cheaper than buying, installing and operating these machines.





日期	每日	機
時間		
機油UPH		
實際產出		
產量		
產量累計		
產出累計		
測試良率		
外觀良率		
備注		



People of all ages work in mining tin, under severe adverse conditions





HAMBURGER

We have dedicated an entire [article](#) to the production of livestock and how destructive it is to human health and the environment. But the entire food industry is one of waste and unnecessary imports from other tribes. Tomatoes grown in Spain make their way to the US, while seafood is transported from Japan to Germany. You can read our [article](#) on waste to gain a stronger grasp of the severity of all of this.

For a sample 'taste', here's what goes into a typical American hamburger and fries meal: the meat is grown in Brazil, with its paper wrapper made from Vietnamese wood that is processed in an Indonesian plant, the fries are deep fried in palm oil from West Africa, seasoned with salt from Chile, and garnished with ketchup made in China ([source](#)). Of course, we're oversimplifying all of this, so you can probably imagine that a lot more goes into transporting all these 'items', as well as other seasonings, types of potatoes, power needed for the grills & deep fryers, and so on, all to bring you a very simple (and not so healthy) meal.



In summary, the frenzied global dance of food is another area of insane 'trade' exchange between tribes, and an 'out of this world' waste of resources and energy.

Consider that if enough people want a particular dish (a 'demand' mainly influenced by a consumption-based culture), there will be some that will provide ('supply') that dish for them, regardless of how much resources and energy will need to be spent on getting it to them. Plenty of people die while attempting to 'hunt' dangerous animals or exotic sea creatures, merely because someone is willing to pay them to do that so that someone can then sell those foods to clients.

There are so many people working under very tough conditions on farms, and frequently overexposed to the sun, just to harvest some fruits or vegetables that could much more easily be farmed in automated ways. Again, if it's monetarily cheaper to grow tomatoes in Spain and import them to the US, just because workers, taxes, etc. are cheaper there, then that is what today's monetary system / consumer culture forces them to do, ignoring the fact that far more energy and resources are wasted this way than using tomatoes grown in the US using automation.





CHOCOLATE

Speaking of food, your favorite chocolate is made from a plant that needs to be harvested, and its beads then extracted, dried, and processed. We eat it in cakes, drink it as hot chocolate, etc., but all kinds of sweets are made out of the cocoa bean. The plant needs to grow in very hot, rainy tropical areas, so if you want to make chocolate in Europe, Northern America, or Australia, you can't grow it there to save resources, although I suspect that it's technically possible to use indoor agriculture, if money weren't in the way. Anyways, these plants are mostly grown in the wettest parts of Western Africa and the rest of the world imports it from there in order for the rest of us to enjoy it.

It's not widely known that this practice comes with a huge toll on human lives, as the cocoa industry enslaves children like perhaps no other industry. This practice helps make their prices competitive, as they do not pay these children, although some plantations may pay others to kidnap and deliver these young workers to them.

According to reports, one child costs \$260 (230 Euros), which includes transportation and the infinite use of the child. Some of the children are even 'sold' to plantations by their own families, unaware of the working conditions of a plantation. But there are also children who offer to work under such conditions, and for very little wages, just to help support their families.

A CHILD COSTS \$260

1.8 MILLION CHILDREN ARE/WERE ENSLAVED



A stylized illustration of a child's torso and legs, holding a large cocoa bean with a green leaf. The child is positioned on the left side of the frame, against a dark blue background.

Conditions on these plantations are rough, as you might imagine: long exposure to pesticides, chainsaws and sharp, heavy machetes that can harm them very badly, long hours of work (6am to dusk), poor food and sleep, they are often beaten if they don't work fast, and so on. These children may be the ones working on the cocoa beans, but none of them have ever tasted chocolate. It is thought that over 1.8 million children have been abused in this way.

Moving their processing factories close to these plantations would reduce the tons of cocoa beans transported every year, but big companies recognize that the cocoa growing tribes are not safe enough for them to operate in (remember: taxes initially took shape by offering protection). Given the current cultural conditions there, it makes more sense to either put an end to this child slavery or drastically improve their working conditions. Unfortunately, the rest of the world's demand for cocoa and chocolate to remain cheap would mean a huge reduction in their operational budgets, perhaps so much that they would not be able to operate at all.

For the big multibillion dollar companies (Hershey's, Mars, and Nestlé), it is cost-efficient for this entire system of child enslaving and poor working conditions to continue undisturbed, as they spend little (if any) on supporting these lives, and have little to no interest in solving these issues, especially since these kinds of issues can easily be passed off as a different tribe's problem. This documentary highlights all of this outrageous situation.

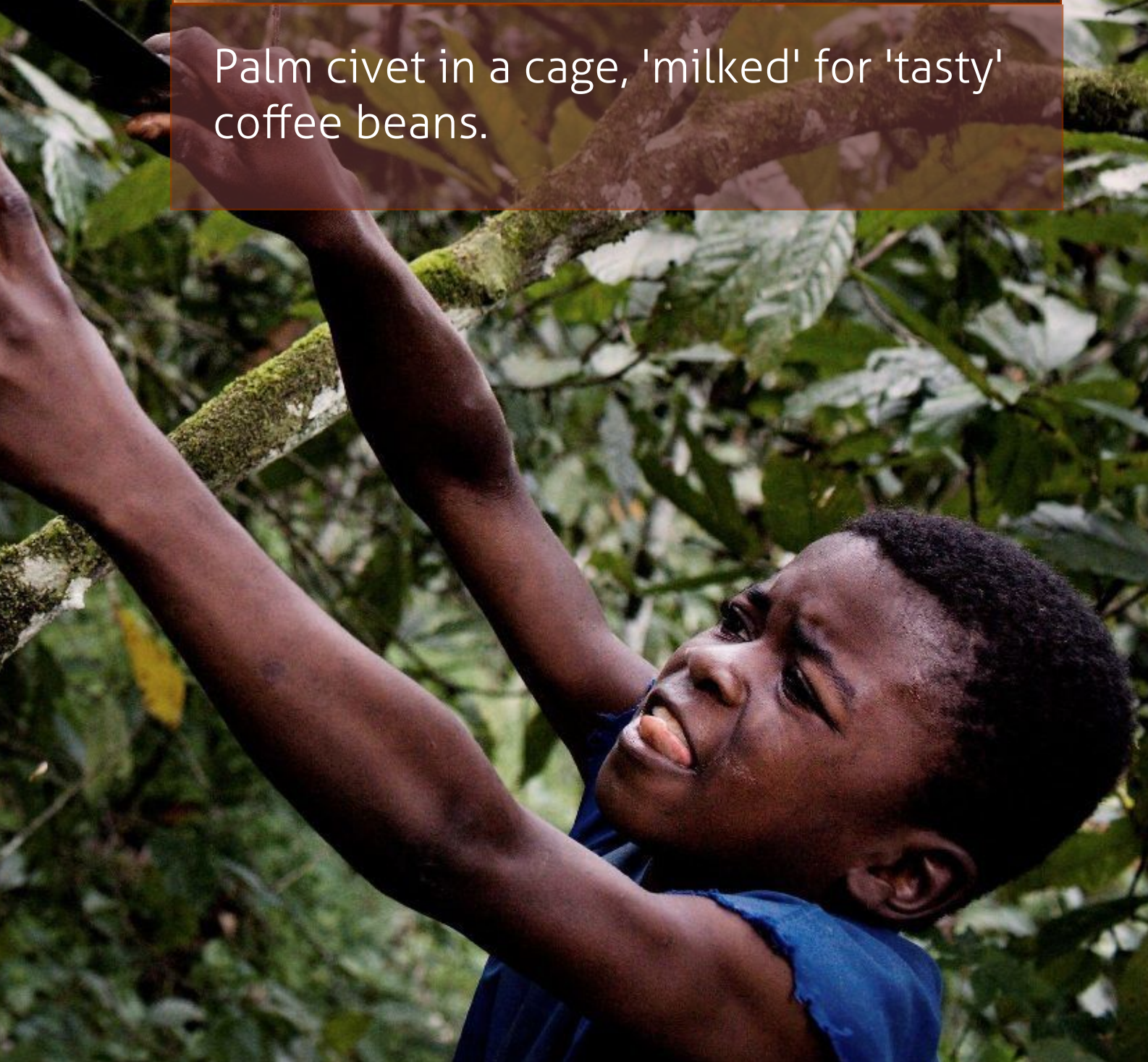
It's important to understand that the same situation exists for coffee plantations, where many child slaves end up working without compensation so that the entire industry can spend less on workers, and thus make more profit. It also exerts a significant toll on the environment, but it goes well beyond that, too: it also exploits numerous animals. You see, some coffee beans are found to be more 'delicious' (for some people) only after a palm civet, a small mammal found in the jungles of Asia, eats the beans and poops them back out. The animals are kept in small cages and forced to eat those beans. Workers then 'harvest' those pooped beans to be sold for significantly higher prices. Even elephants are used for a similar process ([source](#)).







Palm civet in a cage, 'milked' for 'tasty' coffee beans.



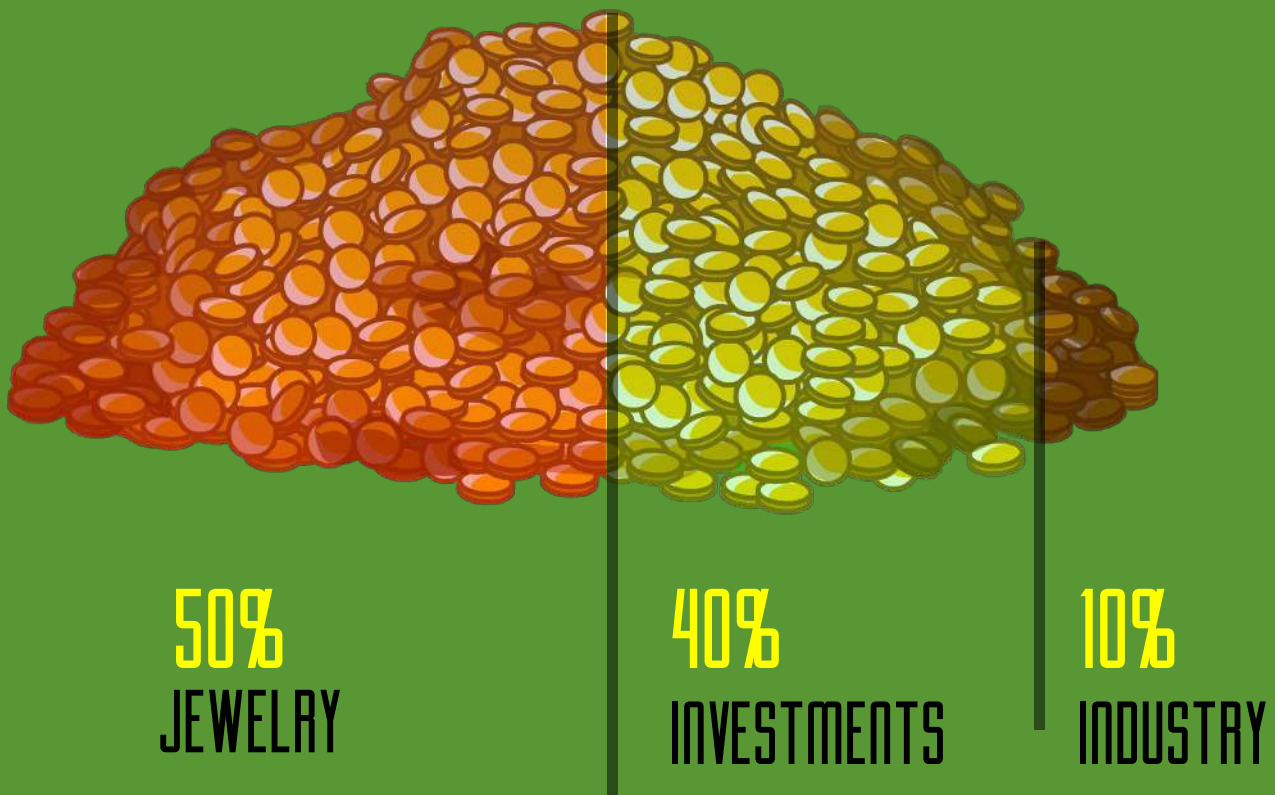


JEWELRY

Think about diamonds, gold, and silver. All shiny and, aside from their intrinsic nature (very useful in conductivity, insulation, and more), completely useless materials in the way they are marketed today and used by people in jewelry. There are two sides of this that make us wonder about the 'value' of a resource:

FIRST LOOKS AT THE 'USE' OF A RESOURCE

Gold conducts electricity extremely well, does not tarnish, and is highly malleable. It can be drawn into wire, easily hammered into thin sheets, melted and cast into highly detailed shapes, and alloyed with numerous other metals to gain new properties. Yet the primary use of gold is in jewelry (roughly 50% of all gold), while 40% of it sits idle in investments, and only 10% is used in industry ([source](#)).



Diamonds are one of the most, if not the most, durable/strong materials known to humanity. Most of its uses today seem to be practical, but their use in jewelry makes diamond much more expensive, as it drives up the price by making them physically more scarce for practical uses, and because it culturally increases the demand for diamond jewelry (the more people want it, the less it is available because of the high demand, just like the earlier pasta and chickens example, so the more 'coins' people can charge for it).

THE SECOND POINT IS HOW A PRICE TAG DOES NOT REFLECT UTILITY OR THE TRUE SCARCITY OF RESOURCES.

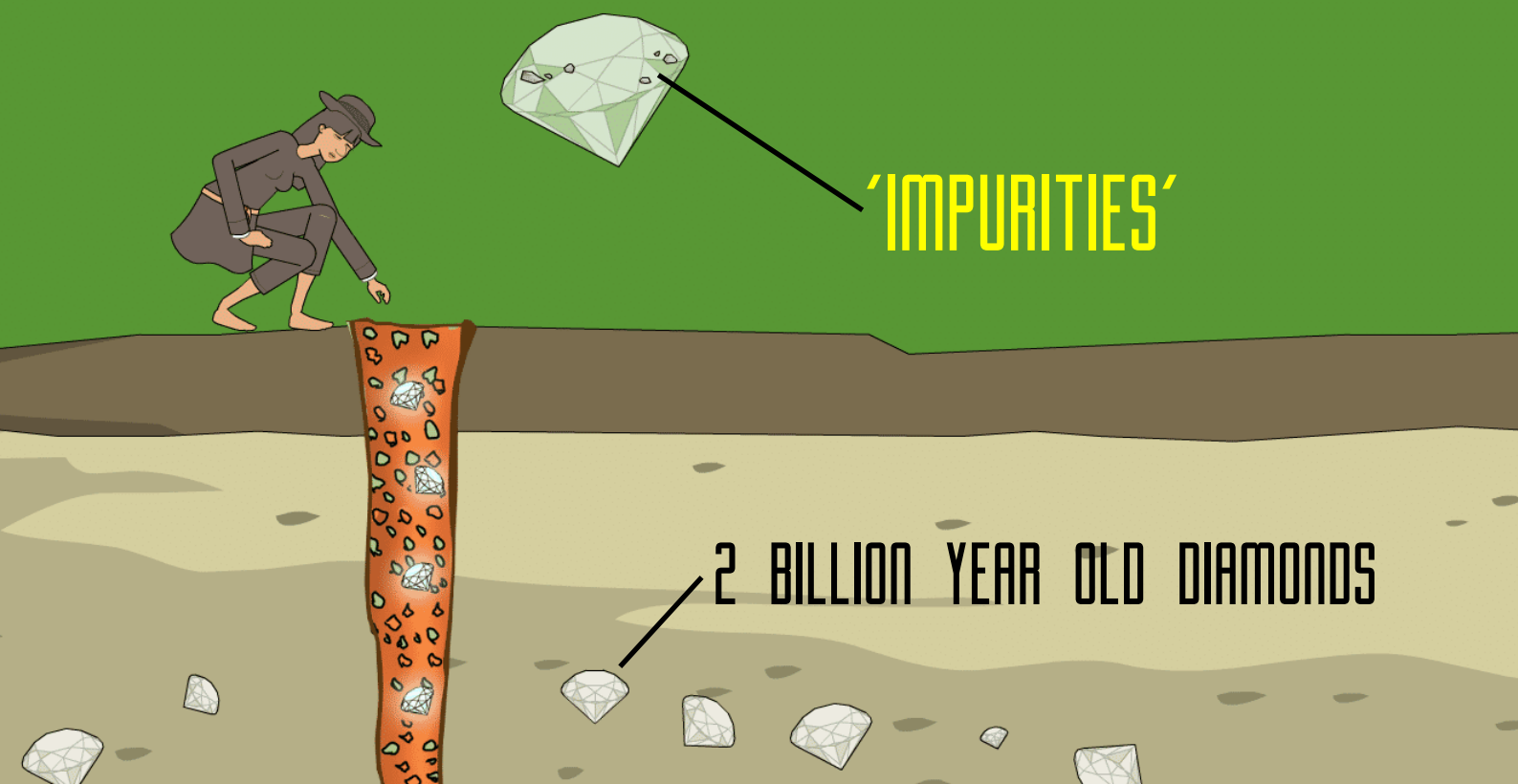
Why? If you take the 40% of gold that is currently used in investment (which just sits around and not being used) and add it to the little 10% of the gold that is available to industry, then the price of gold will dramatically decrease for industrial use. The resource would enjoy a 500% leap in availability (access abundance!). Now add up all of the useless jewelries and you further double the amount of gold for industrial use (a 1000% leap over its current availability), likely making gold extremely cheap for practical utility use. Gold only appears to be scarce or expensive because of the way it is used within the money game, which is not reflecting the real availability of it.

Diamonds are also a scarce resource. Or are they? Right now, we can produce diamonds in the lab at cheaper monetary cost, and the hardness, thermal conductivity and electron mobility of synthetic diamonds are superior to those of most naturally formed diamonds (source). Diamonds are used in jewelry due to of a mix of cultural influence and the idea of it being a scarce material. So why is it that even today, when synthetic diamonds are cheaper, diamonds are still viewed as being valuable? Well, it's people's values (again). Although synthetic diamonds used in jewelry are 20-30% cheaper, many people still prefer the 'natural' ones, just because... This very clearly highlights how the 'value' of a given resource is often based on the value that people merely perceive for that resource, and that perception is a direct byproduct of a marketing-filled, money-based world - a trade system gone mad and severely unhinged from reality.



Both diamonds and gold can be viewed as 'scarce' resources, but only depending on how you interpret that claim. There is no lack of either resource for practical uses, but tying them to monetary investment and people's value beliefs massively changes how valuable these resources appear to be. Remember when we said that the trade system always reflects culture and perceived need (you wouldn't be able to sell a smartphone 2,000 years ago)? Well, not long ago, aluminium was a 'valuable' resource for both a scarce reason and cultural one, so much so that kings had tables, dishes and forks made of aluminium to show off their affluence. Diamonds and gold are seen as valuable in today's monetary world for the same exact reason. Aluminium became less valuable as abundant methodologies were developed to mine and refine it, making it an abundant resource, and the same will happen for diamonds and gold as the methods for making them abundant and available improve beyond existing cultural and market system roadblocks. But hang on a minute, as the current situation is far worse than what we've discussed so far.

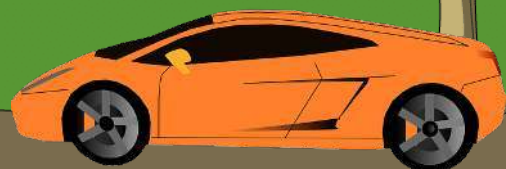
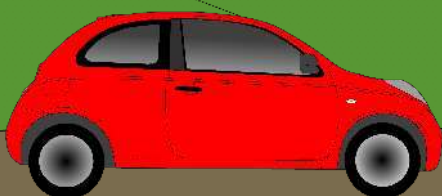
Diamonds provide key scientific evidence that the Earth's core is a highly dense and hot place, as diamonds could only form within those conditions. They are key in understanding aspects of the Earth's core, continental drift, and the age of the planet. Some diamonds also have a little 'dirt' inside them; material that became trapped inside and often provides essential scientific information about the Earth. But that precious dirt is regarded as 'junk' to people collecting diamonds for use in jewelry, so it is 'washed out' for 'clarity' and 'beauty'. This illustrates yet another example of the highly distorted values of 'consumers'. Examples of this distortion multiply as some people are now eating gold in their foods, although it's tasteless, just because of the artificial values they inject into this resource.



A 2015 Lamborghini Aventador costs about \$400,000 US, not because it's 40 times better than a 2015 \$10,000 car, even if it is somewhat faster (something of little use in the world) and perhaps made of better materials. The price mainly reflects a culture of privilege. This car is outrageously expensive because it is a 'luxury' good. Vehicular 'jewelry'.

The painting we mentioned earlier that costs as much as 1,000 villas was recently sold for \$179,000,000! Yes, that's 179 million dollars. If we were to go back in time to where 'trade' started and ask someone, "Here we have a pile of cow shit, and here is a painting. Which one do you prefer in trade for a pair of shoes?" You can be sure that the person will say, "The pile of cow shit, of course, as I can use it as fertilizer." Take the time to really think deeply about this. That Picasso painting holds a value of 179 million 'things' (dollars in today's currency), which translates into a stored value of many homes, cars, so much very nutritious food that you could never hope to eat in a lifetime, etc.. Seriously?!? How the hell does any of this relate to the world's resources? How is it even possible that such a resource, a painting that has already been replicated billions of times in digital and other forms, evolve and retain such a huge artificial value?

The answer mirrors the jewelry concept: trade has gone mad! That cannot be overstated, and this trade disconnect becomes even crazier as value is more and more reflected in currencies than in actual resources.





The diamond industry still enslaves people of all ages, still exerts a huge toll on the environment, and has killed many people, all for the sake of trade. The same goes for perhaps every aspect of the jewelry industry, an industry that has no real value beyond a cultural 'norm' created and empowered by currency and the monetary game.





CLOTHES/FASHION

Look at your t-shirt tag. What does it say? Made in China? Cambodia? Taiwan? Bangladesh? Indonesia? Vietnam? It is likely one of those, as the vast majority of clothes are made in these tribes. Why? It's (again) cost efficient, meaning that it costs less money to make them there, and here's why.

LET'S FOLLOW THE STORY OF A T-SHIRT:

We first need cotton, which is produced by a plant. We plant the plant in a plantation. Plantations were worked by slaves for most of human history, but they are mainly managed today with the use of machines. The plant that produces the cotton for our t-shirt is in the USA tribe; Mississippi to be more precise. Once grown, picked and separated, the cotton is shipped to Columbia, Indonesia, or perhaps Bangladesh, where it is processed from plant to fabric, mainly by machines, although people are still needed for making t-shirts out of the produced fabric.

97% OF THE CLOTHES SOLD IN THE USA ARE NOT MADE IN USA. AROUND THE GLOBE ROUGHLY **ONE IN SIX** PEOPLE WORK IN THE 'FASHION' INDUSTRY.



Many work much more than they sleep, many are paid just at the limit of survival, and all of them live far worse off than those who will eventually buy the t-shirts. Sound familiar? Well, the story doesn't end there. The t-shirts still need packaging, boxes, and shipping containers, the containers need to be transported via air, land and/or sea, all of those transportation systems require fuel, and fuel needs to be extracted, refined, and transported to them. All of that (and much more that's too much to list here), just for making a t-shirt.

You may wonder why people aren't creating t-shirts in the USA tribe, as though the people in these other tribes are some kind of wizards in making these t-shirts. Isn't it monetarily cheaper to make them in the USA, instead of transporting and mining/refining all this stuff from one tribe to another and hiring people from other tribes? Well, the answer has to do with the money again. If the trade is monetarily cheaper that way, wandering about on planet Earth from one corner to the other, then that's how it's going to be done, because that's how the market works. See, these people in Bangladesh or Columbia are paid 10-20 times less than people would be paid in the USA if they were making these t-shirts. So it is more cost efficient, but certainly not in terms of resources and energy consumed. As in all other cases, it's only about money ([source](#)).





Most fashion-related products like clothing are made this way. Also keep in mind that fashion 'trends' are intentionally and frequently changed nowadays, due to the financially profitable success of the consumerism culture. As a result, good clothing is thrown away more and more quicker after the purchase. People in Cambodia often buy second hand clothes that they made, but that had gone from USA (as cotton) to them, then from them to USA (as new clothes), and then back to them again (as good, but discarded, usually as 'outdated styles').





I recommend these two documentaries (1, 2) to gain a glimpse into the fashion world, and you can also check out this [short documentary](#) on how crocodiles are raised and killed in 'special' farms, just for the sake of making expensive bags out of their skin. Keep in mind that it's just one example of the senseless killing of animals for fashion products.

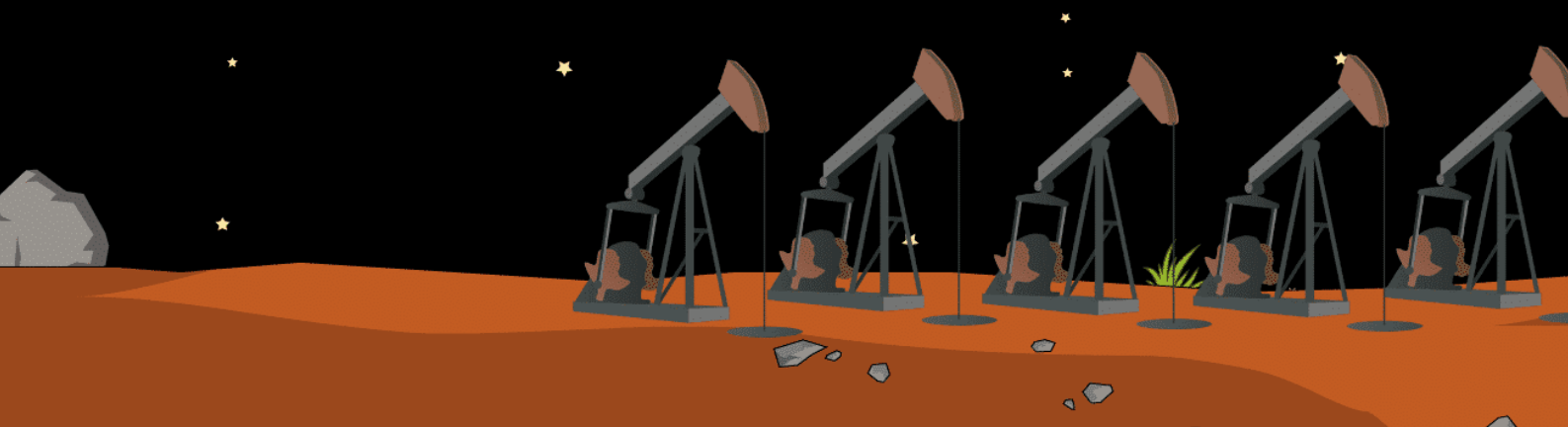




OIL [PETROLEUM]

One BIG and IMPORTANT example that was not on our list, yet is used all over, is oil (petroleum). Where large numbers of creatures have died and their remains have become buried deep beneath the Earth's surface under huge pressures and temperatures, they form into a 'special' mix of stuff (hydrocarbons) that stores huge amounts of energy and has other properties that are very useful to our life. Plastic dishes, shower gel, bath mats, toothpaste, toothbrushes, refrigerators, cereal fertilizers, magazines, car tires, fuel for cars, and even the approaches that we still use for generating electricity, are all fully or in part made out of or made possible by oil.

To use this resource, you have to find a pocket of it deep underground, drill for it, extract it, contain it, transport it, store it, refine it, transform it into plastics, fuels, etc.. The detrimental effects of using this substance to fuel our world are already well-known, as it reintroduces millions of tons of previously sequestered (trapped) CO₂ back into the atmosphere, along with additional unhealthy environmental factors that you can read more about [here](#), but we are focusing on a significantly different angle right now: how a resource becomes engulfed into the world of trade, and how that affects its value. Oil is a recent 'discovery', and understanding how such an important resource enters a global money system is very interesting and tells a lot about the money game itself.



When oil was first discovered ('officially' about 200 years ago), there was no "Wow man, look at how many uses it has! We are going to be rich!". Oil is only useful if you have a technological infrastructure to both extract and make use of it. To put it more simply, if you don't have cars or machinery that require oil-derived fuel to 'work', then oil may be completely useless to you. Oil's first profit driver was basically to generate some light. See, back in 1800, there were no such things as light bulbs. They used oil lamps, and the vast majority of the oil came from whales: they hunted and killed whales to light up their houses. Because of a need (light lamps) and a trade that was very defined by currency, they killed more and more whales to satisfy more and more clients, driving global whale populations close to extinction. The guys who drilled underground for an oil replacement didn't do it to save the whales, but to make a business out of it. Just keep that in mind as a small but significant fact.

After extracting more oil than what was needed for the lamps, they were like: "Ok, we've lit up many lamps... We still have so much oil... Now what?" This highlights how a resource is only valuable within a context. Where there is no use for a resource, there is no value for it. Any resource viewed as non-valuable today may become very valuable tomorrow. But then, CARS! When cars, trains and other steam-powered machinery began to emerge, some inventors turned their attention to making them stronger using petrol-powered designs, and the industrial revolution boomed. Demand for oil increased and those extracting it were perfectly happy to make more money out of it, so they drilled and drilled, and grew in power as a result. It's worth pointing out that in a different kind of society, one not based on money and trade, the discovery of such a 'needed' resource may have been treated differently by them. In other words, when a needed resource is discovered in a trade-free world, then perhaps more time and investigation would be spent on thinking about how that resource could be managed most appropriately, both for our use and the total environmental impact. But in a trade world, such a resource is an opportunity to make wealth (money), so not much thought is put into how it is going to be used, or the consequences. So, keep that in mind, too, because it's another very important aspect.

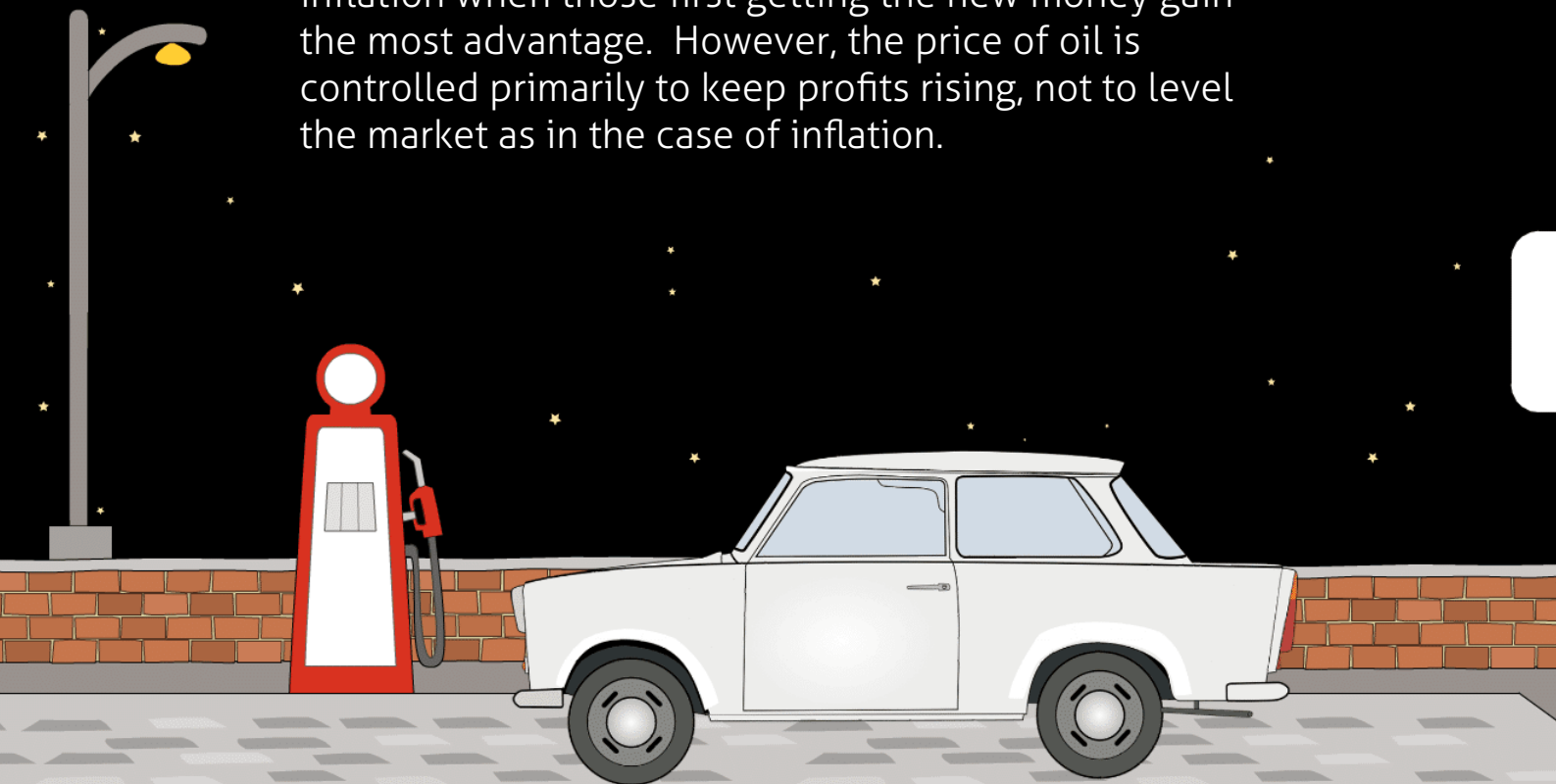


Here are more examples of what it means to discover such a resource in a money game (trade) world:

- More fuel means more cars; more cars means more fuel. This 'fuels' a corresponding increase in the use of other resources for building cars, transporting them, etc. The same applies for making plastics or other 'stuff', as the more plastic products you make from oil, the more you increase the demand for oil to make even more plastic products.

- Tribe A has oil, but tribe B does not. Tribe A then enjoys a big advantage in world trade and it can exercise additional powers. This leads to conflicts, wars, loss of other resources during conflict, many dead people, destruction of the environment, etc..

- Only a relative few control this resource, so the price of oil does not reflect how much oil costs to produce or its need (demand), but instead is filtered by those who get their hands on it first, like in the case of inflation when those first getting the new money gain the most advantage. However, the price of oil is controlled primarily to keep profits rising, not to level the market as in the case of inflation.



By 1960, more oil 'holes' had been drilled and much more oil was pumped out than what was needed for the demand, which meant that oil prices were shrinking lower and lower, reducing the profits of the oil barons. Their solution? Gather the chiefs of the tribes that had oil extraction plants and agree to control the production and prices of oil together, so that they keep the profit leveled (or rising). Today, this group has become one of the most influential in the world of trade.

You can watch this BBC series on the story of oil to learn more about this entire industry.

The thing is, oil is abundant as a resource and there is still plenty of this 'stuff' stored within Earth's crust. The main issues are control over the extraction of this oil, and the impact that using it has on humans and the environment. To put it more simply, if only a few control its extraction and initial distribution, then oil appears scarce, and if it is excessively used (driven by profit motive), then it severely impacts life and the environment in a negative way. SO, dealing with this globally used resource across so many domains depends directly on the global system being practiced. If we continue to rely on a global trade system like we have today, along with the frenzy of consumption it has created over the years, then this resource will continue to be fully exploited, not for improving people's lives or the society, but specifically to maximize profits.



What I've presented so far is not just about a few 'random' examples here and there. These examples represent the biggest and most dominant parts of today's global trade system: food, textiles, electronics, rare materials like gold and diamonds, and oil. Given that the largest trades are significantly in this state of enslaving people and causing massive waste of resources and energy, imagine the rest...

HERE ARE A FEW MORE, JUST IN CASE:



ORGAN TRANSPLANTS

although it's technically possible to eliminate the need of organs for transplant (as we detailed [here](#)), people in poor countries still sell their own organs for little money because it is monetarily advantageous for both the person selling the organ and the one getting it ([source](#));

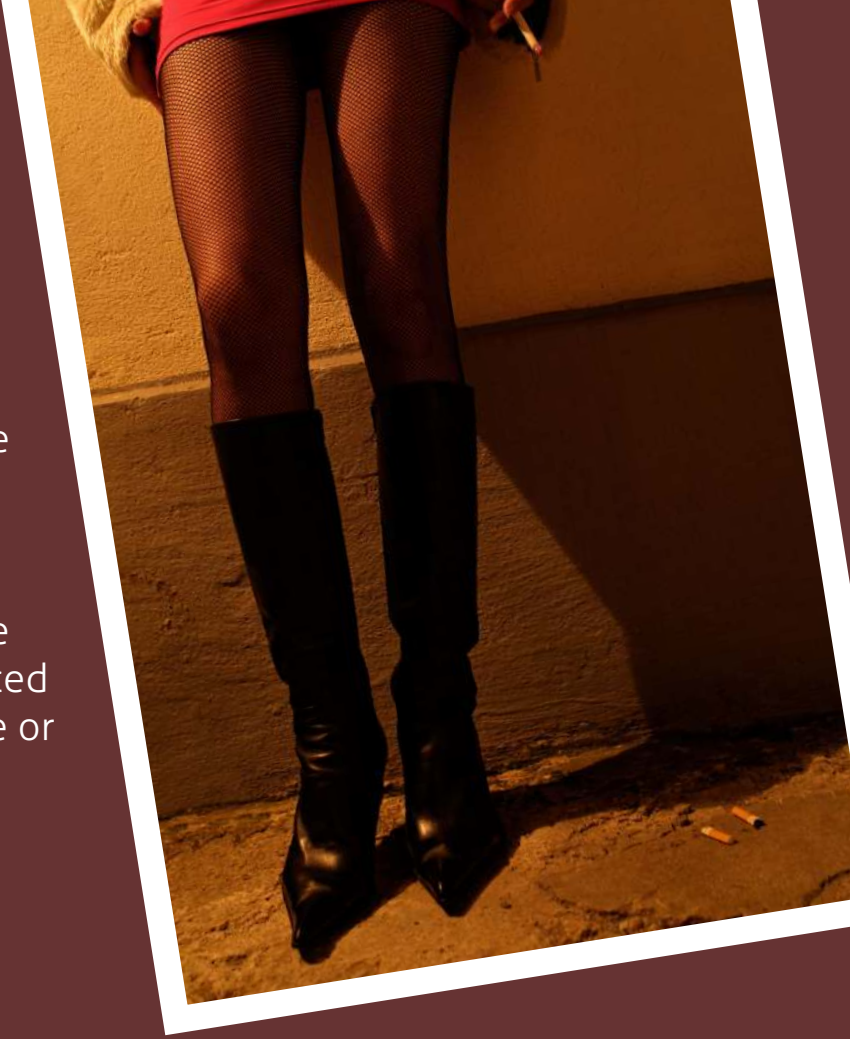


SURROGATE MOTHERS

in India (and other countries), human females are paid to grow babies inside them for those with money and the inability to conceive. These women are paid very little, but they do it exclusively for money because they are very poor ([source](#));

PORNOGRAPHY AND PROSTITUTION

both are extremely exploited by the desire to make profit. Humans are 'stolen'/kidnapped and forced into prostitution; videos and photos are made with these humans to then be sold online or offline; many are forced into having sex with clients for little or no money, and so on. ([source](#));



There are maids who work daily to support their families, zoo and circus animals are trafficked for the entertainment of a few human heads, many drugs are improperly prescribed due to monetary pressures (profit), the alcohol and tobacco businesses are more about making people sick and creating issues than about anything else, toxic gases spilled into the oceans or released into the atmosphere because it is more 'cost' efficient, scientific articles improperly written due to monetary pressures to release them or bended their findings in a way that favors certain agendas (also because of monetary incentives), and so on and so on ([source](#)).

The trade world is no longer about giving something useful to you so that you can give me back something useful. The emergence of the monetary system caused it to morph long ago into a crazy game of exploitation for both resources and humans (or other animals) for profit. If it is cheaper or more profitable to do something, that's very likely how it will be done. It doesn't matter if we have to move everything around the whole planet, with the raw materials grown or mined one corner, the production facilities in another, or whether it harms our own people, the rest of life on the planet or the global environment. Today, cost efficient only means money efficient, not resource and/or energy efficient. **Keep that in mind!**

Another thing to consider is that monetary cost efficiency theory is not always applied where it would significantly decrease expenses or increase the profits. In other words, businesses and governments do not always opt for what is more monetarily profitable, even when doing so would also save lives and/or restore some of the damage that humans have caused to the environment. For instance, it seems to be significantly more profitable (in terms of money) to go for renewable energies instead of oil for fuel, because a solar plant just sits there creating energy, while oil requires a massive amount of 'management': from discovery to extraction to transportation to production, and dealing with multiple environmental monetary costs.

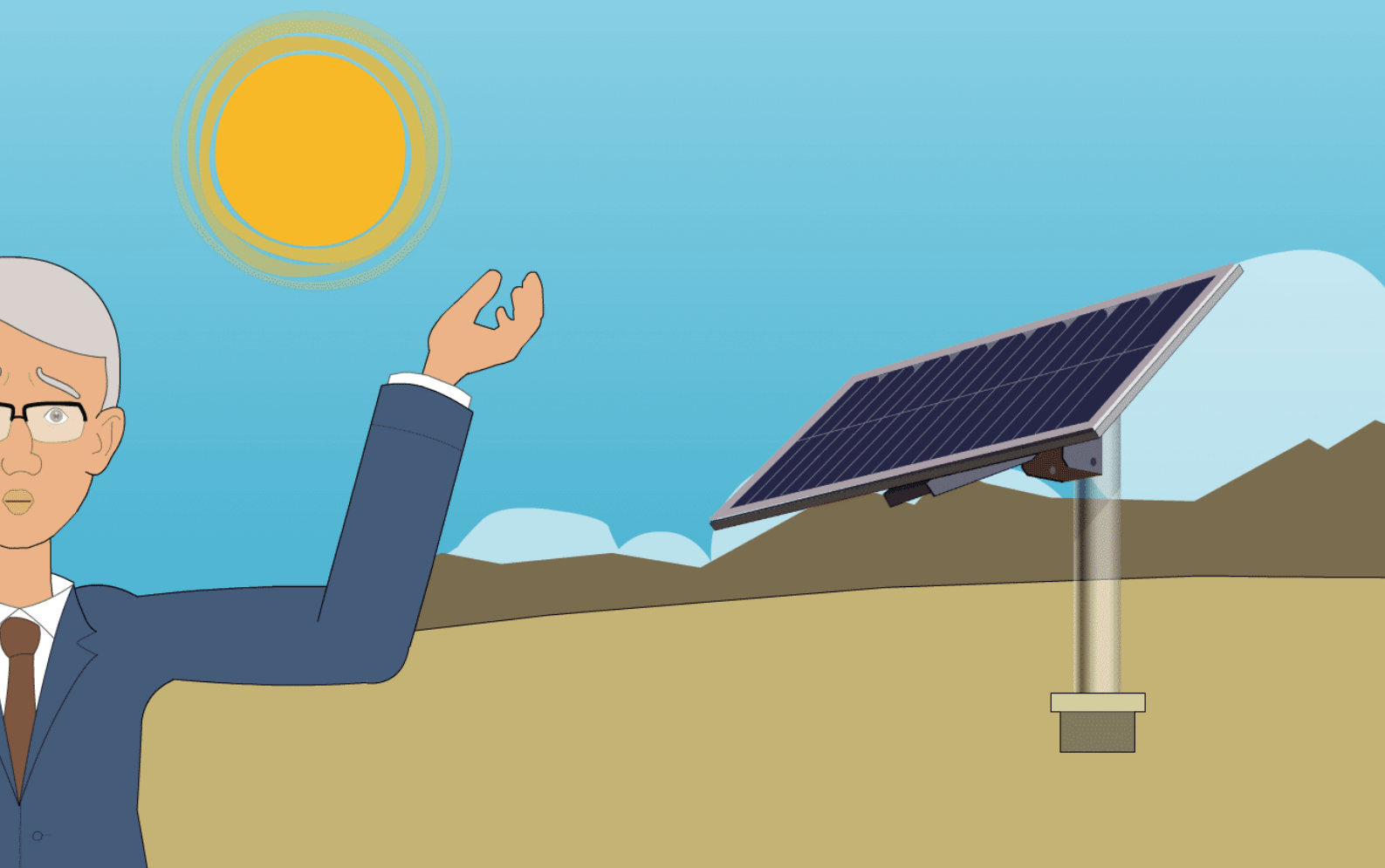
So, it costs much more money, labor and resources to run an oil-based energy production system than one based on solar or wind for the same energy production. Yet this is not done, primarily because of so many interrelated interests and how interdependent its global trade is across different tribes. Let's say I'm the boss of a big oil extraction business and it's time to replace an old, outdated oil plant. I calculate that it would cost me far less to build a solar plant that produces the same amount of energy as an oil production plant, and the profits would be significantly higher. If I then say, "The old extraction plant will close and we will open a new solar plant.", I will quickly find myself in trouble, because it would affect so many lives.



You see, many people will lose their jobs if I close the extraction plants, and since those workers are also consumers, their loss of income will affect many other businesses that depend on the worker's buying their products and services. Then there are all of those that rely on my plant's production to 'fuel' their jobs in transportation, refining, petrol stations, auto mechanics, etc.. What about all of the car and truck manufacturers and auto/truck distributorships who still need to sell cars that run on gas. What about all of the other tribes that will suffer if I stop providing oil for their needs???

As you can see, I can't chase profits even toward improved situations - even when it would be highly profitable for me AND the environment, because of the powerful interlocking interests within the money game that put many roadblocks in the way.

While self-driving cars are expected to save many lives and resources, even when limited to short-term estimates, what we're describing here is why they can't be implemented so easily within the money game. It would cost much less money for an economy (tribe) to work on reducing food or electronic waste, homelessness, crime, etc., but actually doing that would cut off other present-day businesses that the tribe depends upon, so such solutions are adopted either very gradually (extremely so), or (more likely) not at all.



At the beginning of the book, I mentioned that I do not understand how prices are created; why one thing costs more than something else, or how monetary value is attributed to resources and services. I believe I now have a better idea of how prices are formed. They reflect the culture's values (what is promoted as important or not), the system (taxes, rules), the perceived scarcity of a resource (often artificially created), and pricing strategies that are often affected by other prices. If you consider starting a new banana plantation farm, for example, you calculate your banana prices depending on how much money you have to spend on the land (because you borrow it from the tribe), how much you need to pay for the import of banana bulbs and pesticides, the cost of buildings and other support systems, how much you have to pay the workers, transport of the grown bananas to retailers, etc.. Then, you add how much profit you need, which is influenced by your competition. If you can't achieve a competitive price, perhaps because the land is not fertile enough or the climate is insufficient for growing lots of healthy bananas, then you can't even start that business.

Assuming the business is successful, bananas from your plantation eventually arrive in the US, Spain, and Romania. So how is it that the prices are so different in each of their markets? Isn't it the same 'thing' (a banana)? Well, here is where each importing tribe's 'rules' come into play. It depends on how much the tribe taxes its citizens, how big are typical salaries there, what agreements does the tribe have with the tribe that makes the bananas, and so on. A 2012 survey compared the prices of a MacBook Air, a 32 GB iPad 2 and a 16 GB iPhone 4 across different tribes.



The price for all three items combined were cheapest in Tokyo at \$2,225, and most expensive in Sao Paulo at \$4,160. That's almost double the price ([source](#)).

Of course, prices do not reflect resources and services in their true sense.

They are mostly disconnected from how useful or plentiful a resource is, or how useful a service is, and are basically a reflection of a tribe's rules (taxes, businesses, laws, etc.). This is why I pay five times more to access the internet in Spain than I do in Romania, even though it ranges from 5-10 times slower. People are paid more in Spain to manage internet systems (even if you could automate this) than in Romania. The same goes for the cost of physical materials needed for their internet network system. Even if they use the same materials worldwide, the Spanish tribe's trade rules make it cost more to make or bring them here to Spain. The cost of a typical internet connection in Spain comes to about 2.8% of the average tribal wage, while it's about 2.1% of the average Romanian wage. So even taking wages into account, Romanian internet connections are cheaper. Some products have similar prices in both Spain and Romania, especially items found in supermarkets, but then consider that the average wage in Spain is 4-5 times higher than that of Romania. On the other hand, eating out in Romania may cost you 4-5 Euros for pizza and a 33ml Coca-Cola, while it costs around 15 Euros in Spain for the same exact meal. So, it's usually cheaper to eat out in Romania, and cheaper to buy from the supermarket in Spain (quite costly to eat out).

Prices prices prices... it's all about the context of tribes, trade rules, what is 'cool', 'needed', or 'wanted' at any moment in time, and for what tribe. It rarely reflects anything more than that.



Wow! In Japan, the same items cost almost half, \$2,225

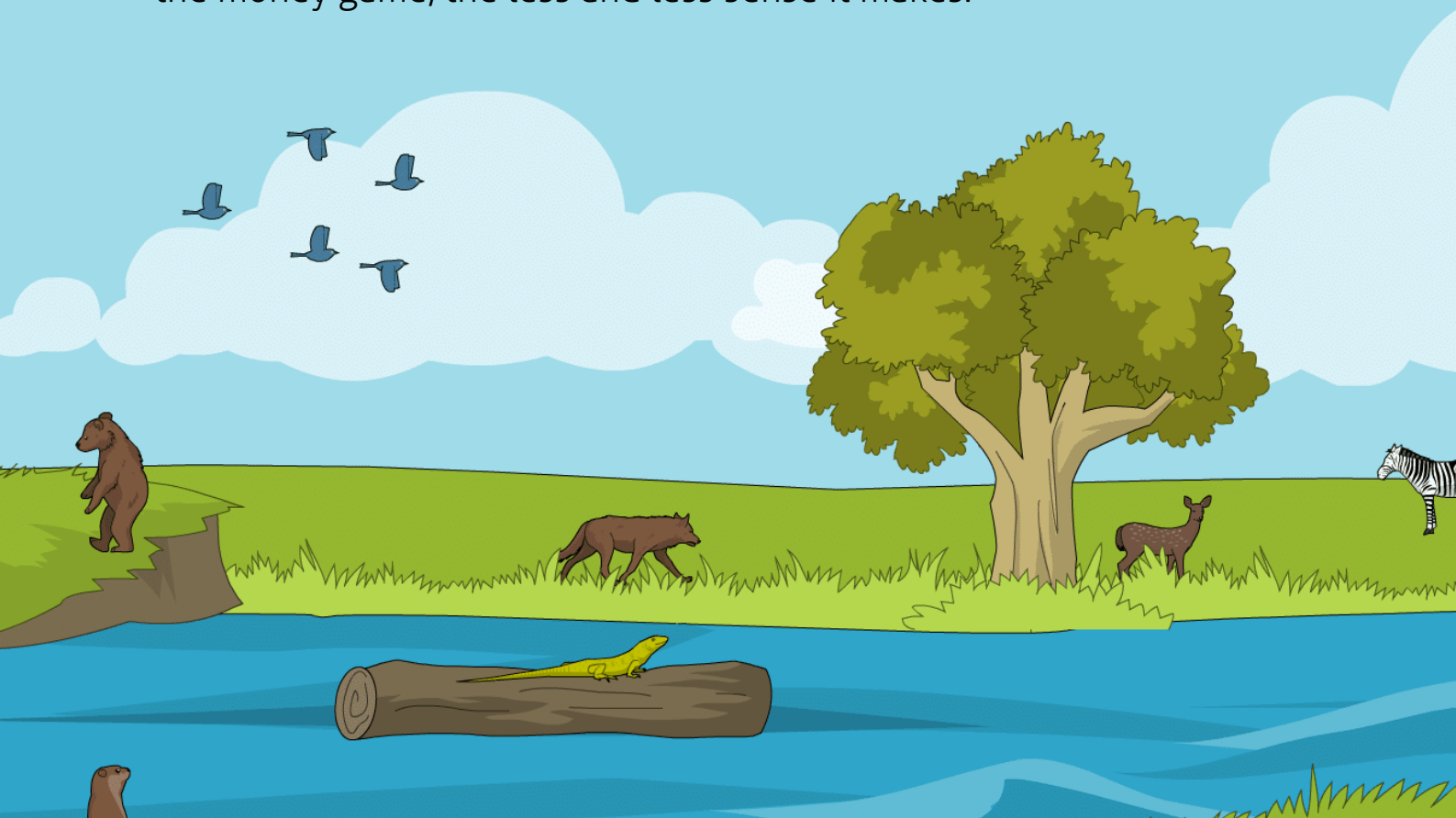
Northeast Trade Winds deliver over 20 billion gallons of water from the Amazon to South America, which translates into about \$240 billion dollars of economic value ([source](#)). But is that quantified in the money game? No!

What is the monetary value of an entire forest, with its vast numbers of plants and other biological life that allow new drugs to be invented, technologies, and large quantities of CO2 to be absorbed? What is the price of bees, coral reefs, oceans, polar bears, or ancient rock formations found in nature that are so valuable for science? What is the monetary price of global climate stability, or that of the world's marine life?

If natural resources had a monetary value, at least money would be representing something real, as climate instability caused by varying amounts of industrial pollution would quickly decrease its value, resulting in price increases that would just as quickly work to restabilize, not the economy, but the climate (something very real).

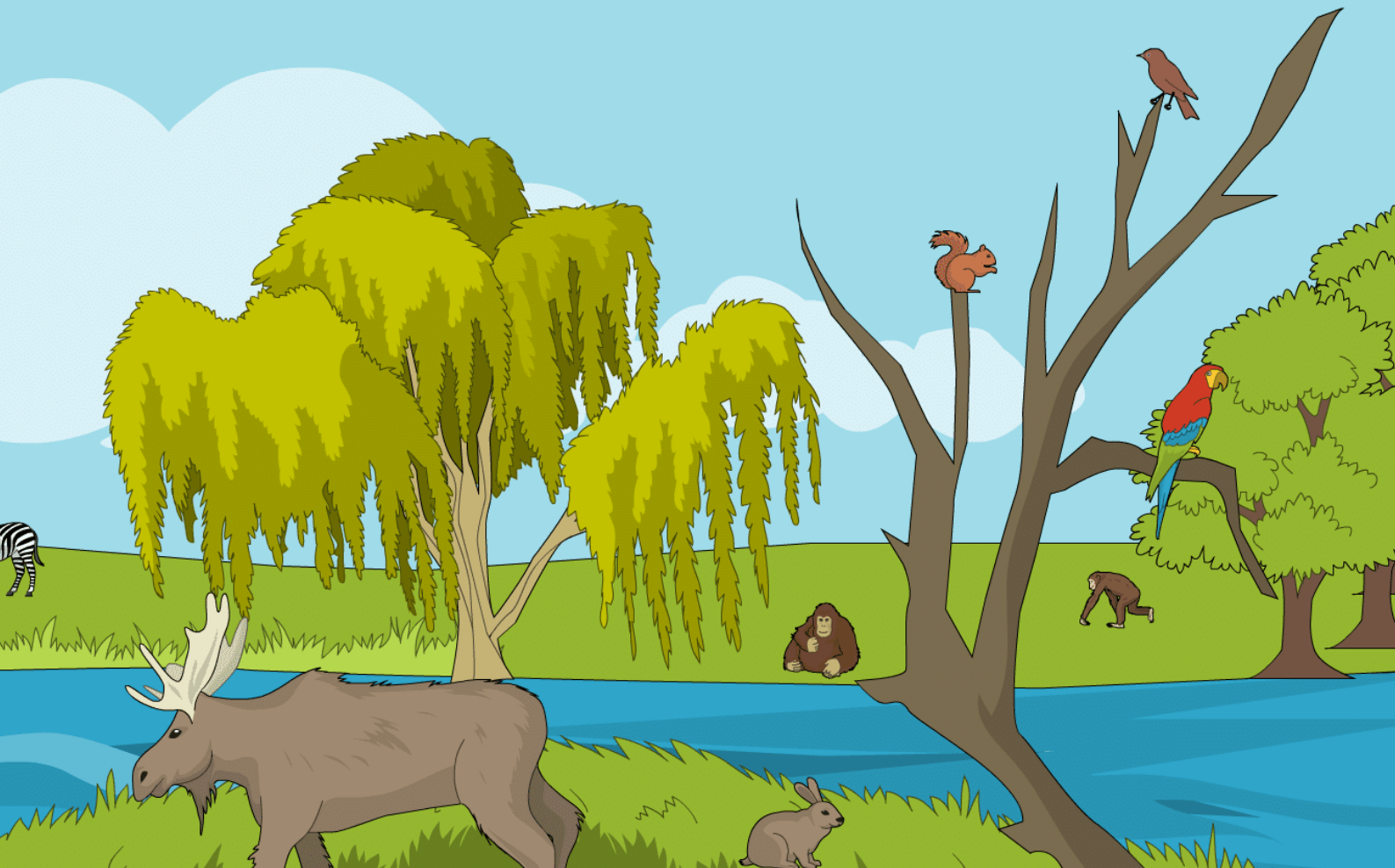
It is thought that if natural resources like these were viewed as a stock market, they would all be rapidly headed for a crash.

But of course, it's near impossible to put a valid price on anything at all (resources or services), as you've seen, so the more you think about the money game, the less and less sense it makes.



The trade/money game appears to exist in order to provide a fair measurement for resources and exchange, while also providing access to them, and in some cases the money game can curtail overconsumption for a period of time through inflation, which seems to provide a good measure of stabilization for the worldwide trade system (you can't make everyone rich and expect all to have yachts, jets, and so on, since the prices will 'level'), but all of that is similar to saying that John has cancer, so he will die, but this treatment will reduce the cancerous cells from time to time, so he may or may not live longer. No matter what, the treatment won't cure him, and he will surely die from the disease.

The same story applies to trade, where the 'leveling' of prices won't stop over-consumption, it can only slow it down for limited periods, because of the way that trade is designed to consume an infinite amount of resources mined from a finite planet. If people do not continually consume at a continuously increasing rate, the money game will eventually collapse.



Trade is not something that humans invented. It's something that emerged out of what humans are: creatures that need to eat, sleep, and shit. Systems of simple barter gradually developed and expanded into complex trade systems to get them the stuff they need, followed by stuff they wanted. Influenced by all kinds of previously unimaginable possibilities, they eventually started to play the game in such a fanatic manner that they decoupled their planning and thinking from the world they lived in. They started to focus on things like: what I get, what I give, how much I have, how much I can make. As currency was starting to expand its role, the fanatic state went to light speed mode, as it made it much easier to get caught up in the trading game, wishing more for currency than the stuff itself. That gave rise to a widening of social classes and, once more widely separated, gave rise to a 'wish' for an ever-increasing consumption of resources, along with easier means to taking advantage of and enslaving others.

Even today, where you are led to believe that an incentive is a noble one, it may not be. Facebook and Google want to offer free internet services in 'poor' areas with no access, but what are the chances that they are doing that just to create more future customers for their ad-oriented service? ([source](#)). You hear some people saying: 'Hell this is a great time to live. Look, even children in Africa have cell phones. The world is getting better!', but the children they are picturing still don't have access to proper medical care or clean water to drink. I also have a smartphone, laptop, internet connection and electric stove, but I have no medical insurance and I have to struggle to find money to pay for all this. So if I get seriously sick and have no money, well... I'm 'fucked'. It clearly shows what our global culture is focused on, and that focus does not seem to include the care of our fellow humans and the environment, but rather the systematic exploitation of humans and the environment. **Even where it looks like 'care', it's more of a 'flare'; a masked desire to generate more profits.**



Moving stuff around may seem crazy when you think about how some AssWhole King the 3rd in China wanted some lions from Africa, but today's world is even more insane, as such trades occur on a daily basis; not for needs that people have, and not even for a more saner 'want', but mainly in direct support of the distorted values created by the consumerist world, where people are taught to be more like the AssWhole King than educated 'intelligent' eco-dependent creatures.

OF COURSE, THAT KING AND PEOPLE OF TODAY ARE NOT REALLY "ASSWHOLES". THEY ARE JUST PLAYING THE DARN GAME, AND REFLECTING THE TWISTED VALUES OF THE CULTURE IN WHICH THEY WERE BORN; PERFECTLY ADAPTED TO THE SYSTEM THAT INSTILLED THOSE VALUES INTO THEM (AND THE SYSTEM COULDN'T BE HAPPIER).



summary

THE CORE ISSUES IN TRADE:

- Currency no longer represents resources, nor does it reflect services, or even people's skills. To see how people's skills are 'valued' in today's world, [read this article](#).

- Trade dramatically changed people's values, causing most people to want more and more stuff, and more silly ones

- It nurtures intense competition over cooperation. If you believe that money incentivises people, [read this article](#) where we argue the contrary

- It naturally exploits the environment (animals, people, nature)

- It is fully unsustainable, as it creates infinite demand on a finite planet

- It elevates profit-motive over human values or the environment

- It produces vast amounts of waste, as lots of stuff never gets used, and even more is dismissively thrown away

- It redefines the value of resources, making them less valuable than they are, or more, depending on trends (demand, and profit)

- It encourages artificial scarcity. If people would agree that we need to make better batteries starting tomorrow, they could easily make batteries much better, cheaper and helpful for all, but the world of trade won't allow them to do that. Batteries, like renewable energies and other tech or materials, are mainly scarce and expensive because of how things are ruled today, not because we can't make them more abundant, cheaper and eco-friendly.

- As long as you can create currency which, in turn, creates money (debt), you have the power to continually consume more and more. And as you make more money available to people (as debt) within such a system, you may perhaps forever live in debt

- Trade always requires people to work, to be part of the trade system, but this is challenged with the advent of sophisticated machinery that can already automate nearly all jobs (source).

- Trade always requires consumers, and that fuels the need to make lots of stuff to keep jobs going. That incentivizes the making of silly, unnecessary and sometimes dangerous goods and jobs, and increasingly gives rise to pointless services.

etc...

MONEY IS THOUGHT TO STORE VALUE, BUT the value of resources and services are both culturally created (what resources and services are considered important in a culture) and dependent on current technology/resources (extraction and creation of new materials is dependent on the technology, and when a resource becomes abundant, it loses monetary value).

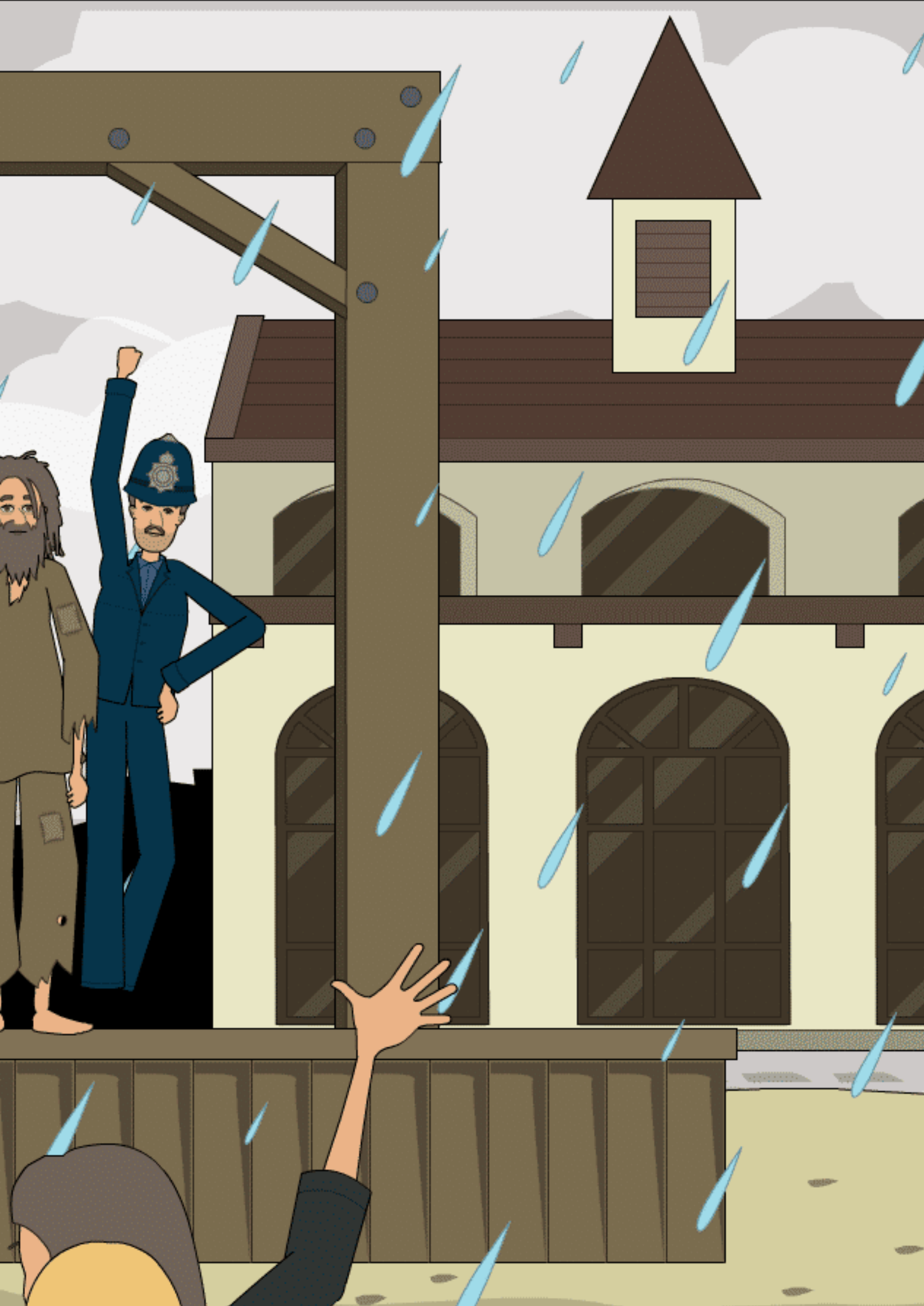
MONEY IS THOUGHT TO BE A MEANS OF EXCHANGE, but today has become more of a means of power.

MONEY IS THOUGHT OF AS MEASURE OF RESOURCES, but it has become anything but that.

I know it looks as if trade is a really bad thing, but without trade, we wouldn't be in the 'modern world' we're in, as trade allowed for the development of societies, new materials, science and technology. It appears much more sensible to conclude that people simply didn't have the knowledge and means to do it otherwise, up until about 100 or so years ago. But perhaps they could have managed this trade journey better, with more careful planning.

SYSTEMS TO ORGANIZE SOCIETIES





In the first part we discussed how money came into existence and how it is more about trade than 'money', but we realized that trade has gone mad by enslaving and killing people, changing people's values, destroying the environment, and so on. 'Trade' is not some kind of creature that can be quarantined, but is rather a type of environment that hugely influences human behavior. We are not the first to notice this craziness, of course, as others have proposed to develop systems to deal with all of these issues over the years. There could be as many such ideas as there are people that have ever lived on the surface of the planet, however, we will try to look at some of the most 'noticeable' ones to see what they proposed and what happened to these ideas; what did they change/improve.

The thing is, as we explained in the first part, the world is not that simple. As in the case of what represents a tribe or how trade came into being, this case is not reducible to "Ah, this trade has gone mad, let's do something about it!" because systems/ideas of organizing clusters of people (societies) existed long before the trade was widely adopted, and were then influenced by trade and many other factors. Overall, everything is an emergent result of all of these influencers.

We could try dividing these systems of organizing clusters of people into:

1. THE MEANS OF PRODUCTION AND DISTRIBUTION
2. IDEOLOGIES
3. A COMBINATION OF BOTH THAT RESULTS IN A 'GOVERNMENT', AND THUS, AN 'ECONOMY'.

1. The production of goods and services changes how ideologies form and, thus, how systems of organizing societies emerge, and how they are managed. Before humans began intentionally farming animals and cultivating all sorts of plants, they clustered within small groups. Sometimes they had a sort of tribe leader, but they relied mostly on familial values and equal sharing of what they hunted or gathered. The leader was mostly someone who advised and perhaps influenced decision making, but the people in such societies were all taking part in it. This was the Hunter-Gatherer period.

However, once much larger clusters of people form, such as what followed the advent of farming, things get much more complicated. We now have more defined roles to deal with separate goods and services (some doing this, some doing that), dealing with surpluses of foodstuffs, decision making, and so on. As such societies emerged, inequalities among tribal members became more and more obvious. One example of how the means of production and distribution impacts social stratification is that as a result of mass producing these products through cultivation (using tools and animals), women were no longer viewed as being as 'useful' as they were back when they were gathering 'wild' food for the tribe, often much more food than the men could provide. As a result of losing such an important role in their societies, women became more and more subordinate to men.

2. With that in mind, let's see how ideals like imperialism, feudalism, communism, democracy, free enterprise, capitalism, and so on were formed, and what they proposed for organizing a society. To help make better sense of them, let's imagine that people are colonizing and attempting to start a brand new society on Mars, examining what each of these systems proposes for managing this colonisation.

THUS, here we are on Mars.

We've managed to create a stable atmosphere here so that people can breathe and plants can grow. We've already brought a few million people here and now a bunch of other people have been invited to come here with ideas on how to organize everything. Young and old, people of all walks of Martian life have gathered together today, eagerly awaiting the bold and courageous ones to present their ideas on how they would organize this new Martian society into a sane and prosperous system, one that avoids injustices, cares deeply for themselves and the environment, and will be able to evolve technologically and scientifically.

Ah, it looks like they are about to begin. Let's listen in:



Hello there. Nice to meet you all. I am **Feudalism** and, to not waste your time, let's get directly to what I propose. I think the best approach for you to organize yourselves is this:

First, proclaim some Kings. These Kings get to fully own different parts of Mars, and each King can allow multiple others, let's call them 'Lords', to manage sections of their land. Maybe they are the King's friends, so it is easy to see how 'Lords' are appointed. We need 'Lords' because Mars is too big for just a few Kings to manage.

Then, we need some people who will protect these areas that the Kings and Lords own. These people protect the land and get something in return, such as goods and services.

And third, we need the rest of the people to work the land and produce the goods and services we all need. They work for the King and his Lords, are protected by the 'land protectors', and in return, get to have access to their basic needs.



However, the ones working the land and the ones protecting the land should forever keep their statuses. Thus, they will never become Lords or Kings.

They will inherit these statuses over generations and are bound to respect them, or else the King would punish them, as the King is the one making all the decisions.

How does that sound?



IMPERIALISM:

Ha! That's an awesome idea. I must add though, since there will be so many groups of people here on Mars, we must work to conquer them with our armies. So we need to become strong, have a powerful army, and be fearless.



COLONIALISM:

Oh man, we really think alike. Imagine all of the weaker populations out there that we can conquer and force to adopt our values, thus making us even stronger and stronger in numbers.



AUTHORITARIANISM:

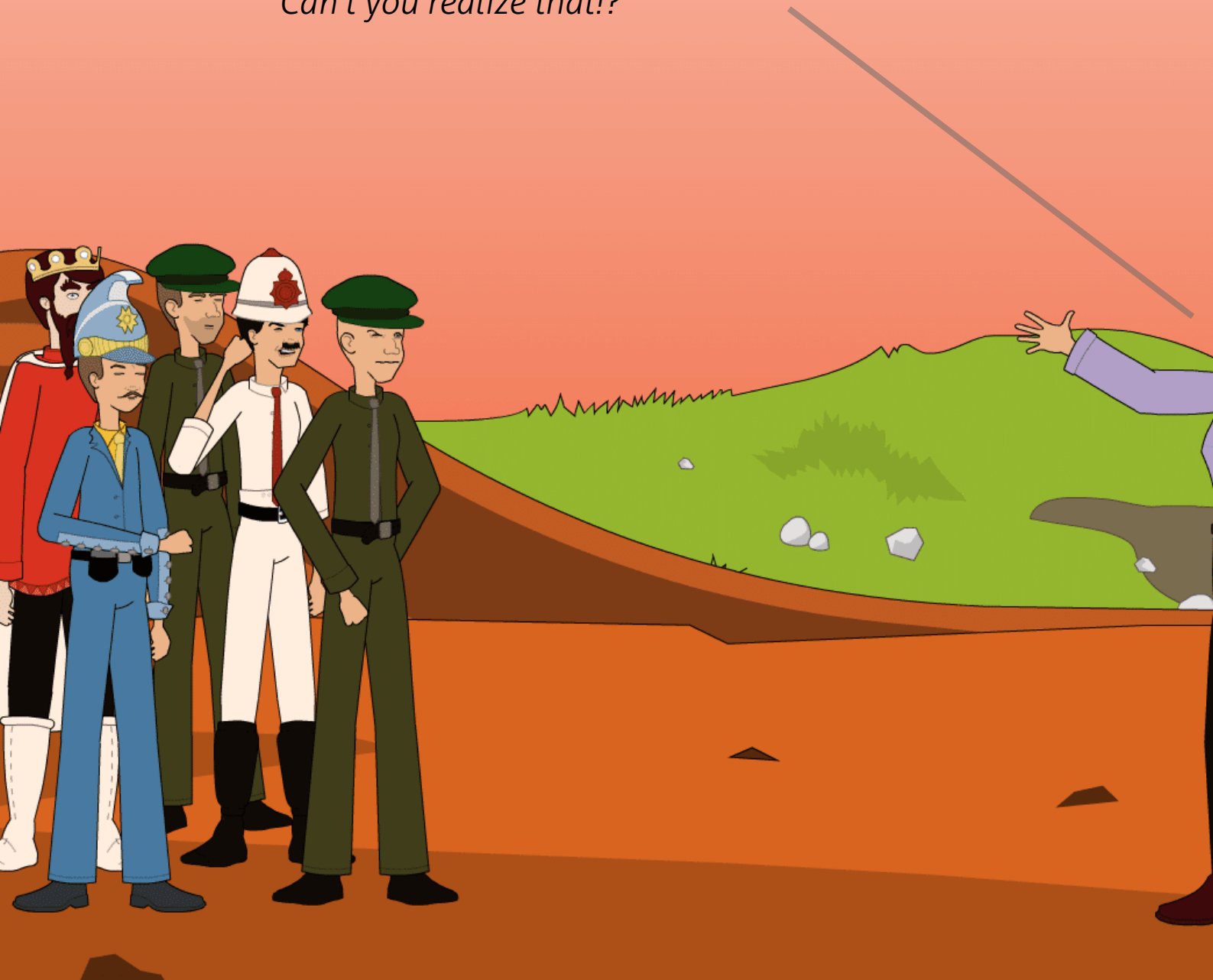
I and **Totalitarianism** TOTALLY agree with you guys. Although Totalitarianism thinks this 'King' leader you propose needs to have strong charisma to attract people to do what he wants them to, but I think we shouldn't worry much about that, so we disagree there a little bit. However, I would add that the King leader must control ALL aspects of society: the science, arts, education, what goods are being produced, what services are allowed, and so on. We need the leader to decide for all of us. Or, well, for you Martians :).



Neah, hold on!, says **Capitalism**. That's completely unfair and quite non-progressive. All people should be able to own land and do their own business. This way, the best products and services get to be made through competition.

If you do not allow those who work the land or those who protect it to lift their statuses, then you create a stagnant society where people won't be motivated to continually improve the society.

Can't you realize that!?



DEMOCRACY:

And they should all be able to vote for who will be their King. Or even what rights they should have. The people must be in power!

FASCISM:

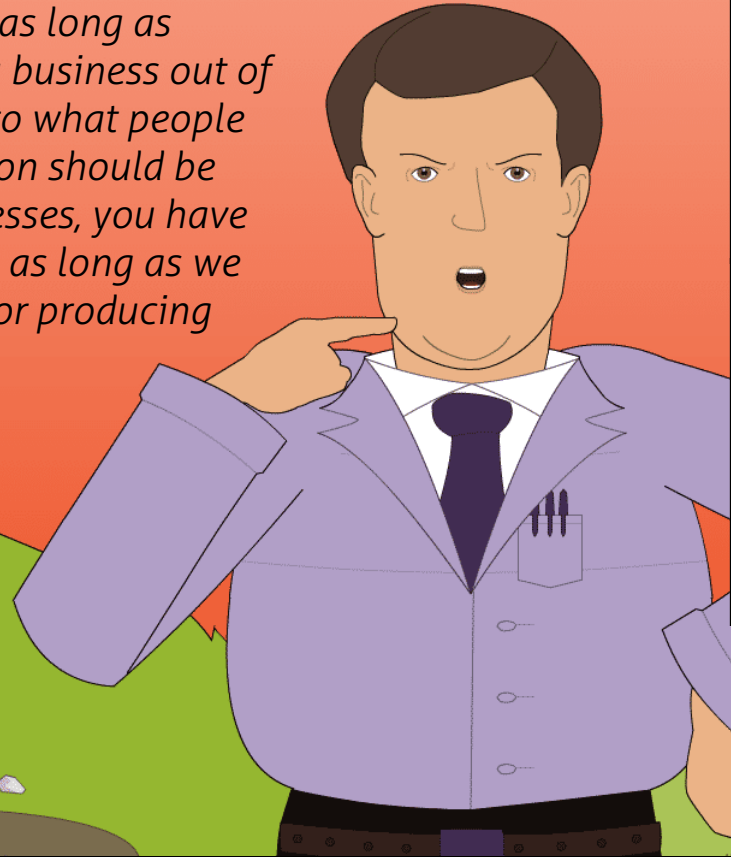
Oh man, you two are so naive. People have no good judgement. No moral capacity. People cannot be in power. Those in power must decide how the society should be run. While I agree with Capitalism to some degree that people should make their own businesses and own parts of Mars, I also agree with the other ones in that the power should stay at the top and the nationality of a group should be kept, even expanded to other tribes through army control.

But I may slightly disagree with Authoritarianism and Totalitarianism as to whom should lead the society. I think it's better to be lead by a group of people, let's call them 'politicians', rather than just one guy (king, dictator, etc.).



CAPITALISM:

Well, to be honest, I agree with all of you, as long as people can own parts of Mars and make a business out of it. I know you all have your own rules as to what people can say, what they can wear, how education should be handled, how they should run their businesses, you have taxes and laws, and so on, but I don't care as long as we let them compete in one way or another for producing and improving goods and services.



FREE-MARKET:

Oh Capitalism, I am only going to agree with you if leaders have nothing to say about how people run their businesses!



SOCIALISM:

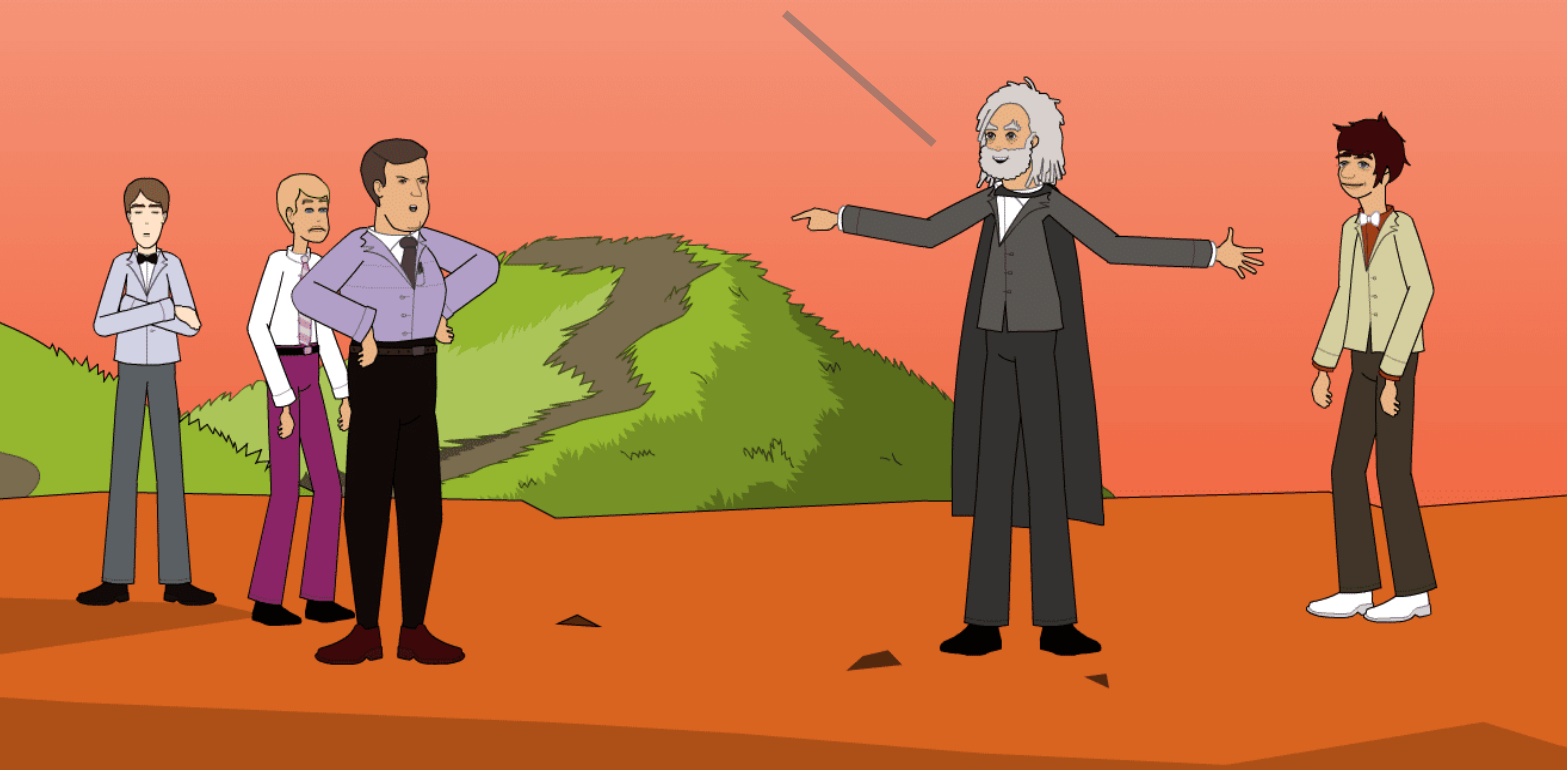
Look Free-Market, if you base everything on letting people compete for their education, goods, services, or whatever, you will create a HUGE disparity of classes. Some will become very rich, some so poor that they cannot even afford food. Imagine the exploitation of poor people... I think it's better to provide the basic needs of people in an equal manner, for free, as part of the economy and directed by the leaders. In this way, we do not promote profit over such services, but instead base our production and services on their actual use and need.

So, the money that workers make should be given back to them, mostly, not to others. We need fairness and that can only be achieved if leaders control a good part of how the society is run, and use the gains to provide free services for their people.



COMMUNISM:

While I mostly agree with Socialism, it's rather naive to think that tweaking the ideas of Capitalism will work. We need to get rid of the notion of working for anything. Men should be free, no social classes should ever exist, we need to eliminate the notion of property altogether. No one should lead a man, but himself. Groups of people will eventually know and decide for themselves as to what they have to produce and when, and how to distribute them. We need to eliminate scarcity and produce abundance! I see Socialism as a path to Communism from a Capitalist society.



CAPITALISM:

You guys are starting to look either like Authoritarianism or Utopia.



COMMUNISM:

And you, Capitalism, start to look more and more like Feudalism, where people get to be enslaved by others even for their basic needs, and even if in theory you say all people can uplift their status by allowing them to own parts of Mars and make businesses, this will hardly prove to be true as those who accumulate more will faster accumulate even more, and the poor will have no choice but to work for them.

That's exploitation, and it can never lead to a peaceful society!



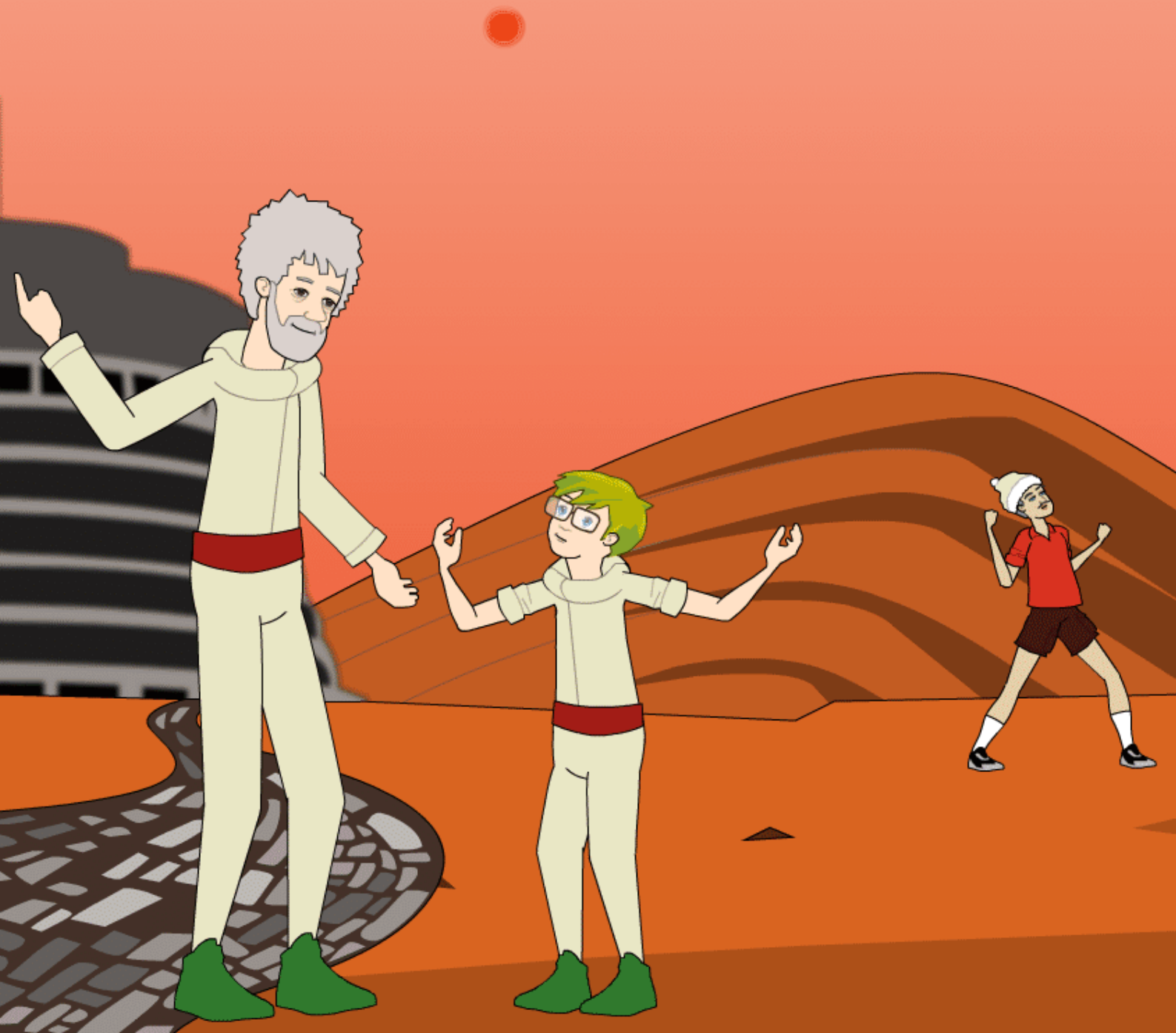
ANARCHISM:

I think we have to keep an eye on all these people. I don't have a plan as to how we can organize you Martians, but I would say you must be skeptical of all of them when it comes about your personal freedoms!



*Wait a minute, says one of the little 'Martians'.
Where did you guys come up with all of these
ideas?*

*Oh, an old 'Martian' says. Let me explain that
to you, kid, because in order to understand the
details of their approaches, you first need to
understand how they came into existence, and
how they were tested and implemented on
planet Earth. Let's head inside the virtual
history museum.*



FEUDALISM

AUTHORITARIANISM

TOTALITARIANISM

IMPERIALISM

COLONIALISM

FASCISM

DEMOCRACY

CAPITALISM

FREE-MARKET

SOCIALISM

COMMUNISM



on earth and in practice

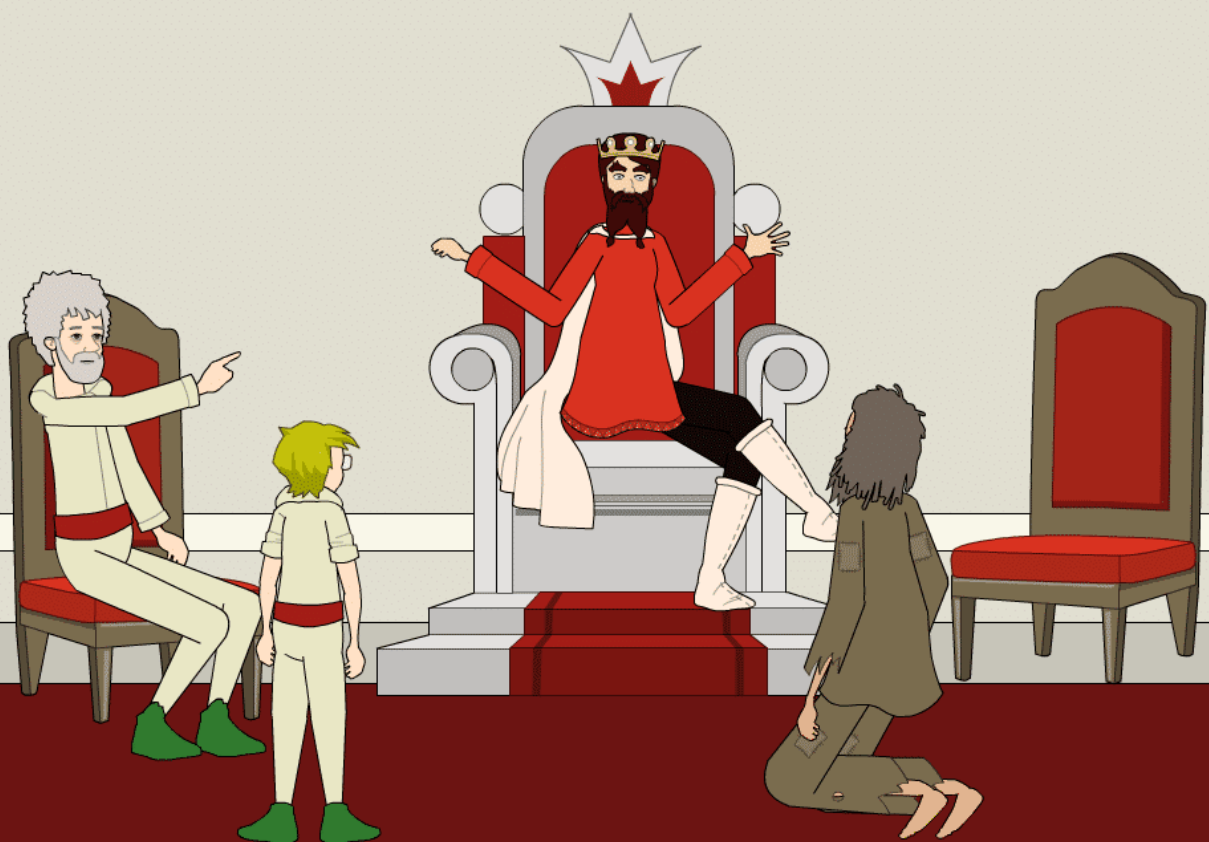
For the entirety of human existence, there have been so many ideas as to how to best organize societies that you could die of exposure while reading about them. Many look almost completely alike, others extremely different, and, once put into practice, most of them seem to be more about their words than meanings. We'll divide them into two categories based upon their 'control mechanisms':

ONE is about people being free to do whatever the heck they want, yet you need to kinda control certain parts of the society.

The SECOND is about guiding people on what to do, and then leave them alone (one way or another) afterward.

Old dude: *The system of Feudalism, where the distribution of goods, services, and privileges is based primarily on a few owning everything while the rest worked like slaves, found itself being replaced some 400 years ago with the idea that people should be able to own stuff, as well as the means of production or the right to sell services, and to make a business out of it. They called it 'Capitalism'.*

We should start from there to see how such ideas evolved on planet Earth, especially what they tried to accomplish, where they succeeded, and where they failed.



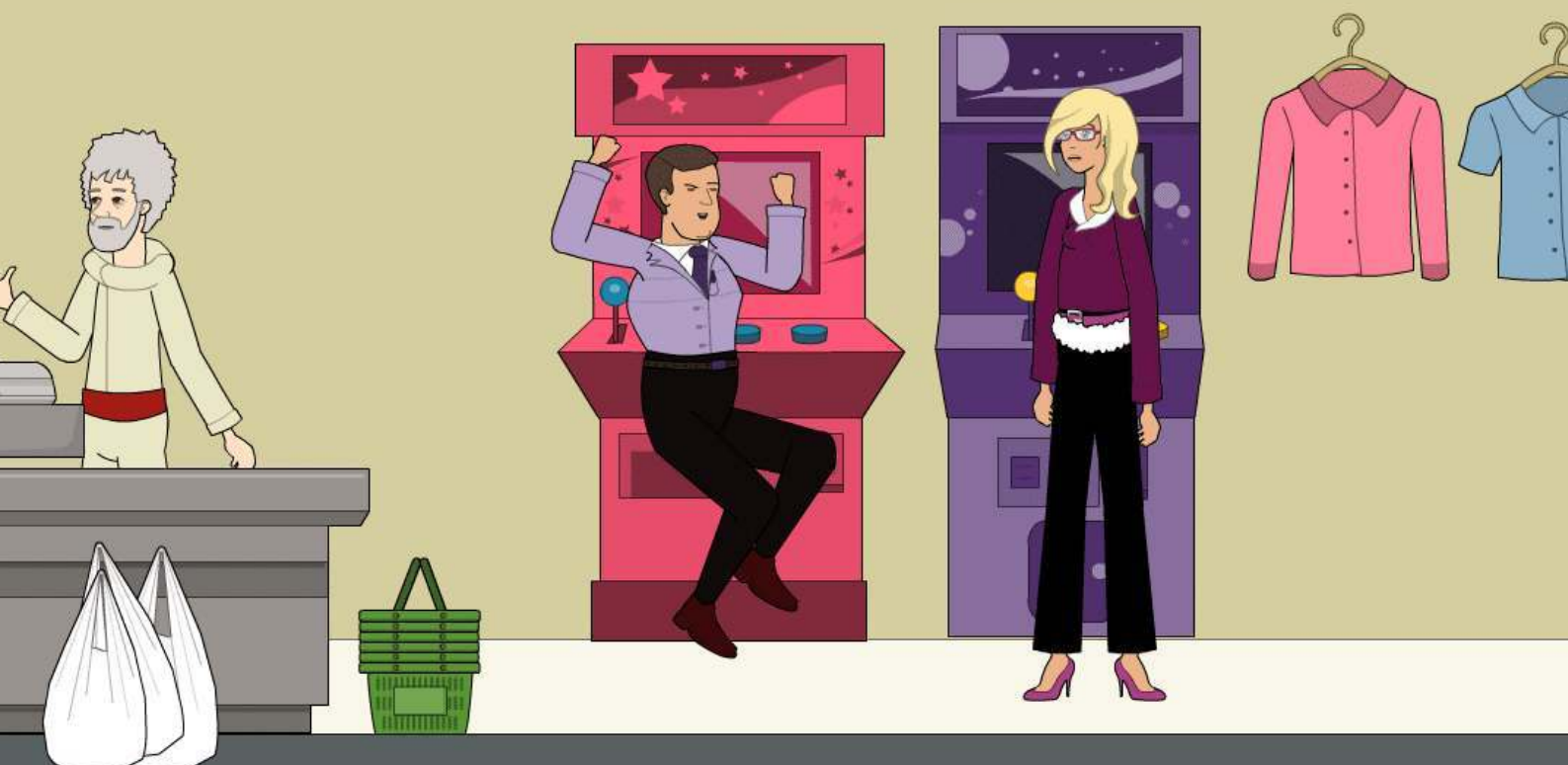
While Capitalism sounded really good as an abolition of the stagnant society of owners and slaves, it didn't end up so well for the people. Indeed, manufacturing exploded in terms of goods and services, with wide variety of colors, shapes, utilities, non-sensical products, etc., which resulted in creating a 'breed' of people who felt compelled to any silly thing that others were able to persuade them to buy. It was thought that this system would empower the worker. However, they quickly realized that the power again shifted towards a few (the owners), while the rest either worked for those few rich people, or suffered the consequences of living with insufficient life support. You see, the core and most basic goal of Capitalism is PROFIT. That's all.

It does not matter if the people are run by a dictator, a moron, or a saint, as long as the society works by allowing people to compete and seek profit under certain circumstances (within the laws). This system is not much better at dividing people into classes than feudalism. But it does something else that is very very important: it blames the worker for his/her unsuccessful life. If you can't make a living, then you are at fault, not the system, thus deflecting people's rage mainly towards themselves, rather than at someone else, like the Kings in Feudalism.



When a culture is focused on profit, people's lives are put at risk as their needs are ignored, the environment is ransacked, and the people's values and lives are changed forever. The capitalism system has had many rules applied to it, but its core idea of people owning and selling their own services within a profit-driven society is still present today in nearly all tribes across planet Earth.

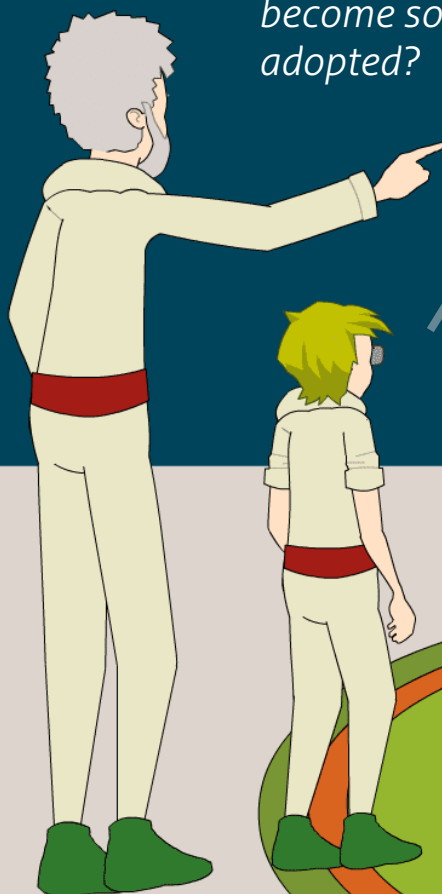
All of this indeed sparked a huge evolution in production and trade, but as it's really important, let me stress again: there is no 'free' in capitalism. Nor does it exist in 'free market', which is a blanket applied to capitalism to emphasize the concept of allowing people to freely compete. Both of them work in tandem with tons of regulatory rules. Even if I am part of the tribe, I'm unable to sell dog meat in many places because it's not allowed, although other types of meat are allowed. In some tribes, I can only sell under certain strict circumstances or conditions. The prices of similar products forces me to modify my own prices. Labeling my product, how I can advertise it, or produce it, and distribute it, is anything but 'free'. It should be written as "free market", with a disclaimer that explains what they really mean by free.*



When I was younger and living on Earth, I once made an internet account for an online streaming Operating System where they said the available bandwidth was "unlimited". So I took 'advantage' of that and consumed about 500gb of bandwidth in 20 days. Then my account locked up, with a message saying "I'm sorry but you exceeded the bandwidth limit." I thought "Oh wow, I somehow exceeded unlimited bandwidth? That's like a new math right there!" I had no idea that the mighty "*" had the purpose of negating the word it was connected to there and meant that their 'unlimited' plan was actually limited. That same thing goes for the concept of "free* market", as well.*

So, keep this in mind: Whenever you hear of profit over human life and the environment, that is a reflection of the power of profit. That's the essence of capitalism and the free market at work. The core idea is so ridiculous that 'encouraging wars' can be viewed as a great business plan, as it reduces unemployment and creates profits for many already wealthy people. A very influential economist once jokingly proposed that for a nation to get out of depression, they should hire people to demolish the nation, and then to build it up again, as it would create jobs and make the market 'run' :). I hope you're getting it now.*

Yeah, I think I get it. But if it's not free and it creates so many issues, why has it become so widely adopted?



Well, the idea of 'allowing' individual humans (under certain circumstances) to make their own businesses became widely adopted for several reasons:



For everyone involved, it replaced a non-progressive and very coercive system: feudalism. So, it looked really good when compared to what they were moving away from.



For the governments, it places the credit and blame on each individual. So if some do not succeed, there is no king they can overthrow to change the system. So it's like an evil that you can't recognize, but you sure can feel its effects.



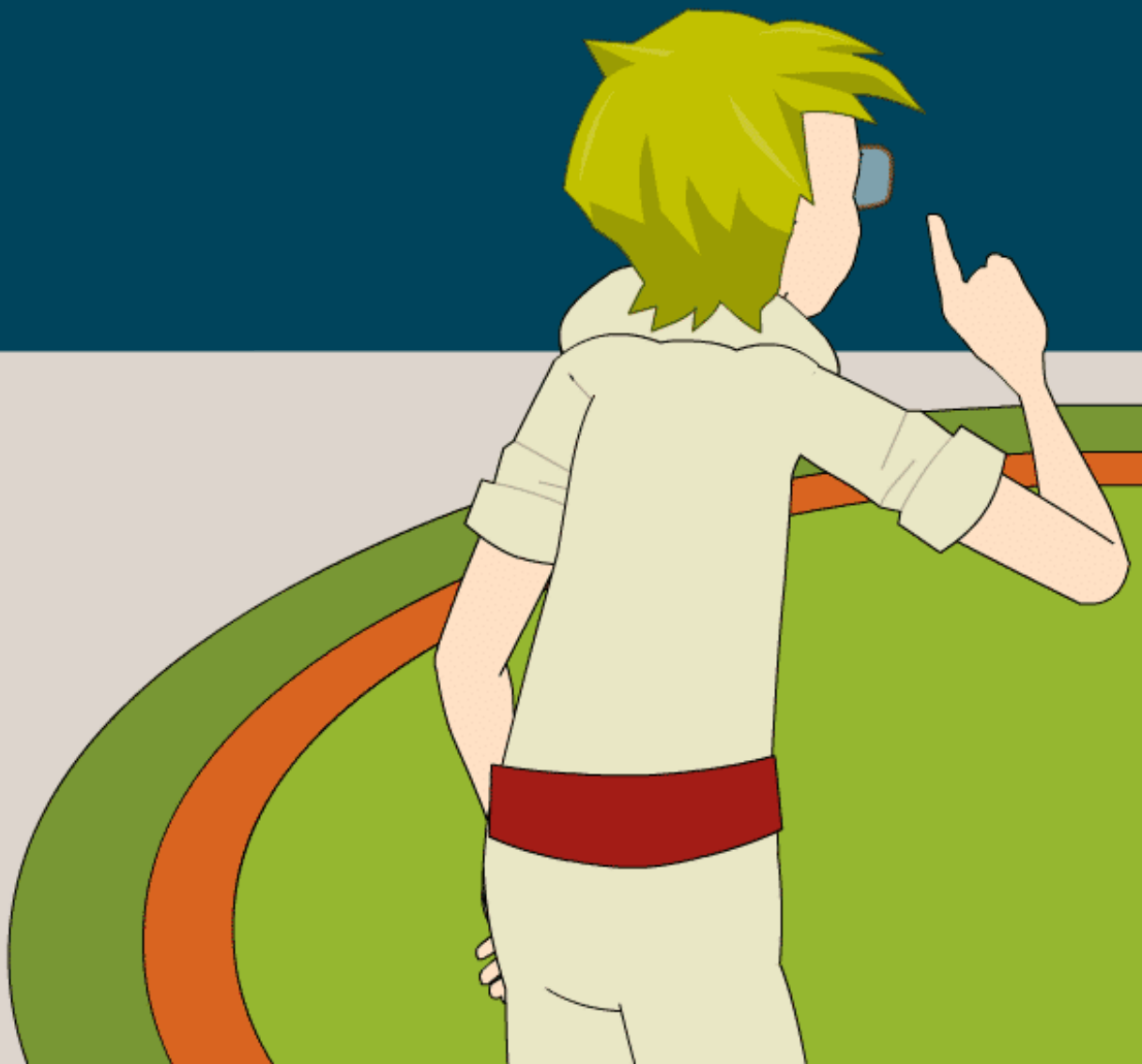
It was quite successful at creating a plethora of technologies, services and goods, as it transformed people into market-addicts, so they didn't need any real plan to organize them. Just let them buy and sell, and then they inserted various rules and regulations into that market for whatever reasons (personal gain, stabilize it, etc.).



That leads to point four: it's a highly flexible 'financial' system that has little to do with any real organization of society, because it only says that people can create their own business - that's all. So, it was readily adopted under so many different kinds of 'regimes', from dictatorships (one tribe member who controls the entire population through his own personal values) to a widely varied mix of 'democracies'.

We'll get back to this 'capitalism' again, kid, but first let me explain its 'enemy' a bit, another kind of system that was designed to control people at first, and then let it loose, as it will work on its own to create an equal society, devoid of the profit motive.

Ok. Just a side note - I forgot to mention that I find Feudalism, Totalitarianism, Imperialism and the like to be completely obsolete and unacceptable.

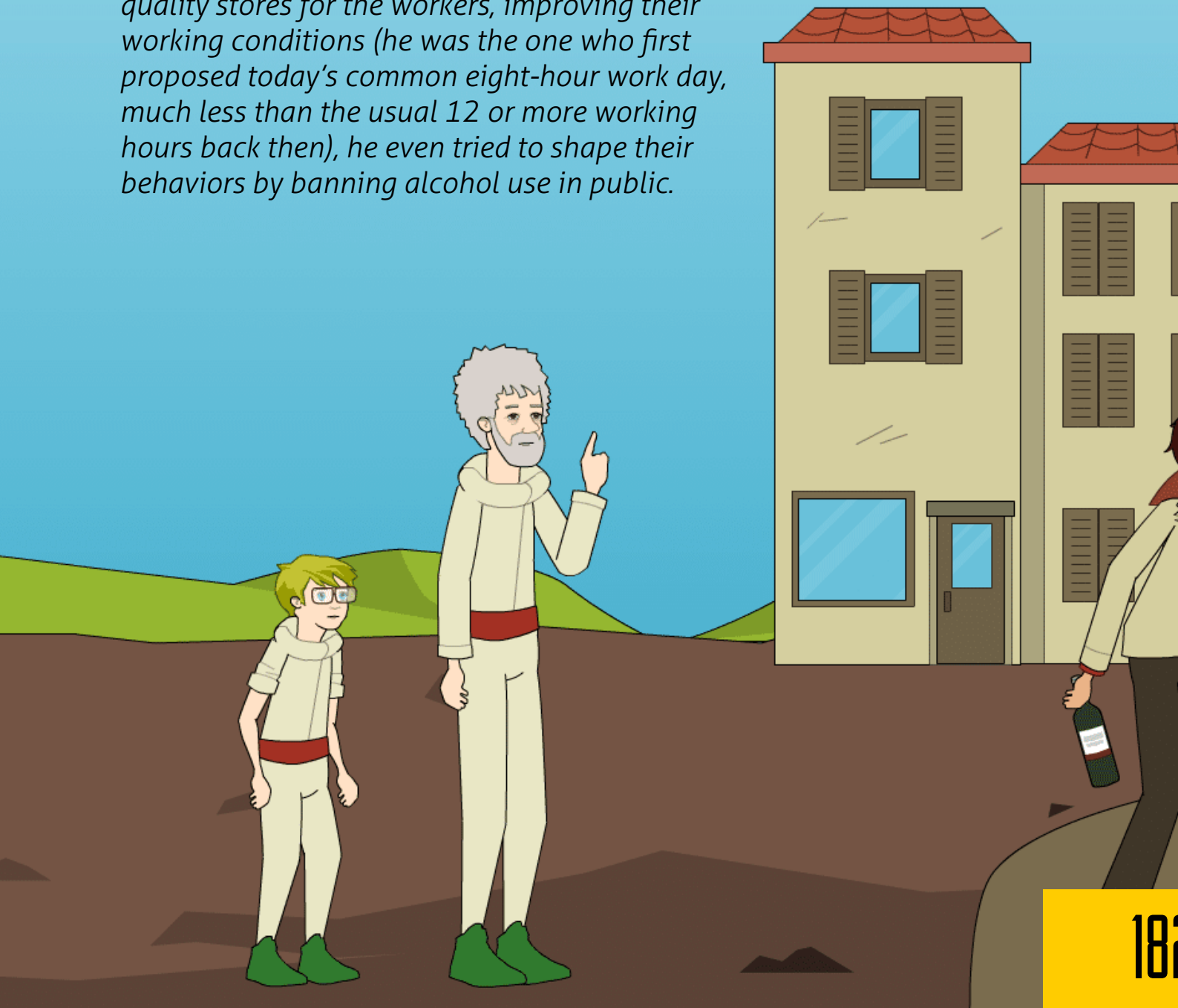


I agree, but let's keep moving. You might appreciate some of the alternatives that some people proposed within this period of time.



The flaws of the profit-driven capitalism approach were more thoughtfully recognized some 200 years ago, when a thoughtful guy named Robert Owen said something like: "Hold on! We can do better than this. We need to respect the workers at all costs!" (that's not an actual quote though). He was also part-owner of some factory mills that about 2,000 people were associated with (some worked there, but their families lived there, too). Many of the workers were in the lowest levels of the overall population; theft, drunkenness, and other vices were common; education and sanitation were neglected; and most families lived in one room.

Owen tried to improve their situation by opening quality stores for the workers, improving their working conditions (he was the one who first proposed today's common eight-hour work day, much less than the usual 12 or more working hours back then), he even tried to shape their behaviors by banning alcohol use in public.



He was one of the first to bring the concept of “child care” into the world. He considered that by treating people well and creating a healthier environment for them, we can allow people to flourish and, in turn, create a better society. He also insisted that people are a result of their environment, so they cannot be blamed for their actions, or in general, for their lifestyle, though he also held some odd notions about Human Nature and the influence of God on behavior that were anything but scientific.

Of course, his thoughts on human behavior being the result of the environment were not completely original, as such ideas date much farther back, but he was one of the first, if not the first, to put them to significant testing.

Kid: *How did he test them? I am so curious!*



Well, the new care programs he developed eventually cost way too much for him to sustain, and he was forced to sell his part of the business. But he kept his views of how we should organize society. His contribution to that business was a model back then and remained a success even after selling it. But he went further. He now had some money from selling his part of the business and was about to experiment this new bunch of ideas that he had. He proposed that communities of about 1,200 people should be settled on land from 1,000 to 1,500 acres (4 to 6 km²), all living in one large square building, with a public kitchen and mess-halls. Each family should have their own private apartment along with handling the entire care of their children until they reach age three, after which they should be brought up by the community. Their parents would have access to them at meals, however, and at all other proper times.

These communities might be established by individuals, by parishes, by counties, or by the state, and in every case, there should be effective supervision by duly qualified persons. Work, and the enjoyment of its results, should be experienced communally. He thought of these communities based on his experience with the mills and the workers.

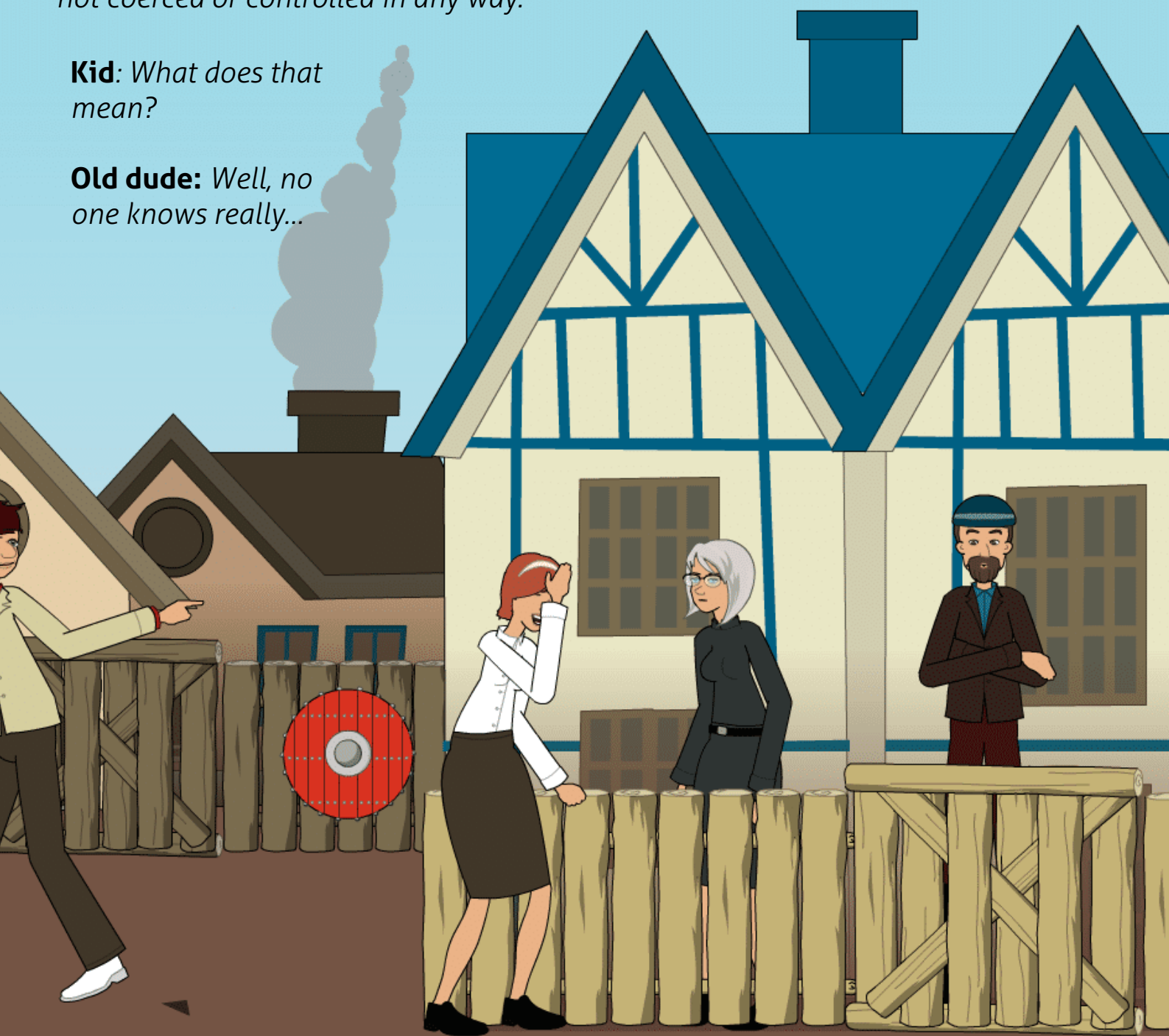
So he wanted for children to not grow alongside their parents? I don't think I like that, I love my parents.



Well that's something others felt as well and it's a good point as you will see later on. In 1825, he built two such projects, both of which failed. In the words of his son, it was because of the choice of occupants: "a heterogeneous collection of radicals, enthusiastic devotees to principle, honest latitudinarians, and lazy theorists, with a sprinkling of unprincipled sharpers thrown in." The people didn't have any control, no one owned anything, many indeed took a scientific endeavor of studying nature and released some science-based books, some focused on educating children, and so on. But it did not work because there was no science in his approach; just mainly his personal views as to how to organize such a community. One of the participants also said that they had many people with different ideas within a miniature-world. That same guy later 'invented' 'anarchism'. Well, he at least promoted and enforced the notion, as the concept of 'anarchy' is yet another old notion, one that basically opposes a 'state-managed' society, meaning tribes with leaders. Anarchy wants all tribe people to be 'free' and not coerced or controlled in any way.

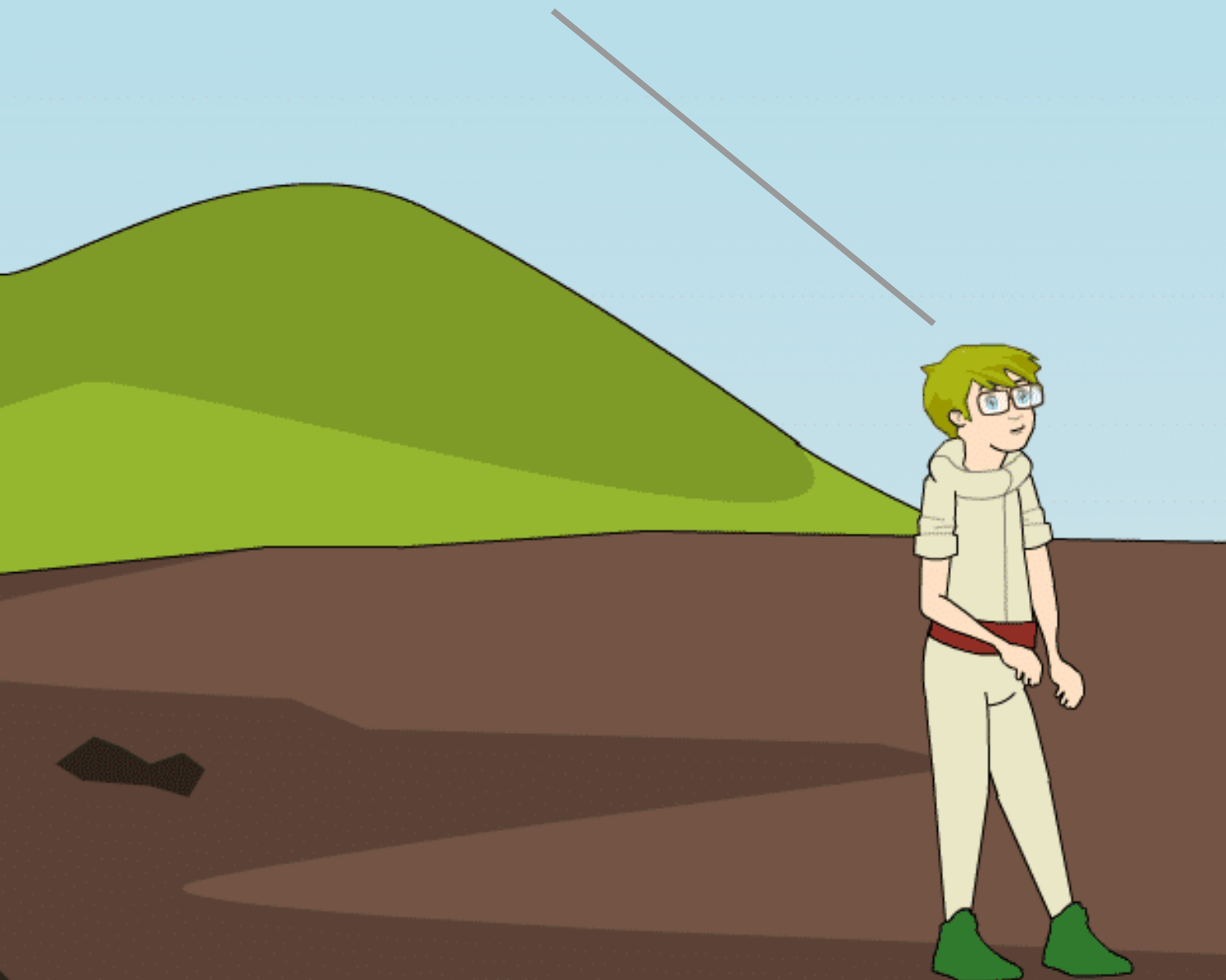
Kid: What does that mean?

Old dude: Well, no one knows really...

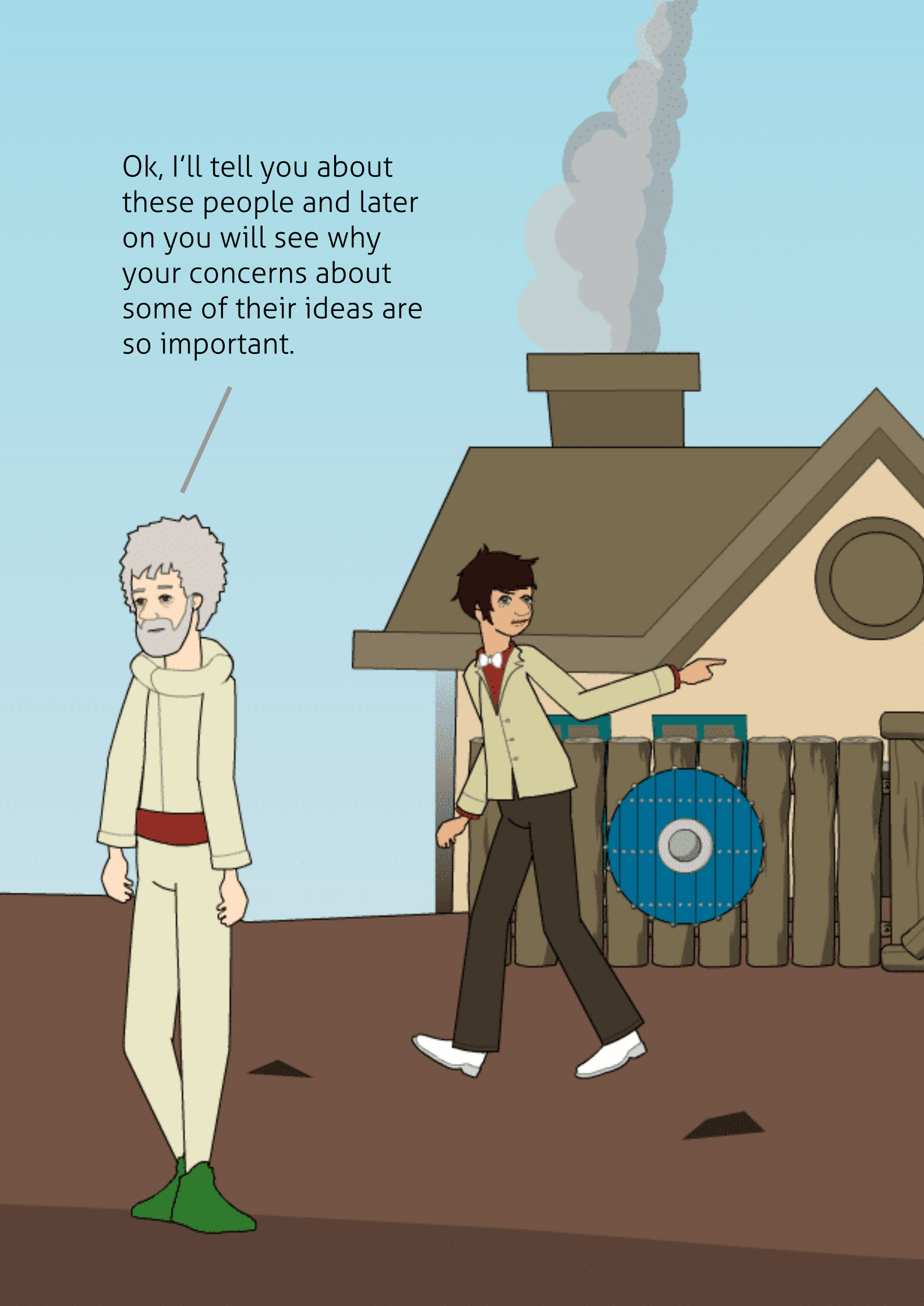


However, the ideas of Owen were coined as 'socialism', a system of no ownership, and one of care for our fellow man. But again, they weren't really new ideas, as many religions and ancient tribes had similar ideas of making an equal society for all humans, but he was the one to test them, though mostly as a personal and non-scientific test, on a small scale and for a brief period of time. His work significantly inspired others in one way or another. You want to hear about them?

Of course. I am curious if they succeeded to build such a world that would care for everyone, although I am still not happy about their ideas of family.

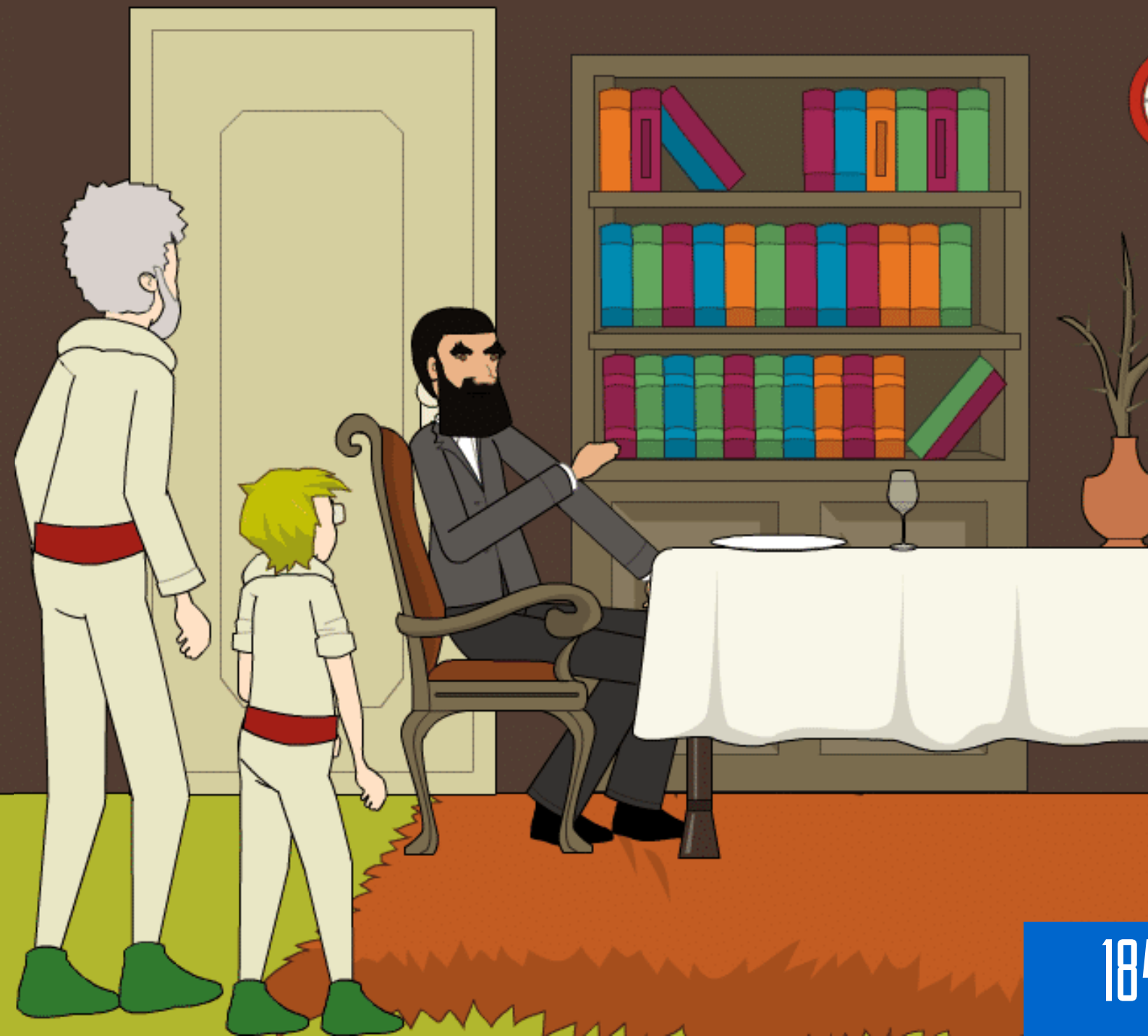


Ok, I'll tell you about
these people and later
on you will see why
your concerns about
some of their ideas are
so important.



One of the people who was influenced in a way or another by Owen was named Engels, a dude who really liked to read and write. He was also concerned about the working conditions of the workers in his tribe, and published a lot about that situation. He later befriended a guy named Marx, another 'rebel' of the 19th century whom he met in England and, together, they took the 'socialist' idea and made it more sound, focusing primarily on pointing out, in detail, the innate failures of capitalism, and they became known worldwide for their critique.

Marx detailed more about the needs of a different kind of society completely different from capitalism, realizing that you can only create a stable society through abundance (scarcity must be eliminated, otherwise such a society will not work), and that machinery should replace man's labor so that humans can spend their time doing what they love doing.



Marx thought that it was naive of Owen to try to build a society based on no ownership, no leader, and so on, because in his view, such a society can only be arrived at, not intentionally forced. It could begin with capitalism, which he saw as very productive, but extremely unfair. Then, once humans achieve a high level of production through this exploitation of people and the environment, the workers must revolt for their rights, as such a revolution would be the only thing that could bring about such a society.

Marx thought that after the revolution, people will self-organize, where all of the means of production, distribution, and whatever else people want, will be a result of how they organize and vice-versa. Marx and Engels called this revolution from capitalism-through-socialism 'communism', basically a more radical idea of socialism based upon the need for a revolution.

The main idea behind communism was this revolution, the fact that the workers will eventually revolt against the ones in power, stating that this will come about as a natural part of history, and that it will definitely happen because capitalism is not a sustainable system.

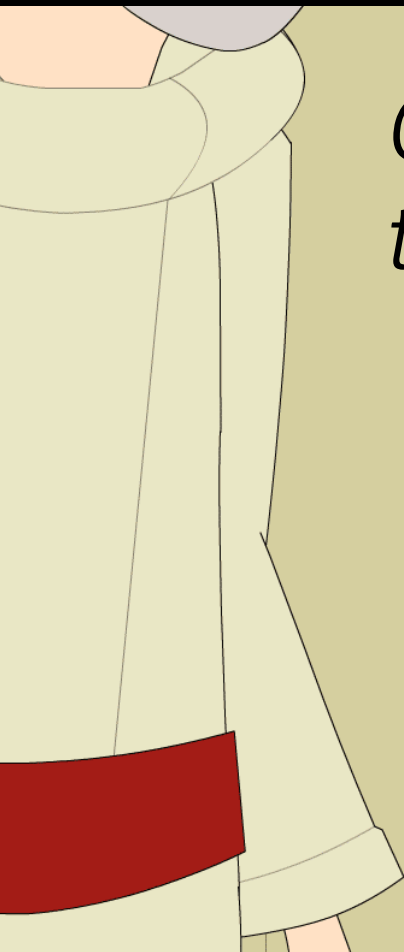


Kid: *Very interesting indeed and looks quite fair! But after they revolt, what would they create? I still cannot understand how they would 'self-organize'. Am I missing something?*

Well, they didn't really say much at all about that part. They just said that people can self-organize somehow, that machines will do most of the work while people will have the leisure to spend their time as they wish. To quote them, "In communist society, where nobody has one exclusive sphere of activity but each can become accomplished in any branch he wishes, society regulates the general production and thus makes it possible for me to do one thing today and another tomorrow, to hunt in the morning, fish in the afternoon, rear cattle in the evening, criticise after dinner, just as I have a mind, without ever becoming hunter, fisherman, herdsman or critic."



Oh, I love that quote!



They envisioned a world of abundance; of no nations, no leaders, no religions. They thought that children must be well-educated and the needs of all people met before 'communism' will be in place. Something like: workers revolt - they get in power and they care for their fellow workers - they organize somehow to provide the basic needs for all citizens (through taxation, elimination of private property, offering employment, etc.) - and they will provide free education for all children. They projected that all of that will abolish competition and lay out a path towards a true 'communist' society.

They planned to concentrate the power to the state as a first transition, to even demolish all 'jewelry' buildings and create the means for people to work; abolish all banks and let the tribe control the money. Plus, let the tribe control the main utilities such as transportation, means of production, etc.([source](#)). They also thought that for such a society to emerge, the 'revolution' must happen in many tribes at once, not just one of them, because tribes are dependent on each other in terms of trade. They even called it 'scientific-socialism', as they said you need to apply the scientific method in order to organize any society: you have to look back at and learn from history, and then try and test your ideas.



Kid: All sounds great to me, I wonder even more if they succeeded.

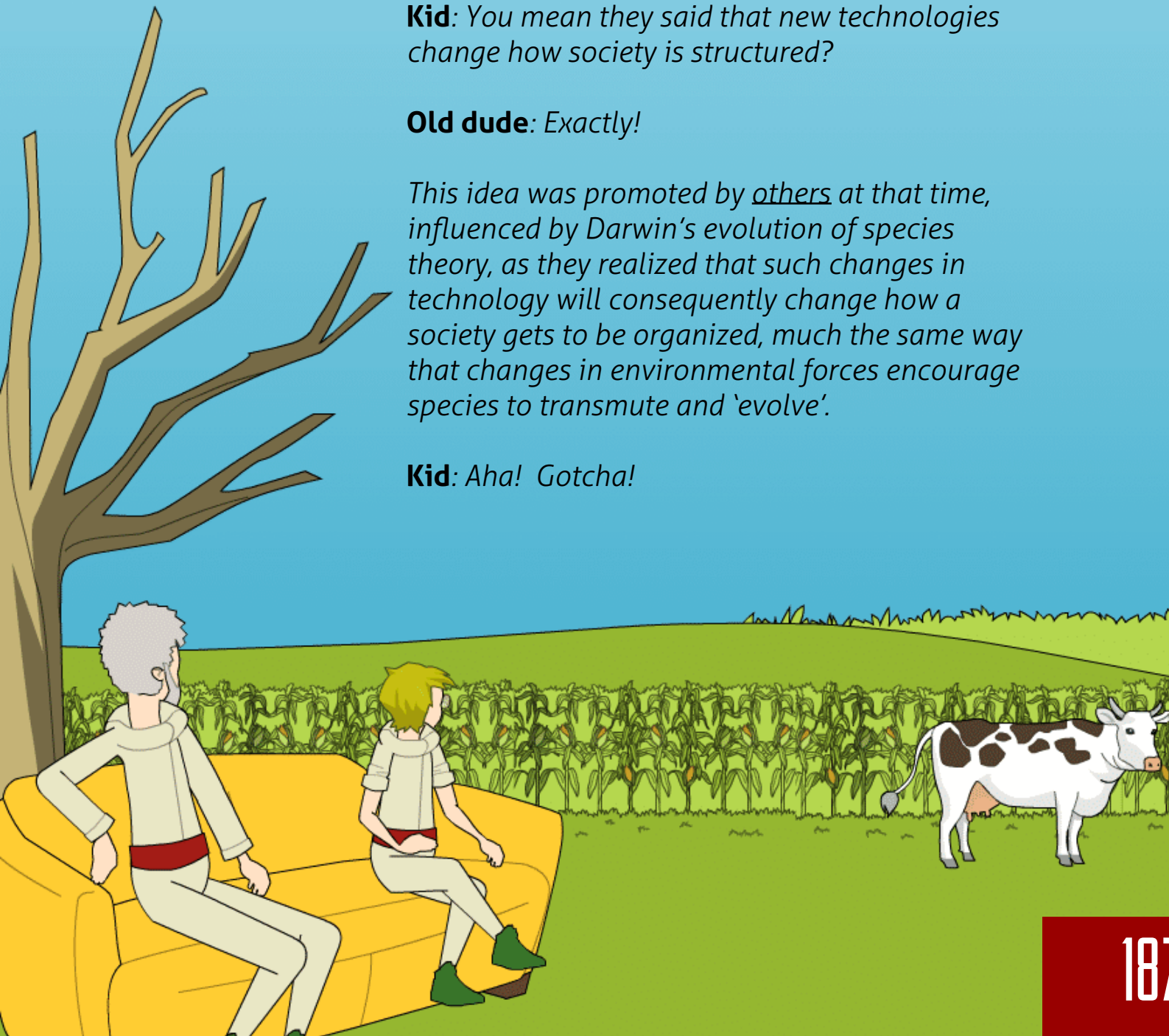
Old dude: Let me stress this though: they concluded that such a society could not be planned into existence, but would instead emerge out of economic evolution. An example of this was the advent of agriculture, which enabled human communities to produce a surplus of food; this change in material and economic development led to many changes in social relations, and rendered the traditional form of social organization obsolete, as it was based on subsistence-living and had become a severe hindrance to further material progress. In other words, changes in economic conditions necessitated a change in social organization. Hard to get?

Kid: You mean they said that new technologies change how society is structured?

Old dude: Exactly!

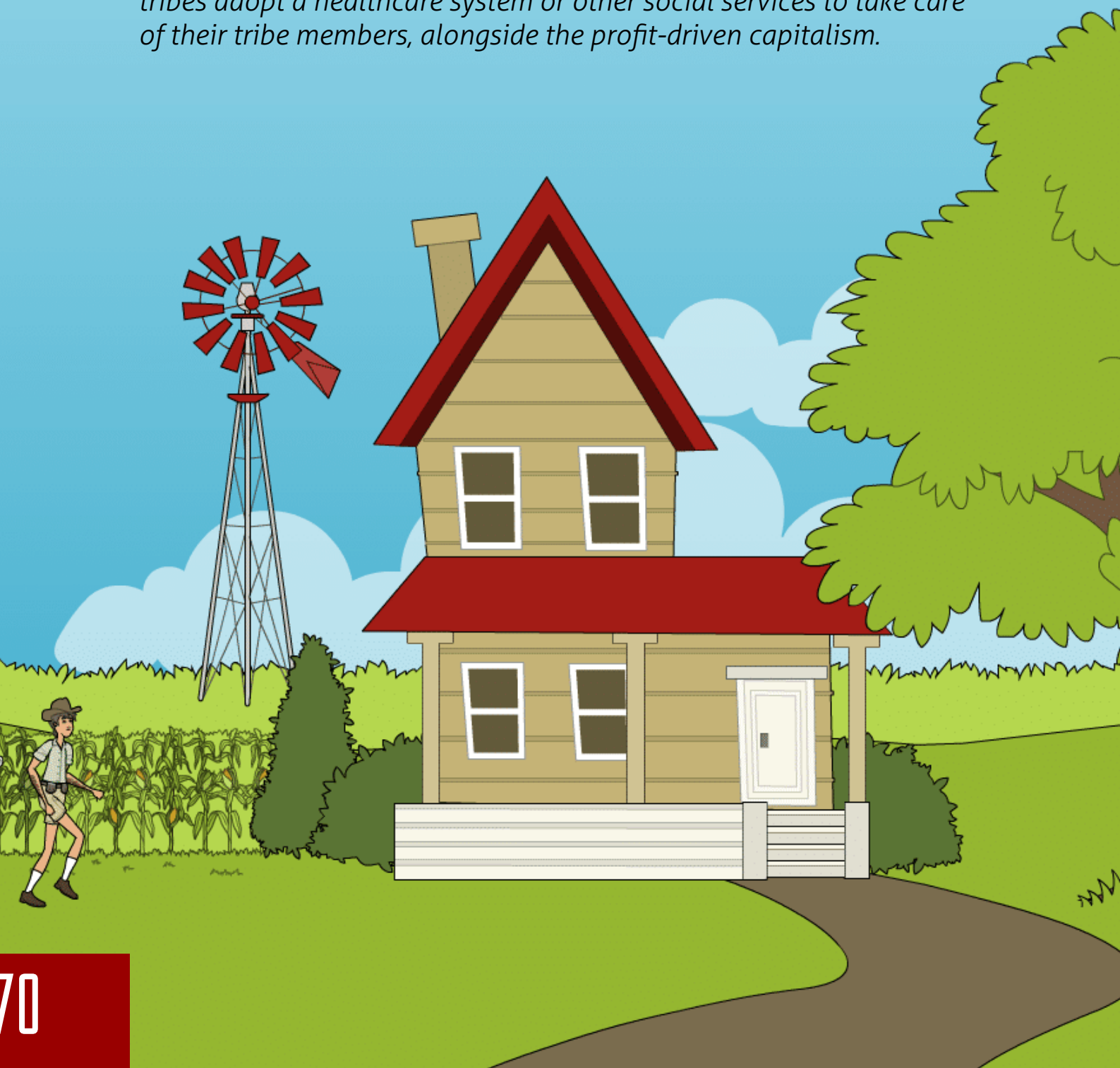
This idea was promoted by others at that time, influenced by Darwin's evolution of species theory, as they realized that such changes in technology will consequently change how a society gets to be organized, much the same way that changes in environmental forces encourage species to transmute and 'evolve'.

Kid: Aha! Gotcha!



Old dude: *But a different interpretation of Owen's work took place in the US tribe, where some of the workers thought that it would be beneficial to implement 'some' aspects of socialism (this way of caring about people) within a capitalist system by gathering workers together and going on 'strikes' in order to force those in charge to change laws on behalf of workers (better working conditions, better salaries, etc.). So rather than overthrow the current system, alter it over time as need arises.*

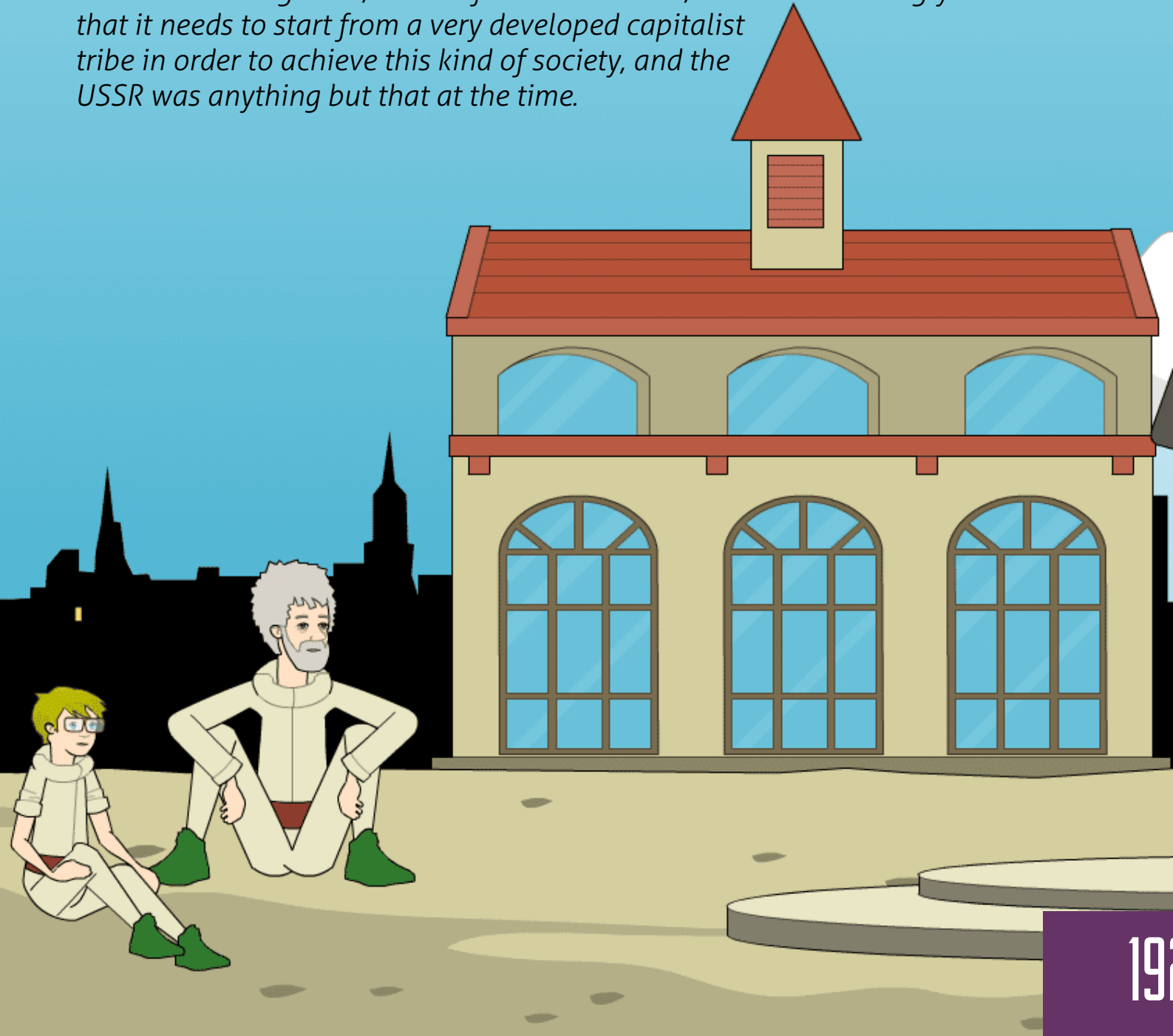
This worked to a certain degree and it was less violent and less 'radical'. We are still seeing this approach on Earth today, when tribes adopt a healthcare system or other social services to take care of their tribe members, alongside the profit-driven capitalism.



Old dude: Marx's idea didn't go unnoticed, though. At the end of the nineteenth century, a guy named Lenin thought that Marx was right and that his radical approach was the solution, rather than trying to merge some of Marx's ideas with a 'capitalist' approach. But he disagreed with communism that the workers would revolt (as Marx and Engels said), so he and a few others decided that they must revolt and bring about the change. He managed to get elected as the leader of the Russian tribe, or USSR as it was called back then, but he also brought his own collection of values with him, and killed many millions of people who opposed the kind of system he was trying to establish. The working conditions for most people were awful, with very little food, and the overall result was a dictatorship.

Kid: Oh man, that sounds nothing like communism, right?

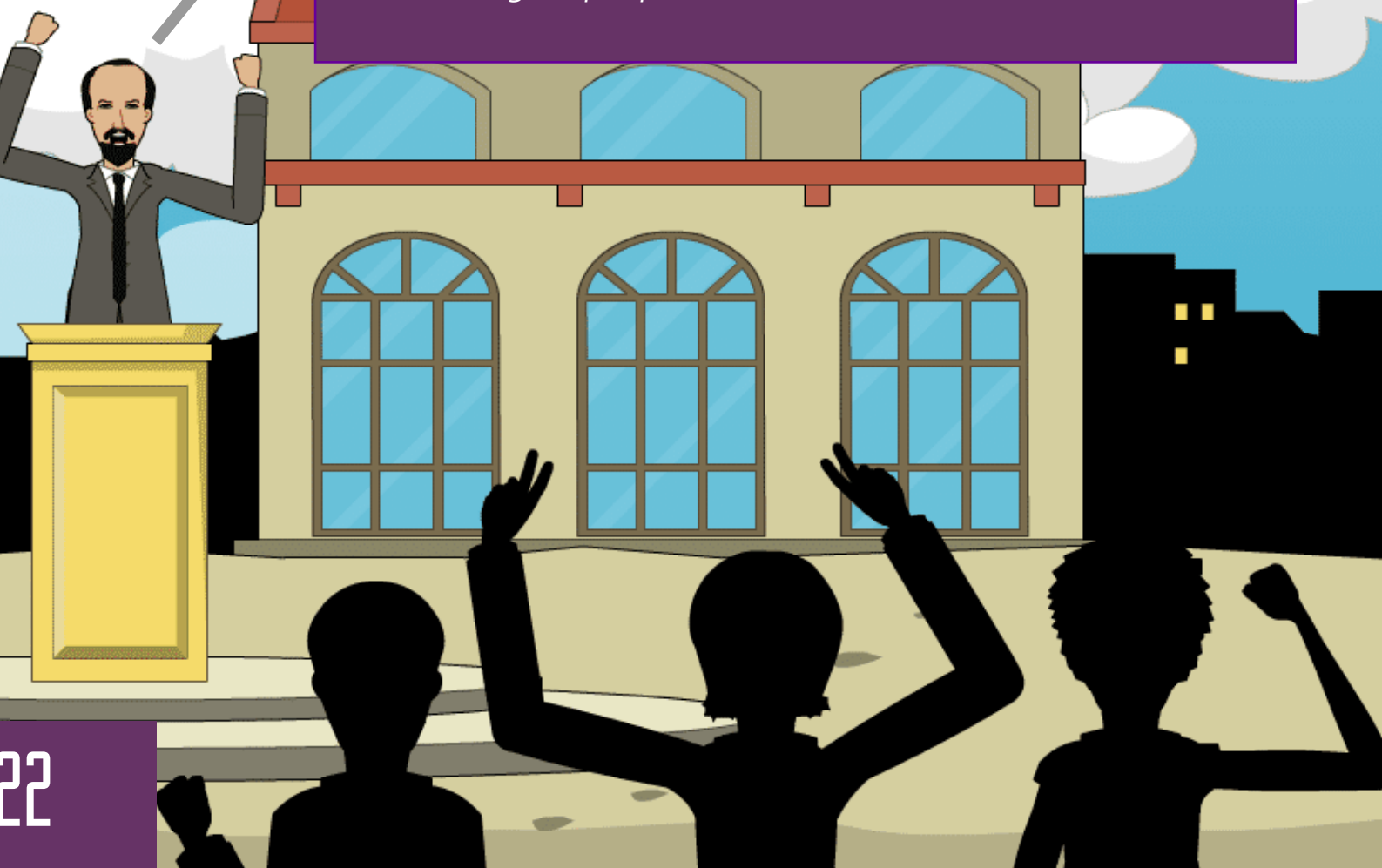
Old dude: Exactly, again! If he had been alive at the time, Marx would have been shocked and disgusted, even before its initiation, because he strongly believed that it needs to start from a very developed capitalist tribe in order to achieve this kind of society, and the USSR was anything but that at the time.



Old dude: Lenin's intentions seemed to be 'honest'; to help the poor, and get rid of 'capitalism' (a never ending thirst for profit and power at the expense of people and the environment) as you can see in the official declaration of what he stood for: "We want to achieve a new and better order of society: in this new and better society there must be neither rich nor poor; all will have to work. Not a handful of rich people, but all the working people must enjoy the fruits of their common labour. Machines and other improvements must serve to ease the work of all and not to enable a few to grow rich at the expense of millions and tens of millions of people."

But he also said (and note that 'kulak' means 'rich people'):

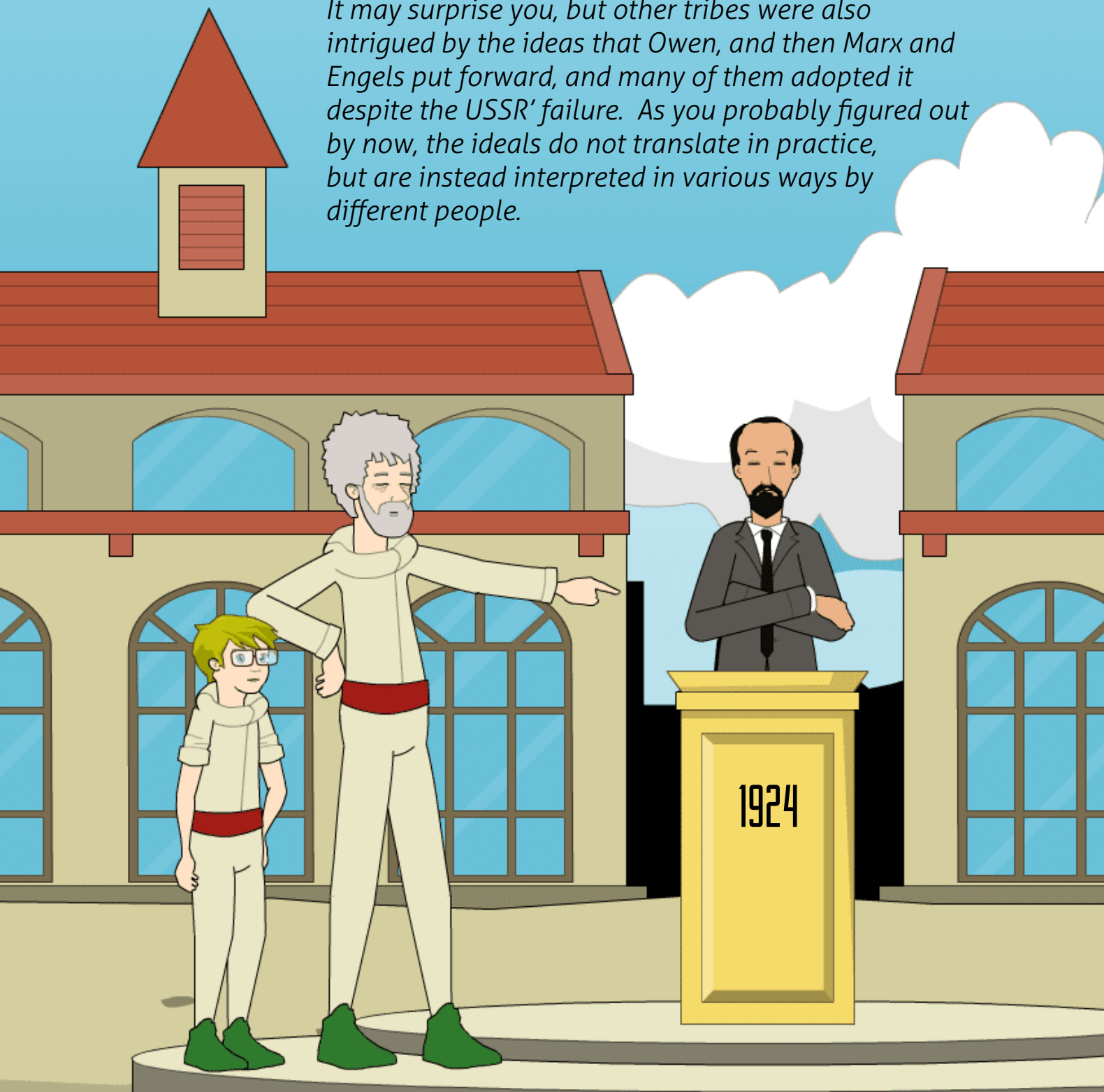
"Comrades! The kulak uprising in your five districts must be crushed without pity ... You must make example of these people. (1) Hang (I mean hang publicly, so that people see it) at least 100 kulaks, rich bastards, and known bloodsuckers. (2) Publish their names. (3) Seize all their grain. (4) Single out the hostages per my instructions in yesterday's telegram. Do all this so that for miles around people see it all, understand it, tremble, and tell themselves that we are killing the bloodthirsty kulaks and that we will continue to do so ... Yours, Lenin. P.S. Find tougher people."



Kid: But this is like saying you want to help to make a better and more fair society, while killing those who oppose your plan, and in such brutal ways? How is that fair? How can that lead to a peaceful community?

Old dude: What Lenin seems to have wanted was to eliminate the rich and social classes, provide for the workers with secure means of working opportunities, and to also eliminate competition between people and industries by making all production and delivery systems owned by the tribe. The USSR was a huge failure though. It was a combination of primitive (non-scientific) ideas forced upon a mass of people, using not-so-advanced technology, which ending up as an overall dictatorship and something completely opposite of a progressive society.

It may surprise you, but other tribes were also intrigued by the ideas that Owen, and then Marx and Engels put forward, and many of them adopted it despite the USSR' failure. As you probably figured out by now, the ideals do not translate in practice, but are instead interpreted in various ways by different people.



Old dude: For instance, the same model arose in the China tribe, where the tribe controlled the means of production and distribution for the betterment of people. But since this tribe was also run by leaders, it emerged within the tribal chief's values and they ended up with another kind of dictatorship where what people were allowed to be taught, what to wear, what to eat, and even what they could speak were closely controlled. It became a huge mass of people who were forced to work for the tribe and respect its rules, or else face serious consequences. Again, the decisions made were nothing like what Marx had envisioned (by the people). Instead, they were made by the few in power, and were so poorly designed that at one point, the chiefs asked people to create steel factories in their backyards to help speed up the production of steel, which resulted in a huge amount of poorly made steel that could not be used, thus wasting a huge amount of resources and energy. At another point, a huge amount of rice crops were planted too close together, resulting in the waste of the crops that were unable to grow properly, producing famine.

But the model still continued and around 60% of the world's population at that time (mid nineteen hundreds) called themselves 'communists' or 'socialists', even though the systems they were experiencing had little to nothing to do with the original ideas of socialism, and later on, communism.

Kid: Yea, you can tell that....



Old dude: By the mid nineteen hundreds, these ideals had been merged so much with other ideas that 'socialism' was now a political party that you could elect. As an example, in the Tanzanian tribe, someone with good intentions was elected to bring about 'socialism', the system for the people. He was a teacher and he tried to bring social care and education into the tribe. At first it was ok, as people did get some health care, education, and food. But since he started with a very poor tribe and people had to work to bring these services to all, it turned into a complete failure; never able to bring about the abundance that Marx had envisioned.

Quickly enough, Tanzania found itself caught up in another fire: globalization (debts to other tribes, imports and exports, etc.). Influenced by external forces and values, the teacher transformed into a dictator, controlling many aspects of the tribe: media, production deals with other countries, proclaiming his own party as the only that can exist in Tanzania (no other choices to elect another party), forcing people to move from their villages to other places, and so on. So, it became yet another failure.



Kid: *I would never have imagined that such good ideas like caring for our fellow human beings by creating an equal society devoid of classes and profits could be transformed into such horrifying scenarios. But as I understand now, it's because they weren't prepared: they started with primitive and unscientific notions for organizing their people. How many people died because of this?*

Old dude: *Hundreds of millions, and many more ended up living a sad and brief life.*



Old dude: But there is a positive approach that was taken toward the communist idea. Not long after Marx and Engels had died, a different kind of attempt for such a society emerged. Numerous Kibbutz formed, small productive groups of people organized themselves in Palestine (Israel today) based on Marx's ideologies. They had no concept of employee or employer, no ownership, no individual leaders, and little use for money. They farmed for food, took collective care of the children, and even shared their clothes.

They also tried to build a way to shape human behavior into the society. For instance, they raised children alongside other children and not their parents, so that children grow up to become more independent, although parents could spend 3-4 hours daily with the kids, which is more than what happens in most tribes on planet Earth today.



Old dude: *Small things such as using benches instead of individual chairs for the communal place where they gather (to eat, dance, etc.) helped to make people socialize more. Kitchens were communal (not in each home) for the same purposes. Some of them didn't allow television, so their members would not be influenced by the external consumption-based-world. Work was quite a must, though. They also tried to provide equal opportunities for women, so that men and women would have more equal statuses in their community.*

Kid: *The rule about how to raise your kids again I see :). Don't get me wrong, is not that rule that bugs me, but the fact that they would have any rules as to how you can raise your family. I think I understand it better now, that they wanted to build another kind of human through the infrastructure, a different kind of behavior. Did people accepted these rules though?*



Old dude: Well, these communities still exist on Earth, with around 270 groups consisting of over 100,000 members as of 2010, taking up around 9% of the entire population of what is now known as Israel. They produce most of what they need, but are still reliant on the external world for land, some funding, and other 'relationships'. They mixed in with the rest of the world a bit so, while many of these communities still rely on the principles of community and volunteer work, many have members with external jobs, and some communities pay their members or invite people from outside of the group (non-members) to help with the work and pay them.

Although major decisions about the future of the kibbutz were made by consensus or by voting, day-to-day decisions about where people would work are often made by elected leaders. All of these changes create some values/status issues/distorsions that put some of their members off.



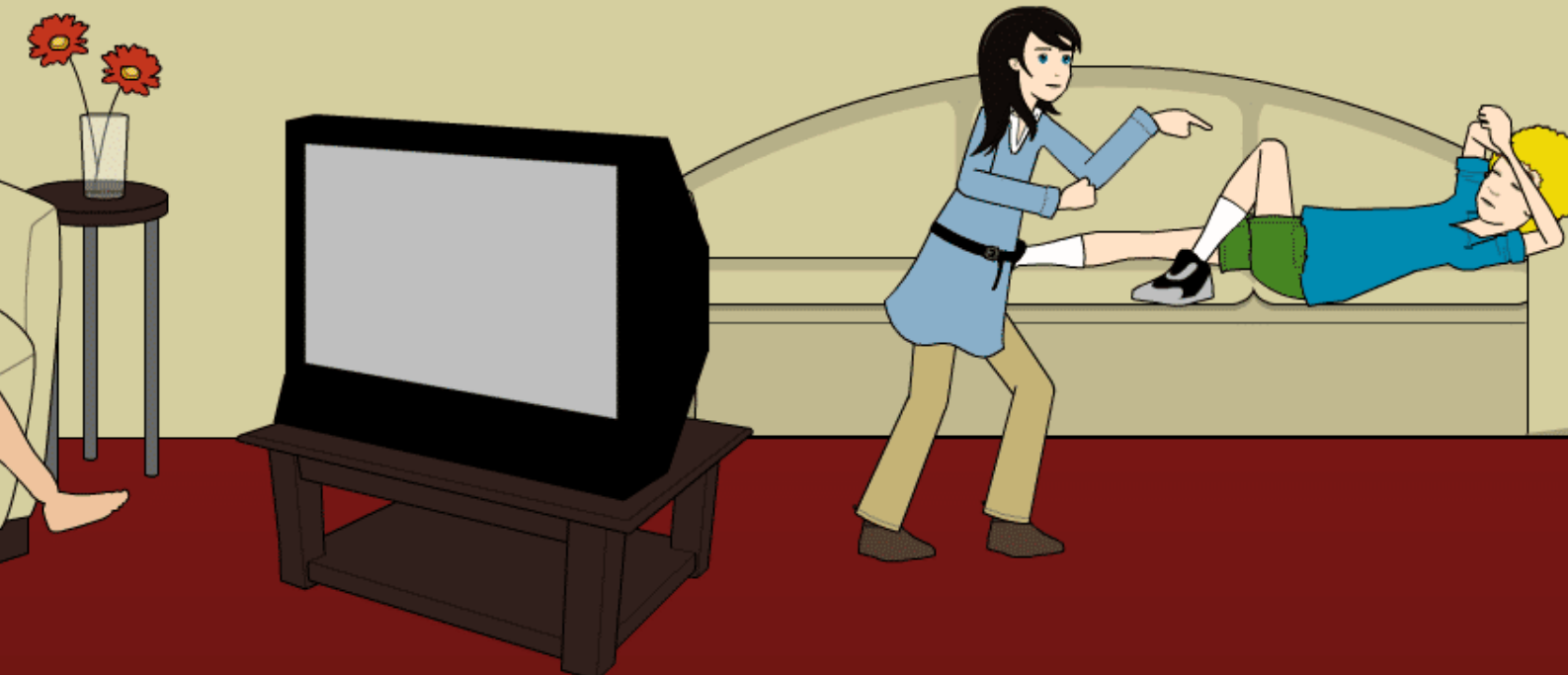
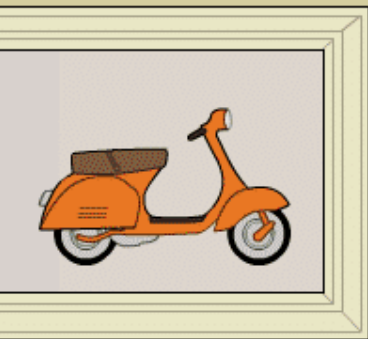
But overall, the crime rate is significantly lower than the national average and a surprisingly large number of kibbutzniks have become teachers, lawyers, doctors, and political leaders.



Many felt like you about some of the rules they put in place. A good number of them started rejecting basic ideas such as no television allowed, no property allowed, or the fact that you have to raise your children in a separate children's home, and that lead to even more dilution of their initial ideals. Some said they were not motivated to work better because they had access to the same things as some who didn't work much, while others said that they developed a sense of 'fellowship' and care for the others.

Kid: Ah, I see. So in the end, it seems like it's not a good idea to dictate to people as to how they should live their lives, like how to raise their children. This seems like a great attempt though. But did it change much of planet Earth's societies, I mean in people's views?

Old dude: Personally I would say that it hasn't even made a dent. They are so few people involved in that, compared to the rest of the world. Also, many of their core values, which should have reflected communism, are too blended and mixed with other values of the capitalist world.





COMMUNISM

*Do you understand
now why the
alternative to the
capitalist world
didn't work?*



CAPITALISM

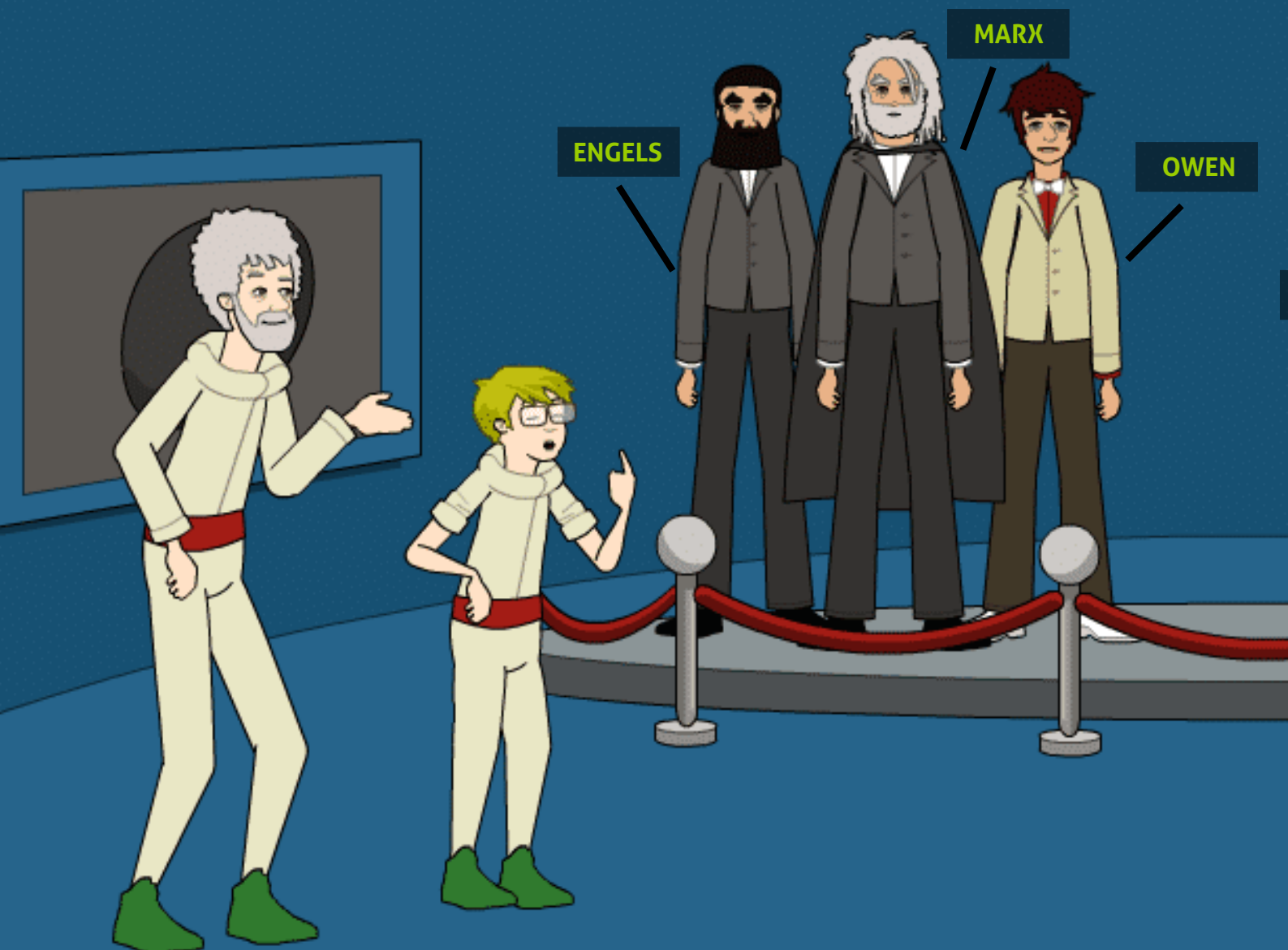
SOCIALISM

*Let me
try....*

Kid: As far as I can tell, the ideals of 'socialism' and 'communism' were never truly put into practice, at least communism wasn't.

Old dude: Yes, and as a result, it creates a huge confusion when people talk about communism on planet Earth, especially when they associate it with Lenin, China, or other tribes that didn't follow the original ideals. Ask any earthlings if they know of any advanced tribe of millions of members ruled by no one and devoid of social classes and money, all based on science? Actually, according to the ideals of communism, the entire world should be like that as a truly unified world. So, they never happened in the first place. Why you think they never happened?

Kid: As I understand it, those who came up with these ideas had very little to say about them. They merely presented some basic concepts that could be interpreted in many different ways. Are you summarizing their ideas a lot for me here?

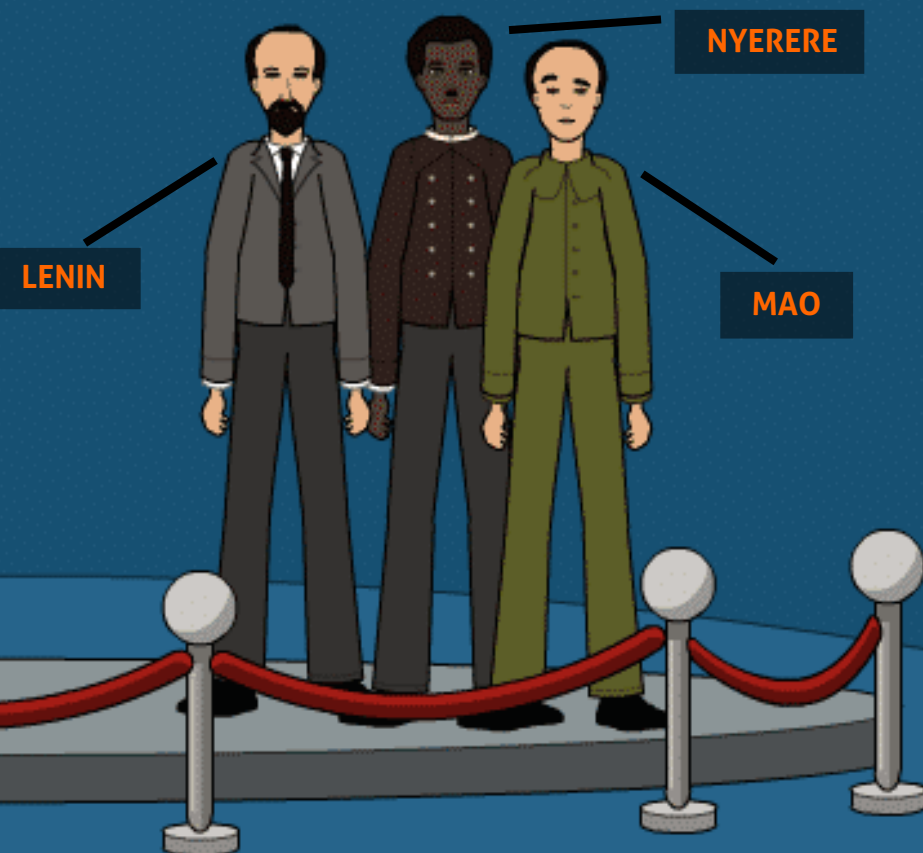


Old dude: *Actually no. I said exactly what they said. They mainly criticized the 'ugly' and 'spoiled' brother: capitalism.*

Kid: *Yeah...because what in the world does it mean to be equal? No classes? What do you mean by abundance? How can you go about creating that abundance? The more I think about this, the more I realize there are too many unanswered questions, even in the ideals. How can you create a new world when you don't know much about how to actually do that!?*

Old dude: *You're a pretty smart kid, kid!*

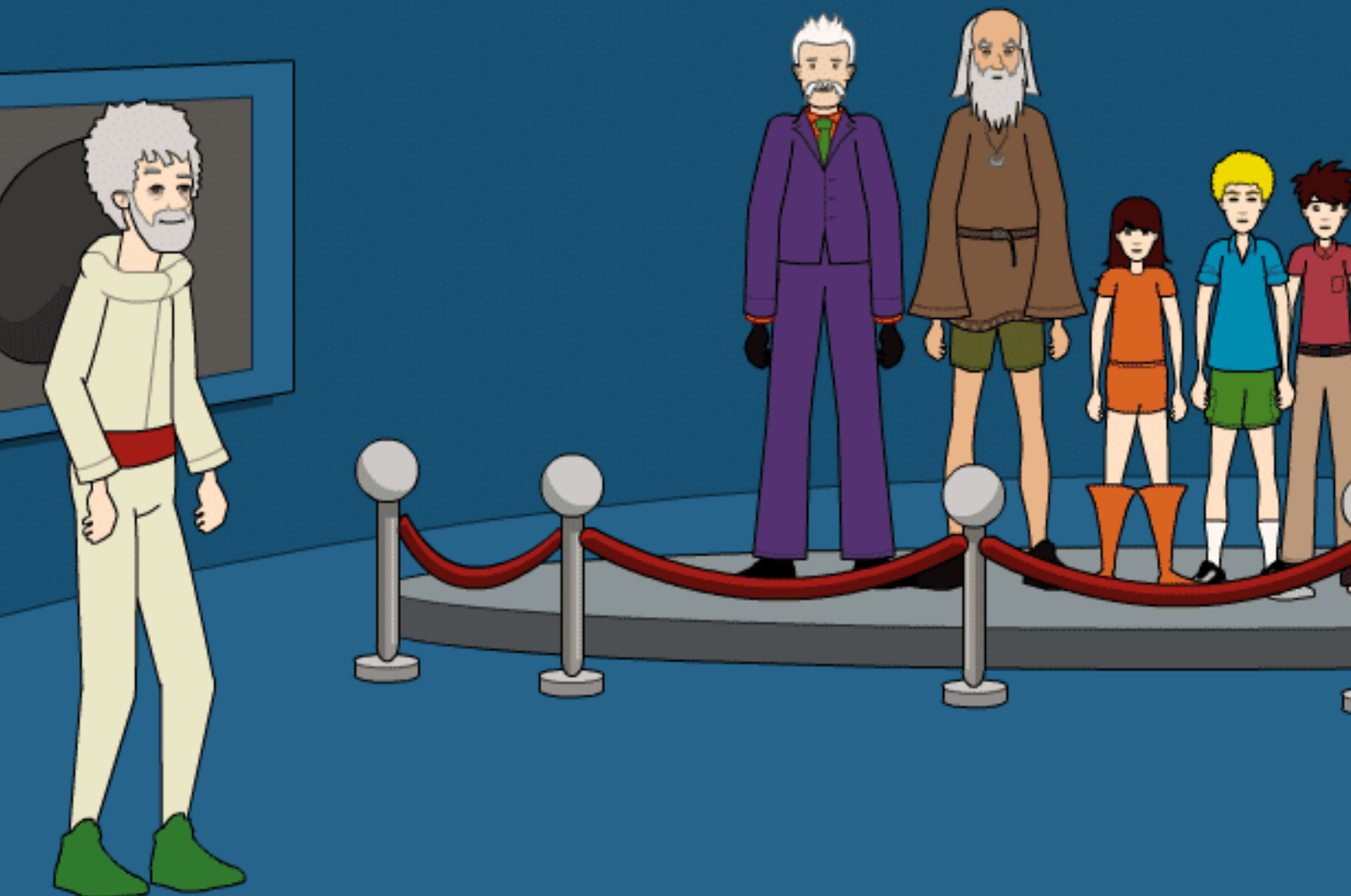
And those who tried to put these ideas into practice on large scales did anything but science. They tried to impose such a simply-described system to masses of people living under poor technological advancements and a primitivism of their own personal judgements. I want to say that I appreciate their efforts to try and create a different kind of world, but when I think of the many deaths and enslaved... I just can't bring myself to say that.



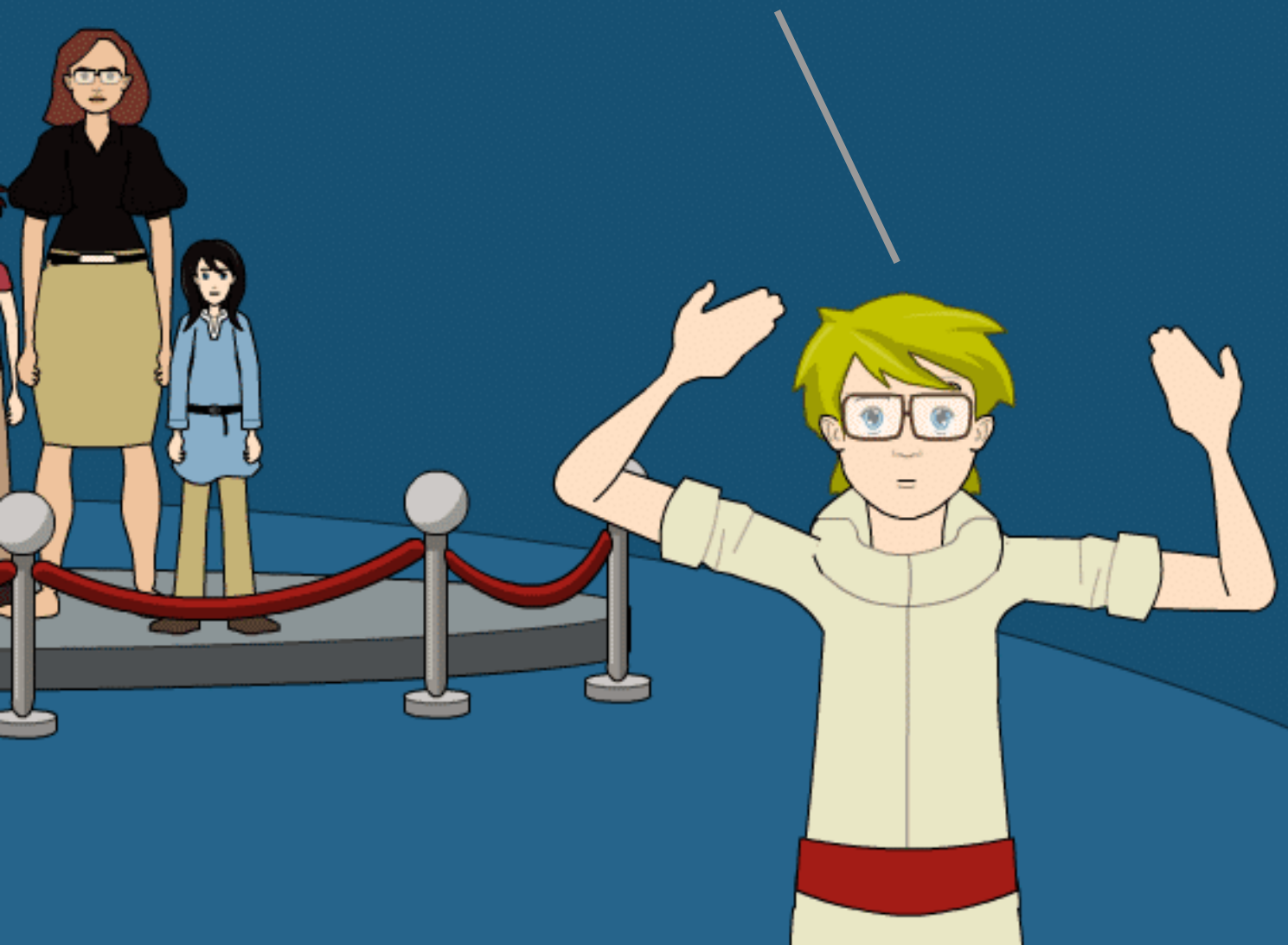
Kid: *Yes! You kill those who oppose you? Don't you have any scientific understanding on how to bridge the differences between people or nations? What about building a society where you can reduce or eliminate crime?*

Kid: *Even those Kibbutz communities that were closer to the basic ideas of communism were also injecting their own values into how they should organize themselves, right!? They were also 'infected' by the capitalist world. I wonder if they ever had any plans as to how you might organize huge piles of people, not just a few hundred or thousand per group. If I understand correctly, many more issues and complexities arise when there are a great many people at stake.*

Old dude: *Yes. And also in Kibbutz communities, they were not technologically advanced, there wasn't an abundance, they grew dependant on their host tribe (Palestine/Israel) for land and funds, and so on. There are many similar self-sustainable mini-societies today, but we are concerned about how we can organize a highly technological society on a planetary scale, right?*



Exactly! But what system should we choose to organize ourselves here on Mars? I am so confused right now.



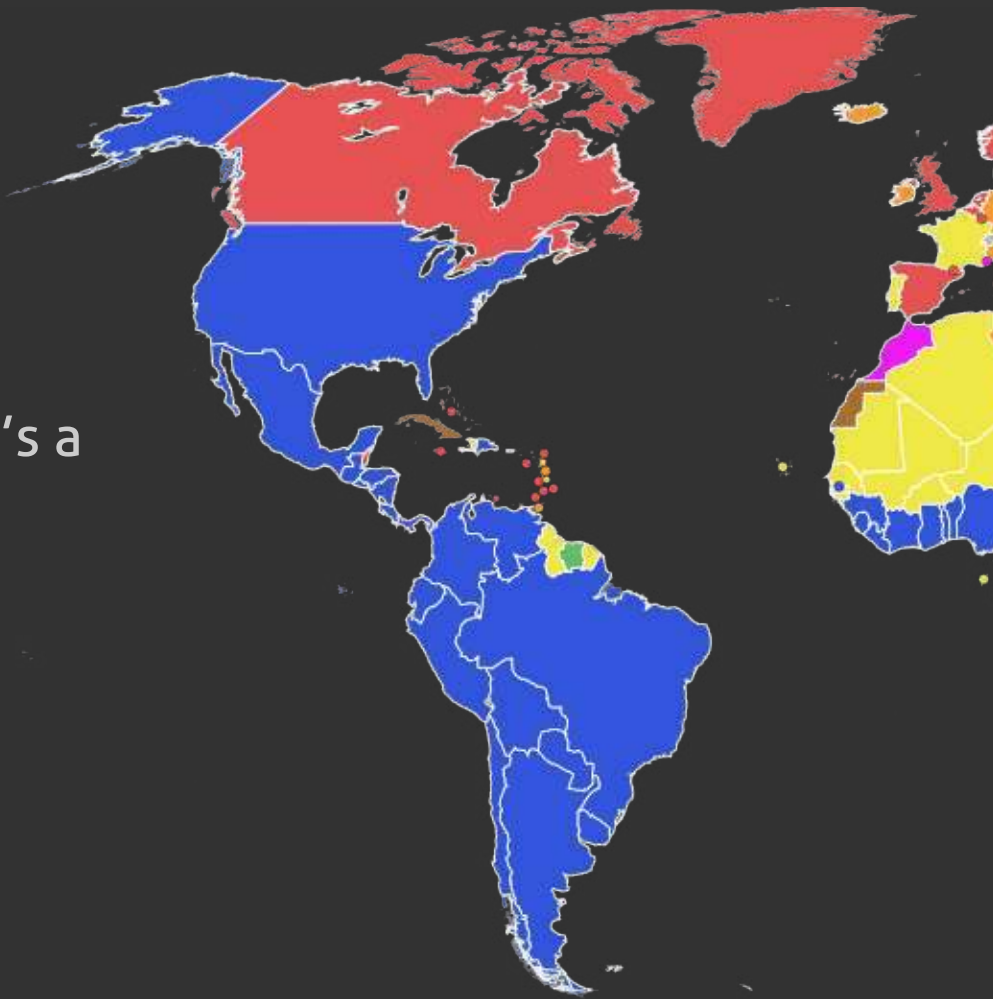
We will get back to the Mars story soon (we won't quit until we manage to help those Martians organize). But first, we need to look a bit closer at the state of affairs today, here on Earth.

To gain more detailed information about the history of socialism and communism, [watch this documentary series](#). Pay special attention to the 'human nature' remark towards the end of the series, as it is just opinionated.

So those who try to control global trade (i.e. control human societies) still fight today over the extremes we've presented so far (capitalism and free market on one hand, socialism and communism on the other - providing the backdrop for the terms "left wing" and "right wing"). While no one goes near those extremes today, nor do they have any real definition for them, they often fight somewhere in the middle.

All of the other systems in the world today are variations of the two we just described; they only differ in their details.

To gain a visual, here's a map of the world:



A person is elected regularly (every so many years) through voting, as chief of the tribe, but he/she usually cannot change the laws. He/she has command over military and other aspects of his tribe.

One tribal chief, plus a lesser one. A chief is directly elected by the people at regular intervals, and the other one is indirectly appointed (depending on the tribe). The big chief usually delegates tasks to the lesser one, who can even change the laws as needed. Combined, they have power over many aspects of the tribe.

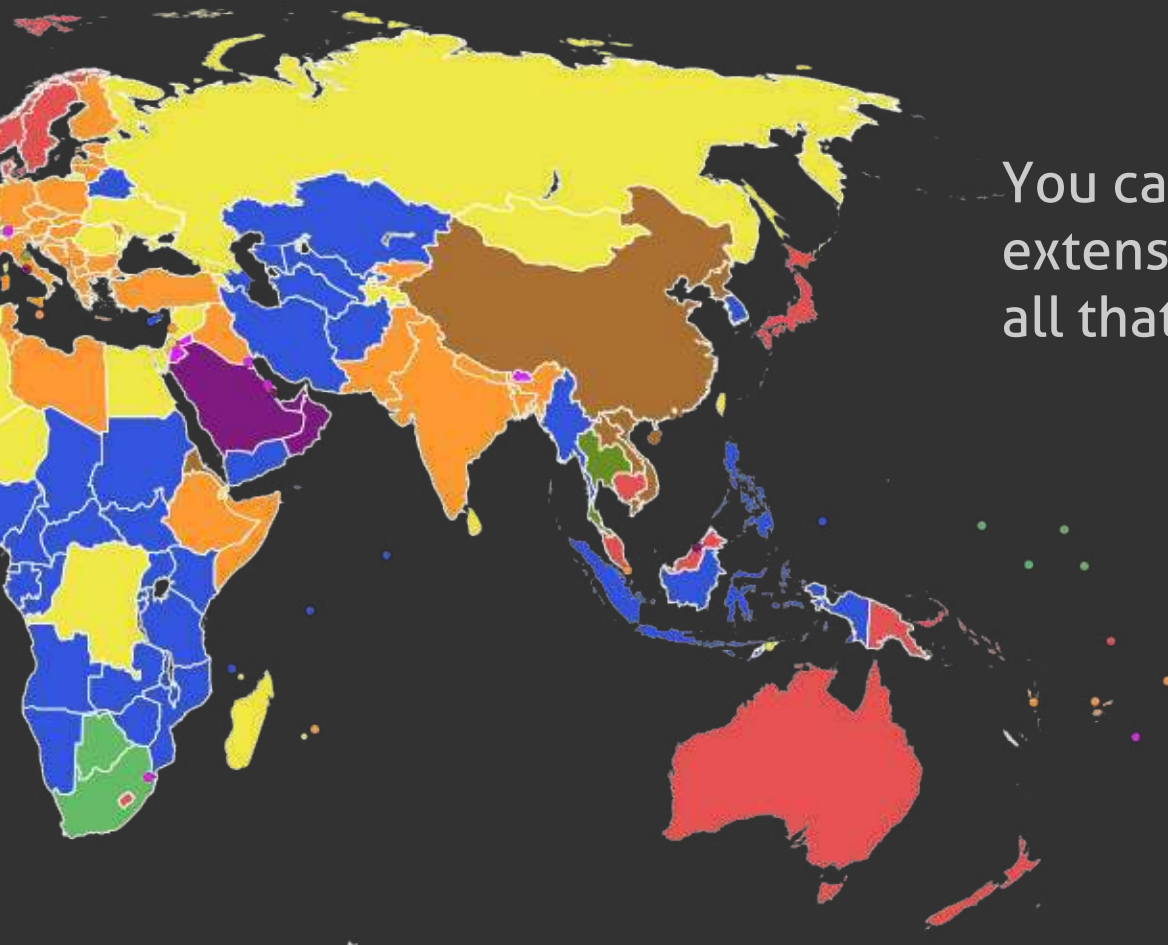
A combination of the previous two.

A mix of two chiefs. In some tribes, one chief is ceremonial; not really elected and doesn't really have much power. Only the second chief is elected at regular dates, while the main chief is mostly like a royal mascot for the tribe (king, queen, etc.) :).

Here they have a main chief, but this one has lots of power and in some cases is not 'elected' by the people.

One chief, with no way to elect others. The chief and the 'people' supposedly work to transition to a communist society.

Military dictatorship.

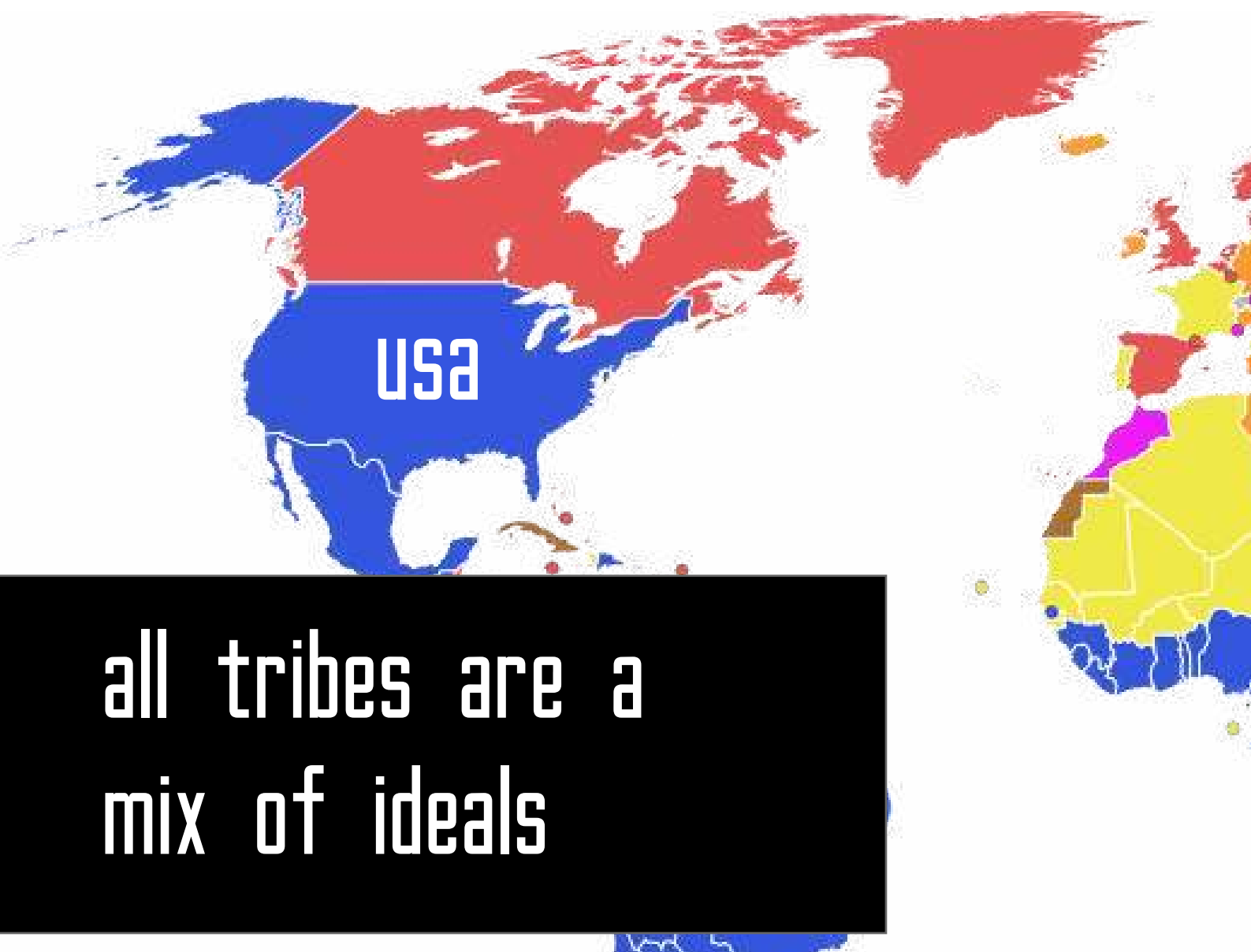


You can read extensively about all that, [here](#).

Since they are all a mix of ideals, let's see what these mixes have brought about.

Most tribes try to merge socialism with capitalism. The US, for example, claims to have a free* market, making them 'capitalists'. Yet under certain conditions, they also provide some free* services for people like Medicare (health care), unemployment benefits, and food allowance programs for the poor, while they also provide infrastructure like roads and how/where to make them, national parks, state-controlled 'public' spaces, along with making laws, enforcing the rules that apply to all of the benefits above, and so much more.

Thus, they are also 'socialists', with a strong flavor of 'dictatorship' (Does the NSA spying its own citizens sound familiar to you?). Plus, if your mum' has a big palace and vast amounts of land, you will also get to inherit that, and then it eventually goes to your kids, and so on. Yeah...so that part is along the lines of 'feudalism'.

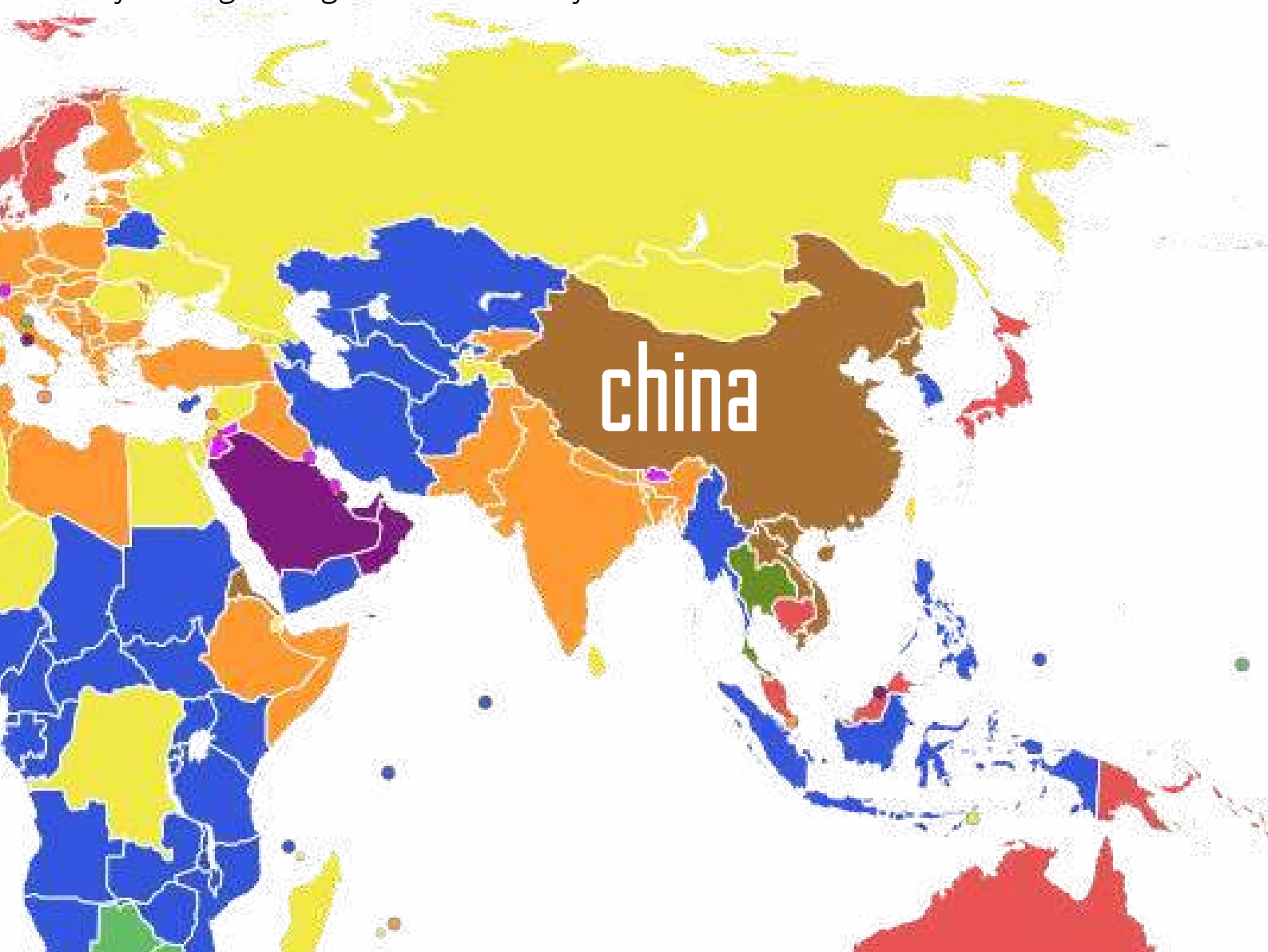


all tribes are a
mix of ideals

In China, it's said that they control people (education, services, etc.) and the means of production, yet the free* market is 'booming' in China and has produced more billionaires than the US([source](#)) while 'hosting' over 64 million empty apartments, all while most of their population remains quite poor. It's rather interesting that they are still labeled by many other tribes as 'communists' (equal society for all!?).

You see the confusion and mutation of those core ideals? There really is no such thing as a socialist, communist, or free-market tribe! All tribes today are a huge and complicated mix of so many ideas. So, try to avoid getting trapped into that kind of debate. When someone says a tribe is communist, just ask them if it has no leader, no money, has eliminated scarcity, and so on. If they say that one is a free* market system, ask them what they mean by 'free'.

You know... think about all of the 'bad' things we presented in the first part; with child slavery, coercion, corruption, no care for the stability of the environment, profit over all, etc.. All of these things happen in all tribes, under all kinds of regimes: from China to US, from Uganda to Canada, Romania to Pakistan, Japan to Brazil. Even with all of these tribes' different 'rules' and ways of organizing themselves, they still face the same issues.



Case in Point: Canada

Canada. Pretty much all have great things to say about that tribe, especially about the health care system. Their healthcare is 'socialized', meaning that if you have a boo-boo, you get it fixed for free, whether you're rich, poor, or homeless. But they still can't escape the money-world. Some of their hospitals have monetary incentives to clear rooms for new patients.

To make more money for the hospital, they rush to clean a room as soon as its previous patient is discharged, resulting in less care for the cleaning. And in hospitals, where diseases can quickly spread, that can easily translate into life and death situations. More so, since they also run on a state budget and experience 'cuts' in those budgets, they are often forced to reduce the staff that focuses on cleaning the rooms, making the situation even worse. For the same reason, they also keep their overall staff at a minimum, and often have to reduce or stagnate scientific and technological progress in the medical field.

They also have contracts with private parking lot companies for their hospitals, so when patients arrive, they have to pay a parking fee. If they pay for a one hour stay and then have to stay longer (which often happens with hospital visits), they are made to pay hefty 'ticket' fines. You see, the ticket man is incentivised to give tickets as he gets a share of the fines. These kinds of things happen with nearly all 'socialized' programs that purport to provide free services for people, though often as a 'hidden' cost. Can you see the maze here? We're not done yet.



Let's now take a look at Canadian businesses (private or state-owned): Plumbers and other repair services are incentivised to inflate problems to get you to pay them more for repairs than they are worth; dentists will often recommend expensive and often unnecessary treatments because they must stay in business, too; Eco, 'healthy', and 'natural' products are often misleadingly labeled to entice you to buy them, sometimes outright 'lying' about various aspects so you don't even know what you're buying; eyeglasses may cost around \$20 to make, but are sold at \$300-\$1,000 just because of the brand - some eye doctors even refuse to provide you with the results of your eye exam, because you might choose to buy your glasses from somewhere cheaper; businesses can buy fake online reviews in order to mislead you about their products/services; and so on.

For a source of all these and more, check out [this video series](#) 'exposing' the marketplace in Canada. All of these examples occur within what some people consider to be the greatest, most peaceful, fair, and most caring tribe in the world. Then consider that these examples cover both privatized and state controlled businesses (both capitalism and socialism ideals). Of course, you might recognize that these same practices occur within your tribe as well.



These are not 'petty' crimes, and they happen on a daily basis. When I went back to Romania some three years ago for the holidays, there were many taxi drivers at the airport, all pushing their offers in your face from the moment you exited the terminal building. We knew that there are many taxi scammers in Romania, so we paid close attention to their offers. We chose one that had a price tag of 1.9 THINGS (Romanian currency) per km, because that price was close to 'normal' taxi prices in Romania. When we arrived at our destination, we had traveled 10 km, thus around 19 THINGS ($1.9 \times 10 \text{ km}$), but the taxi driver was like: "Hm, no....it is 190 THINGS!". WHAT?!?!

Here's the trick he plays on his riders/victims: his price sign indeed said 1.9, but beneath the sign was also the word taxi. He said that the decimal point dot between the 1 and 9 was actually the dot from the letter "i" in the word "taxi". So it cost was actually 19 THINGS/km. There's no doubt that the guy was creative, no argument there, but for me, that situation perfectly describes the entire world of capitalism and free* market combined with socialism that most of us live in. I see no difference between that and a cereal box label that says it contains this "healthy substance", but then later learn that you have to eat 20 boxes of their cereal a day for their special substance to have any effect on your health (especially when half of each box is filled with air).



Or when they advertise Lasik surgery at only \$490/eye, yet when you go there, the eye doctor says: "Ah, this only applies for this range of eyesight problems." (only for those who still see rather well), hoping that many will choose to pay much more to take advantage of their offer, since they are already 'there' and excited at the thought of improving their poorer vision. Or those labels that say the product will improve your health when it does no such thing (and maybe the contrary happens). Or when they abuse words like 'eco' and 'natural' to mean whatever they want it to mean. Or just in general, like when they price things at 4.99, 1.95, and so on, just to confound you into buying more.

When I arrived in Romania, after a fight with the taxi driver that came close to than a verbal fight, I went with a friend to an open field, where people sold all kinds of stuff from DVD players to live pigs, machetes to smartphones, underwear to fruits... There was lots of mud, lots of noise, and all of the 'merchants' wanted you to buy their products. In other words, chaos! It was like a very bad dream. You could find \$500 smartphones being sold for \$50, yet the seller would not allow you to test it to make sure it works. You want it? Then you have to buy it - then test it. Too bad if it's not a good one, or that the mislabeled box only contains a "case" for the device, as it often turns out. Desktop computers with obviously no power source to test them, yet they were selling them. There were even gadgets that the sellers had no clue as to what they were. It smelled like a scam from front to back, and you had to be extra careful with your own pockets. While you may have gone there to buy something, others were there just to pickpocket your money.



I'm describing all of this to you to again emphasize how I view nearly the entire world today. I see no difference between these kinds of chaos markets to the 'real' ones, where it may smell better and people can do the acting part better and look nicer, but they all have the same obsession with making a profit at any costs.

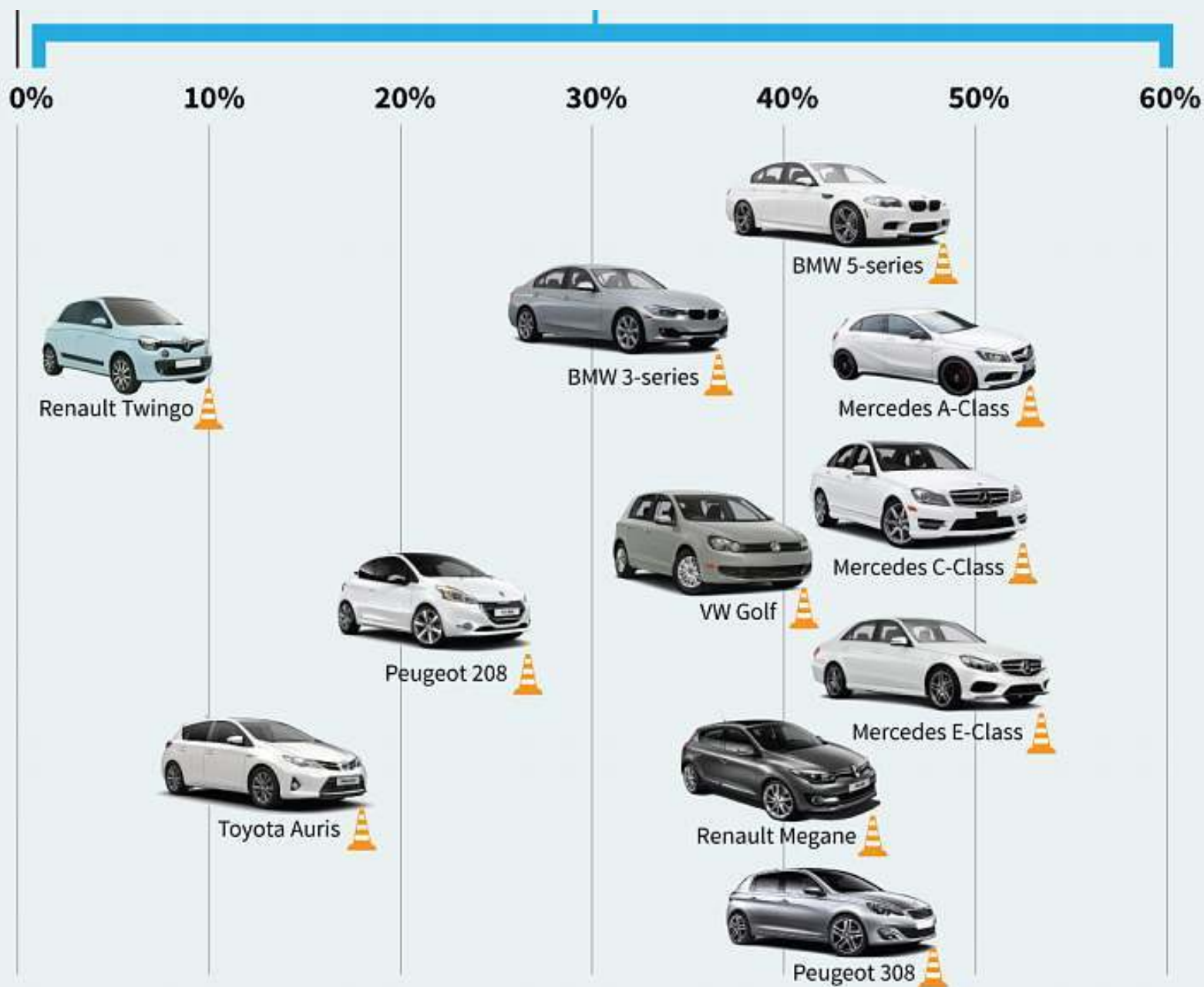
laws rarely, or more likely never, stop crimes:

LARGE CAR COMPANIES:

Volkswagen, the second most powerful car maker in the world, is also the company that was recently discovered to be 'cheating' most tribe's rules to a huge degree. You see, tribes say: "We need to cut down the CO2 and other 'harmful' vehicle emissions to reduce pollution and prevent global warming, so no vehicle is allowed to emit beyond 'this' threshold!", making that a law for all vehicle makers to respect. Volkswagen then decided: "We can make a huge profit by installing a smart device in our cars that, when they are tested, will meet the emission limits of the test, but when they are used on the roads, they'll emit the vehicle's normal emissions, which are 40 times over the limit. People will flock to buy our low-polluting cars, since we'll be able to market them as being so 'eco-friendly'." Well, it turns out that they've been doing this for the past 7 years and it was only discovered, by accident, a few weeks ago ([October 2015](#)). It seems rather obvious that they don't care about the environment or our health; only for growing their business. It's like they said "So, we can continue to pollute the environment, which eventually leads to the destruction of our species and many others, but who cares? We'll make a ton of extra money if we just install this device in the cars we make. Well, that sounds like a viable business plan to me. Let's make some profits!" That's how insane it has become. In case you didn't know, Volkswagen owns Audi, Bentley, Bugatti, Lamborghini, Porsche, and many other carmakers and models.

They care so much about maximizing profits that they're even willing to risk the object of their devotion, profit, since they are screwed if they get caught, right?. I mean, if you were the second largest auto manufacturer in the world, with so many millions of cars on the road, do you believe that doing something like this will go unnoticed? But wait! They ran with a similar scam in 1974, and only paid a \$120,000 fine when they got caught ([source](#)). So much for accountability...

Unfortunately, there is much more to all of this. Once the first Volkswagen domino fell, things quickly escalated as it was discovered that BMW (Mini, Rolls Royce), Mercedes (Maybach) and Peugeot were all emitting 40-50% more CO₂, burning a whopping 40-50% more fuel per mile/km than what the automakers 'officially' claimed. The average gap (lies) was about 8% in 2001, and had increased dramatically to 31% by 2012. The results came about by analyzing 600,000 cars from 11 different datasets across the EU ([source](#)). Surely, the number of protection laws and their severity toward offenders (especially "repeat" offenders) must have increased during this time. So how were they reprimanded and convinced to never try this again!?



Well, you can [read here](#) about some big car companies lying about the safety of their cars, emissions, and so on, and how they 'cruise' away from prosecution by paying "Let's forget all about this" fines.

COMMON WAYS CARMAKERS EMISSIONS AND

Disconnecting the alternator prevents the battery from charging, and reduces energy use.

Using higher gears can operate more efficiently.

LABORATORY

Carmakers can optimise the engine controls to reduce emissions.

LABORATORY

Careful lubrication and use of special lubricants help the car run more efficiently.

LABORATORY

Altering wheel alignment reduces rolling resistance

ROAD

Fitting special tyres with a lower rolling resistance.

ROAD

Overinflating the tyres reduces rolling resistance

ROAD

The rolling road is programmed with the minimum weight or inertia class.

LABORATORY



Laboratory instrumentation

LABORATORY



Optimising the Ambient conditions

allow the engine to
y than normal.

allow the engine to
y than normal.

Taping over indentations or protrusions on the body reduces aerodynamic drag.

Pushing the brake pads fully into the callipers reduces rolling resistance.

CO₂ results declared by the manufacturer can be up to 4% below the actual test results.

Taking advantage of test tolerances and Adjusting the results Header

test drive & conditions

OTHER BIG COMPANIES/INSTITUTIONS:

Speaking of profit over human existence, ExxonMobil, the largest oil company in the world, apparently knew about climate change issues since 1981, seven years before it became a public issue, according to newly discovered email from some of the company's own scientists. Despite this the company spent millions over the next 27 years to promote climate denial ([source](#)). For the sake of profit, you can even interpret laws as you want to. Take, for example, the European Union's (a bunch of powerful tribes) move several years ago: "We've taken a tough public stance on increasing the use of renewables. Well, we can think of wood as renewable energy, since trees grow back, right? So by this definition, we can burn wood to generate energy and more easily meet our global goals of switching to renewable energy, since trees are a renewable resource. Brilliant!" Not only did they actually follow through with that horrific plan, they are still doing it, ignoring that even if the CO2 produced will likely be reabsorbed later by a new generation of trees, the process can take decades (trees don't grow in days), while the practice also sparks huge incentives for other tribes to cut down their trees to sell them to the EU tribes ([source](#)). What a mess...

And let's not forget about the tobacco companies that strongly denied the harmful effects of their products for years. They paid scientists to do that. They even paid doctors to appear in TV commercials saying that smoking is good ([source](#)). Unfortunately, we are now entering a similar situation, as processed red meat was just confirmed as a type one carcinogen, meaning that there is no doubt now that it causes some types of cancer ([source](#)), something that was suggested for a while now. We previously published an article on the impact of livestock and meat consumption, but the question now is what will happen with the big red meat industries. Will they accept this and advise their 'customers' about the effects? Will they take relevant measures on this: close their businesses, reduce their production, etc.? Will the government ban them? Personally, I doubt anything will happen, and even if it does, it may take many years and many more sick and dead people before anything 'substantial' happens. ([source](#)).



The incentive to lie, even if human health is at risk, is a common practice today.



If big companies like this, so exposed to the entire world, are willing to risk so much for profit that they blatantly defy tribes' rules, imagine all of the things that the many more smaller ones attempt to get away with. Now imagine the big ones that have not been caught yet...

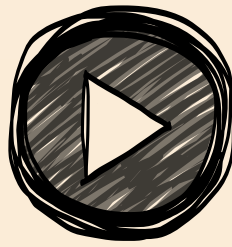
We told you about people selling their organs for money in the first part of this book, and they still do that, even if it's illegal in most tribes. 'Well intended' legal folks try to implement measures to combat such situations. In this case, they said the donor must be interviewed to make sure that they are willingly 'donating' the organ for charity, not for money. That was their solution to the problem (a law) in order to make things more 'just' and 'legal'. In response it's become a common practice that the ones selling their organs (for lack of money - 'wink wink') are trained by others on what to say during these interviews in order to 'pass' them. Simply put, when you try to stop people from making a profit in a world based on profit, then people will always find ways to cheat. The same principle seems to apply to all parts of today's societies. For every issue that exists, there are people trying to solve them with more and more rules and laws, yet they seldom have any real success in eliminating the issues.

Socialist programs are not only subject to mutilation due to the market system, as we've showcased so far, but they have become so molded on the market system that even its free education system (socialist) focuses almost exclusively on preparing children to become workers, thus 'merchants'!

The need is not to have free education, but a diverse, scientifically literate populace within a saner society. Not free healthcare, but easily accessible and technologically progressive healthcare. Trying to inject 'free' programs into today's world is a long practiced tradition, and while it can be shown to have helped some and has brought about advancements, both within the context of today's monetary system, it's still little more than a bunch of 'band-aids' for ongoing problems, with little to no effect on curing the actual problems (and often making the problems worse).



I'm going to resist trying to point at examples of corruption and other ill effects of the capitalist world. The enormous negative repercussions of the monetary system are so ubiquitous that it might prove easier to try to sum up the squares of all numbers in existence, but I am sure you're already well-aware of the kinds of problems we're talking about here. *SIDE NOTE: we will address the money influence in the scientific field when we will make a series of articles about SCIENCE.*



having a good business does not mean you will succeed.

Corruption and other 'bad' outcomes are widely recognized effects of capitalism and free* markets, but I want to point out something else. The concept of capitalism and free* market is that if people are permitted, they will come up with increasingly great products and great services because, it's claimed, if you make a bad product or treat your customers badly, you will soon find yourself out of business. But this appears to be pure illusion, an overhyped ideal, or some twisted combination of both.

Here's why:

In capitalism, it's said that if you have an idea, you can make it into a business, and if your idea is better, you will overtake whoever had a business based on a similar one. But that's almost never the case, because big companies can easily, and often do, buy up small companies with the best ideas. Who owns WhatsApp and Instagram now? Facebook! Not because Facebook came up with those ideas, but because they saw that these two companies were growing and wanted those products under their own name and control. Big companies often reduce their prices, easily absorbing losses in profit specifically to hurt their growing competition (who cannot afford such losses), and then raise their prices again once that competition can no longer compete and closes its doors. So, if I am Google and I normally charge \$10 per 1TB of online storage, while other competitors charge the same, I might be able to afford to drop my price to \$7 so that I keep my customers, while convincing many of their customers to migrate to my service. I will succeed at 'twice' hurting my competition (they lose customers, while I gain them), despite my short-term loss, because now I've made my business more profit-safe.

Did you know that Bill Gates bought a small computer operating system from a dude, tweaked it a bit, and then built a multi-billion dollar company off of the results, making him the richest man in the world for a very long time?
([source](#))

Many established big companies today have little or no competition because of similar practices.

A 'capitalist' recently bought the rights to an essential drug used to treat patients with malaria, toxoplasmosis, some cancers, and AIDS. As its new 'owner', he raised the price from \$13 to \$750 per tablet ([source](#)). That is such a huge unreasonable increase in price that it can only be called 'criminal'. On another note, if this free* market is supposed to exist to satisfy people's wants and needs, what about those whose wants and needs are in a minority? Why do you think there's very little investment in drugs that only help a minority of people?

Wouldn't you think that if you develop a great Youtube channel, it would become a well-paid one? Or if you write a very important book? Or come up with great inventions? Well, more than likely, it won't. If that was the case, we would have had self-driving cars on the roads long ago, maglev trains, truly 'smart' phones, better healthcare, all nutritious foods, and so on.

“

Come on in! We buy
promising companies
that compete with us, so
we can grow more and
more powerful by
eliminating any
competition.

SIT DOWN.
HAVE A SNACK.
SIGN THE PAPER,
TAKE THE MONEY.
NOW, GO BACK!

”

WHAT A QUACK....



criticism, corruption, shady practices and the like, won't close down a business.

Meanwhile, so many people complain about how Apple uses 'planned obsolescence' to force people to prematurely buy new products from them, yet the same people still continue to buy Apple products. Volkswagen managed an awful scam for years on an unsuspecting public, yet it's highly likely to survive the aftermath of the scandal and people will still buy cars made by the company. Facebook, as we detailed in a previous [article](#), employs a suite of extremely unfair tactics to their network, and many people who are very aware of it still use Facebook.

Or consider the leaked Sony emails that revealed how such huge companies are full of..., well, 'assholes': people in powerful positions within those companies who 'talk trash' behind the backs of their clients (spreading gossip and revealing their personal information); ensuring enormous profits for some, and little for others; a steady money flow for paying ('bribing') publishers for good reviews for their movies; how they rely on sequels of successful movies and new movies that are based on best seller books because they don't want to risk money on anything unproven; and so much more. You can see and search all of their leaked emails [here](#).

Movie companies (Sony, Paramount Pictures, 20th Century Fox, Universal Studios, Warner Bros., Columbia Pictures) hire lobbyists to push laws that favor them (a normal thing for all large companies nowadays - source 1, 2) and to push for harsh punishments for people who illegally download or watch their movies (meaning laws applied to most people in the world with an internet connection) ([source](#)). As a movie fan, aren't you repulsed by all of this? Maybe yes, but you will still watch movies, right? Would you expect these big movie companies to disappear after high-profile cases of corruption, leaked egocentric emails and displays of how seriously insecure many of them are, when bribery, 'immoral' behaviors, and so on come to light? No, they won't.



SAMSUNG

Disney

Coca-Cola



Nestle, H&M, and all of the other businesses involved in what we presented in the first part of this book (enslaved children, waste, pollution, etc.), Microsoft, FIFA, IBM, Coca-Cola, McDonald's, Google, Samsung, the major auto makers, Disney, AT&T, Amazon, and nearly EVERY other big company (and many smaller ones) found to be involved in corruption, scandals, and shady practices, continue to survive and thrive. Go ahead and think of any big company. Then run a web search on its name, along with the terms "corruption", "scandal" or "criticism", to see what pops up.

So, consider the ideal that states: "Within a free* market and capitalism system, businesses will focus on pleasing their customers, and not engage in shady behaviors that could adversely affect their image.", and recognize that this is only valid 'on paper', not in reality. The reality is made possible by lack of other options (monopoly, industry collusion, 'bought' legal protection against lawsuits, etc.), 'positive' advertisements that these companies push so that people forget about their 'bad' past, or just because people don't care or aren't motivated enough to organize against such practices.

Capitalism's competitive approach (maybe) looks good on paper, but it has become disastrous in practice, despite the fact that it helped bring about significant developments in technology, services, and goods. But as we argued in this article, far more progress could have been made using a completely opposite approach, through cooperation.

We will now leave behind the world of capitalism and free* market, as we've presented plenty of its harmful effects over and over and over again throughout this series, and with many other articles that we've made on the subject, all of which you can find right here. I mean, if people are willing to intentionally jump in front of cars in some tribes (video), because they might get money if they are 'lucky' and get run over, then what more is there to say about the sick, twisted world we live in?!?

One thing we'd like you to take away from all of this is that when tribes proclaim themselves as this or that, they are neither this or that. They all qualify as a salad, a mix of this, that and the other.

This is why in 2008, the credit crises in the US led to 30% unemployment in Spain, and an outbreak of bird flu in China dramatically increased the price of chicken in Canada. They are all connected and are basically the same, differing only in the details of their money-based rules and notions/rituals.

OUR BLESSED HOMELAND

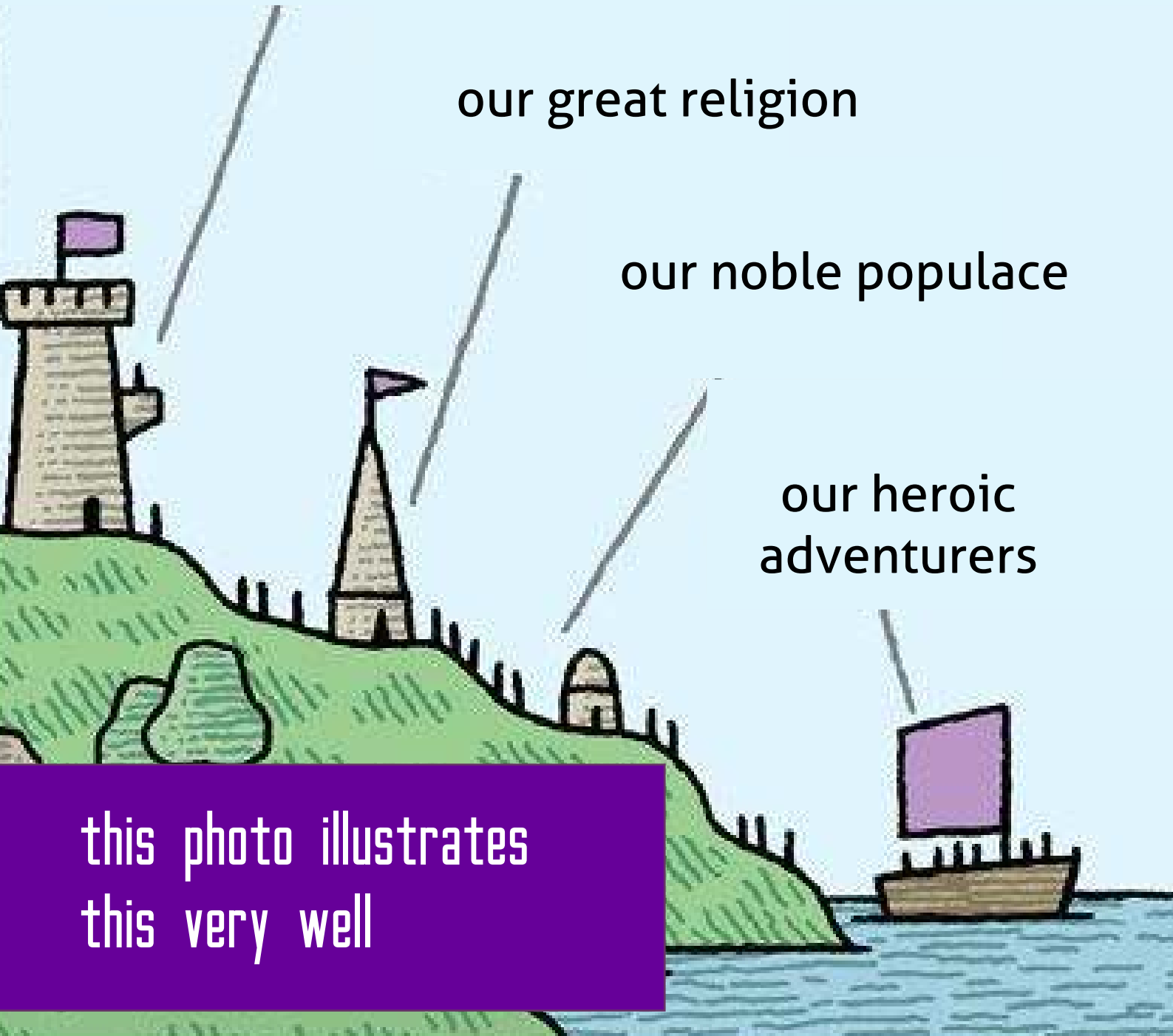
our glorious leader

our great religion

our noble populace

our heroic
adventurers

this photo illustrates
this very well



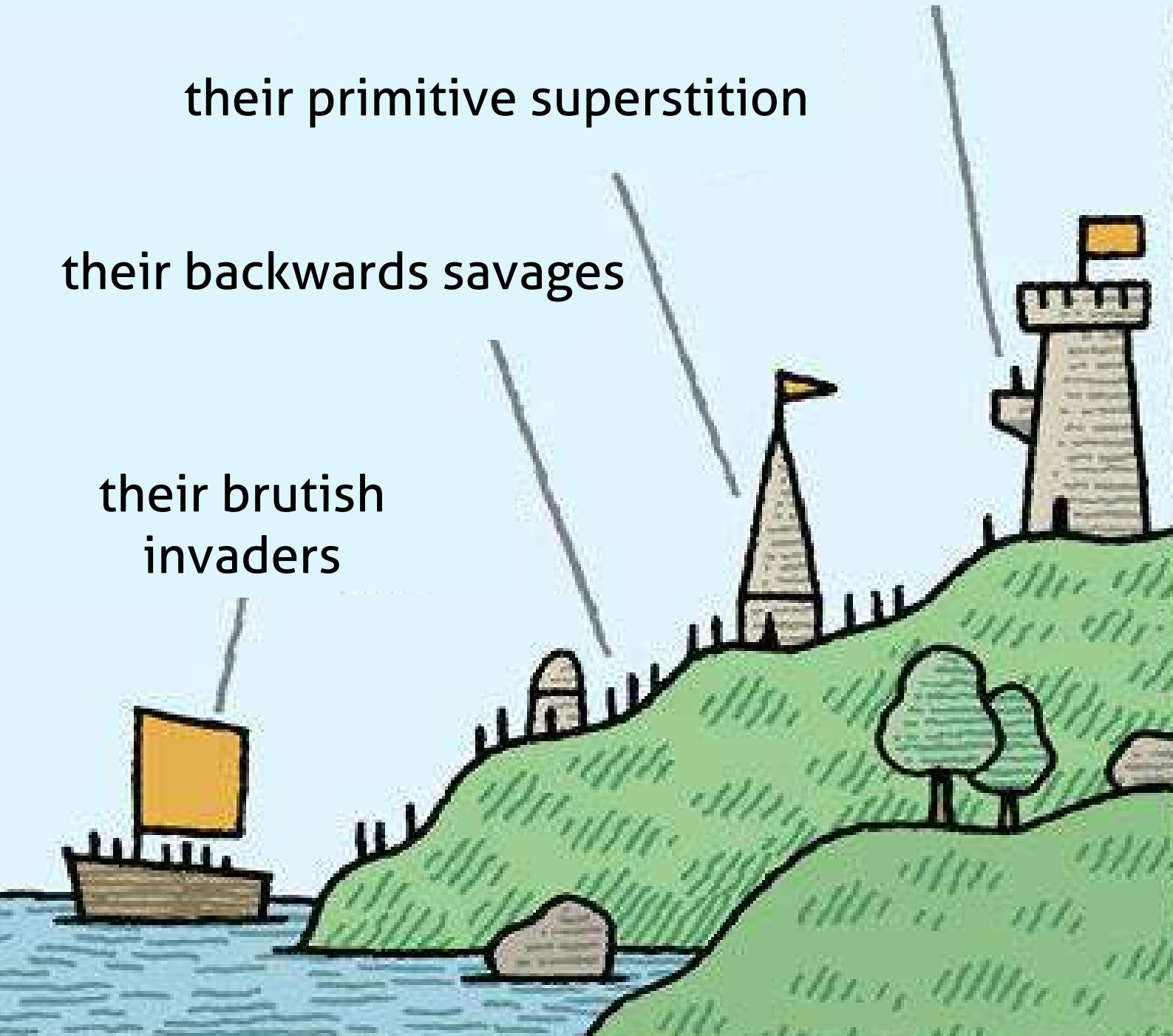
THEIR BARBAROUS WASTES

their wicked despot

their primitive superstition

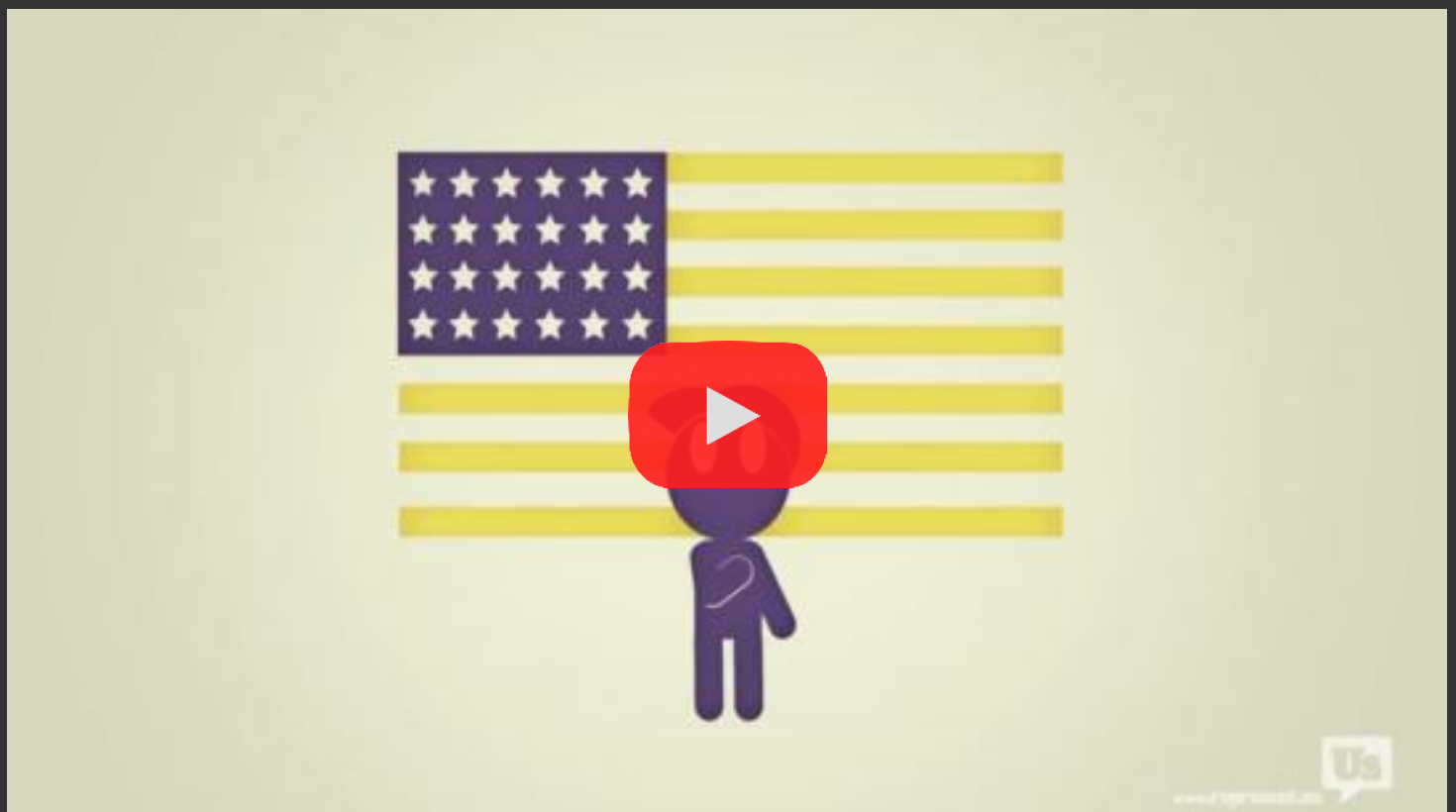
their backwards savages

their brutish
invaders



As for democracy... Well, think about it for a minute. If it was really up to 'the people' to determine what they want, then online copyright probably wouldn't exist, as the vast majority of people break those laws without much thought. Tribes probably wouldn't go to war, as most people don't want that. Salaries would increase, work time would be reduced, prostitution and drugs would be legalized, some 'leaders' might actually be executed, as many seem to proclaim this wish, and so on. Of course there is no such thing as democracy, and even if the notion sounds good in principle, it's not, because it says that whatever the majority wants, it should get. If 51% of the people want all people of a certain color, religion, nationality, etc. in prison or whatever, then fulfilling that wish qualifies as democracy. **If science was managed as a democracy, we would still live in caves, and there would be no science.**

Plus, just like all of the other governing ideals mentioned within this book, democracy is always merged with other governing concepts, which makes what was originally proposed (and still claimed) nearly irrelevant.

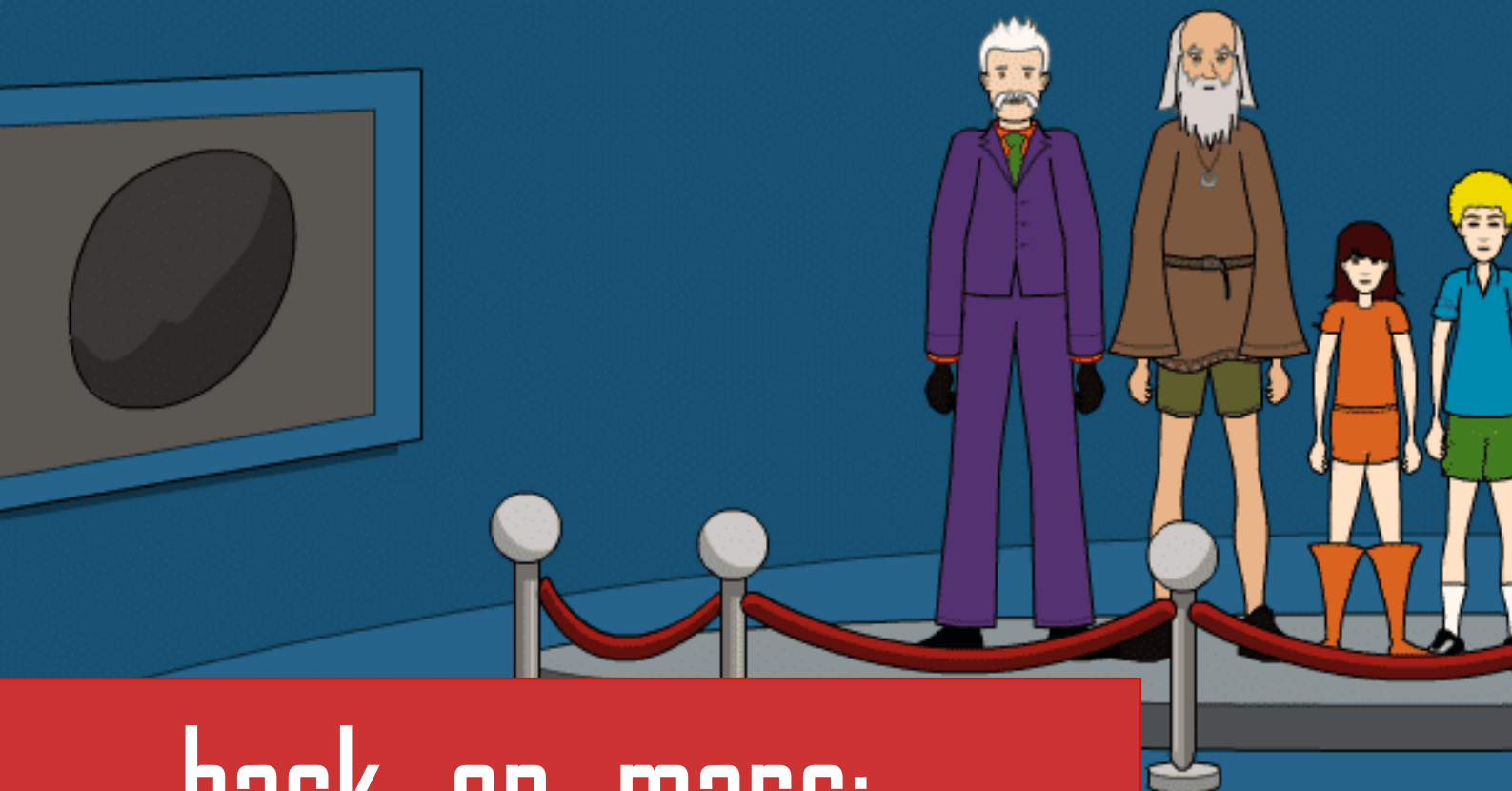


The solutions presented at the end of this video are, as we've detailed so far in this book, merely an attempt at the patching of symptoms.

SO TO ALL OF YOU MIGHTY
UGLY TRIBES, STOP WITH ALL
OF YOUR PRETENDING TO BE
NEW AND BOLD, AND LET'S
LOOK AT ALTERNATIVES
BEYOND THIS.

While Owen, Marx, Engels, and others like them tried to grow a set of bold ideas about organizing societies with something other than capitalistic profit-driven methods, they failed to provide a clear path. They also did not have the knowledge or technology that we have available today.

Old dude: *Kid, you're right. It is confusing as to what we should choose, but we must first look at other ideas before we can decide. Ok? This is a very complicated matter. After all, we're trying to organize billions of martians here; many heads with many different brains (personalities) that have many different ideas. Technology is always evolving and we should not only try to keep in step with the changes that brings, but also be able to fully implement and support such changes. By knowing how humans have tried to organized their societies so far, we can better understand what worked, what didn't, and why. So, try to be patient.*



back on mars:

Ok, I agree. I'm really curious about the other ideas and I understand why it's important to learn about them all before deciding.



Old dude: *Hey Socialism, Communism, Feudalism, Capitalism, Totalitarianism, and even you Democracy, we do understand that all of you, or at least some of you, are honest and truly want to provide what you think are sensible ways for organize ourselves, but we're going to look at some newer ideas, ones that have emerged from our present-day scientific and technological advancements. I heard that the Sharing and Gift Economy sisters have recently arrived Mars to present their ideas*



Technocracy, Open Source, Sharing Economy, and more are on their way as well, so we want to learn from them too. We also learned that some 'special guy' is expected to come to Mars afterward, and we've heard he has the most comprehensive, detailed, and up-to-date plan for organizing ourselves. So we're going to wait and see, but thank you a lot for your efforts. I think that without some of you, we wouldn't have made it this far. But I also recognize that because of some of you, far too many have needlessly suffered, died, and/or have lived miserably simple and unfulfilling lives on Earth, and we're not exactly happy with the idea of continuing that here...





Ok my fellow Martians. Now that our first guests are on their way back to Earth, let's see what the second, final group of guests will propose for us to organize our Martian society. We have little time to lose, as we need to get things up and running here on Mars and get on with our new lives, so let's bring them in.



TECHNOCRACY:

*Hello Martians. Quite a trip here. Glad to see you all.
Let's get down to business.*

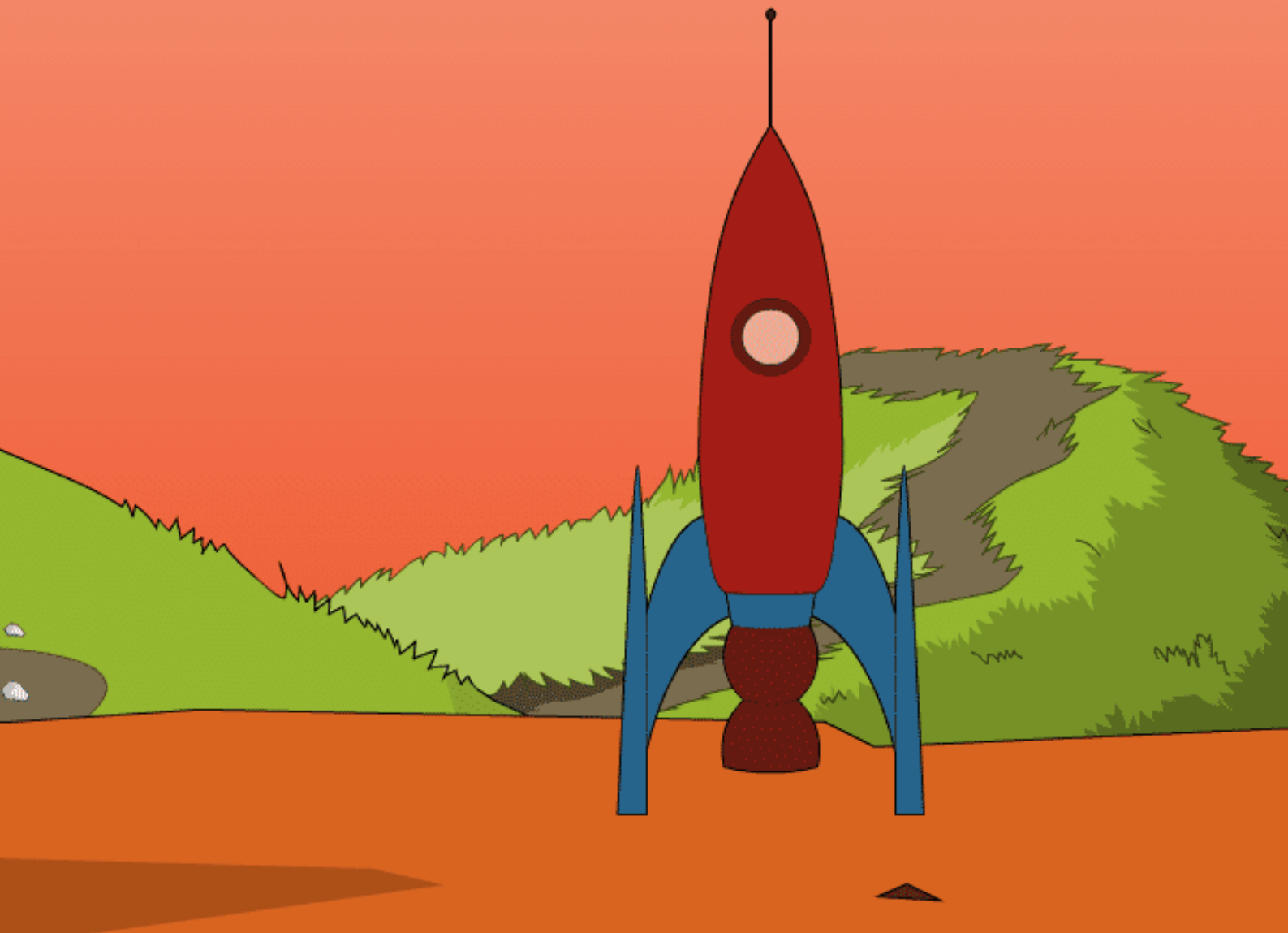
I'm aware of the presenters who were here earlier, but I believe they give far too little attention to technology and how important it is. After all, we all came here on a rocketship. My proposal is similar to what communism proposed (in a way); to eliminate money and all 'economic' measurements of skills and products, replacing all of that with highly technical people who can make the most intelligent decisions for all.

What I mean is this: people don't elect who will perform heart surgeries. Such decisions are arrived at, based on the skills of people. If one becomes skilled enough by going through the process of schooling/education, then he/she will be a surgeon. So who will decide what transportation system we should use? A transportation planner who is highly educated in that area. How to raise children? Highly trained psychologists, and perhaps sociologists. The same goes for construction, engineers, food growing, chemists, chefs, and so on.



The society I propose should not have elected leaders like a democracy, but instead, skilled people should be the ones deciding for the bits and pieces of society's needs. Many roles, all based on technical skills. We need to use the scientific method to solve social problems, because every single issue has a mechanistic nature to it. That goes for everything, including human societies. It is just a matter of understanding the mechanisms at work, and arriving at appropriate decisions. But democratic controls for any non-technical issues and decisions should still be allowed, of course.

We first need to conduct a survey of all available resources within a given area, to make sure it can sustain the level of production and distribution we'll need. Speaking of that, in order to have an inventory of the resources, energy, and what people consume, I propose to measure everything in energy units. So, for example, a certain kind of gadget requires a specific amount of energy to produce (from mining to refinement to production to distribution), so that should dictate the price for that gadget. So the gadget's energy-price reflects all the energy that went into the production and distribution of that gadget, from raw materials to the final product.



Now you may be wondering if this a just new kind of capitalism or money system? It is not. First, this is a direct measure of resources (not an abstraction like money). Second is the way that we distribute and make use of these energy certificates. We give the same amount of certificates to everyone (black, white, short, tall, female or male) and they are only valid for the individual's personal use, so they can't be shared with anyone else (plus these energy credits are recycled after a period of time, so they cannot be accumulated). This way you cannot bribe, gamble, corrupt, and so forth. All public services (such as local transportation, health care, housing, education and our infrastructure and its maintenance) will be provided for free, without any personal expenditure of energy units. An individual's personal energy units would be used for food, personal effects and entertainment, creative development and expression.

And, very importantly, we propose to create an abundance of goods and services and so these energy certificates will mostly be for keeping track of resources and what people buy, to know what to produce, but not to limit what people can do because they will have enough of these energy credits to access pretty much anything they want.



That being said, we expect crime will be cut down by a huge degree, since people will have access to what they want, as there is no human nature. It is human behavior and that behavior reflects the environment that each human experiences. People will become more kind with each other, have more free-time to pursue creative endeavors, and so much more.

Our goal is to produce goods of the highest quality possible, focusing on production for use, not production for profit! We act as the technological arm of the people: we don't dictate people's lives, but build what people need.

So, scientists instead of politicians, technical skills instead of voting and democracy, and energy certificates acting as a measure of our 'spendings'. All of that should coalesce into an abundance of goods and services, encapsulated in a self-sustainable system where we measure resources and energy so as to not exceed what we have available.

SHARING and GIFT ECONOMY:

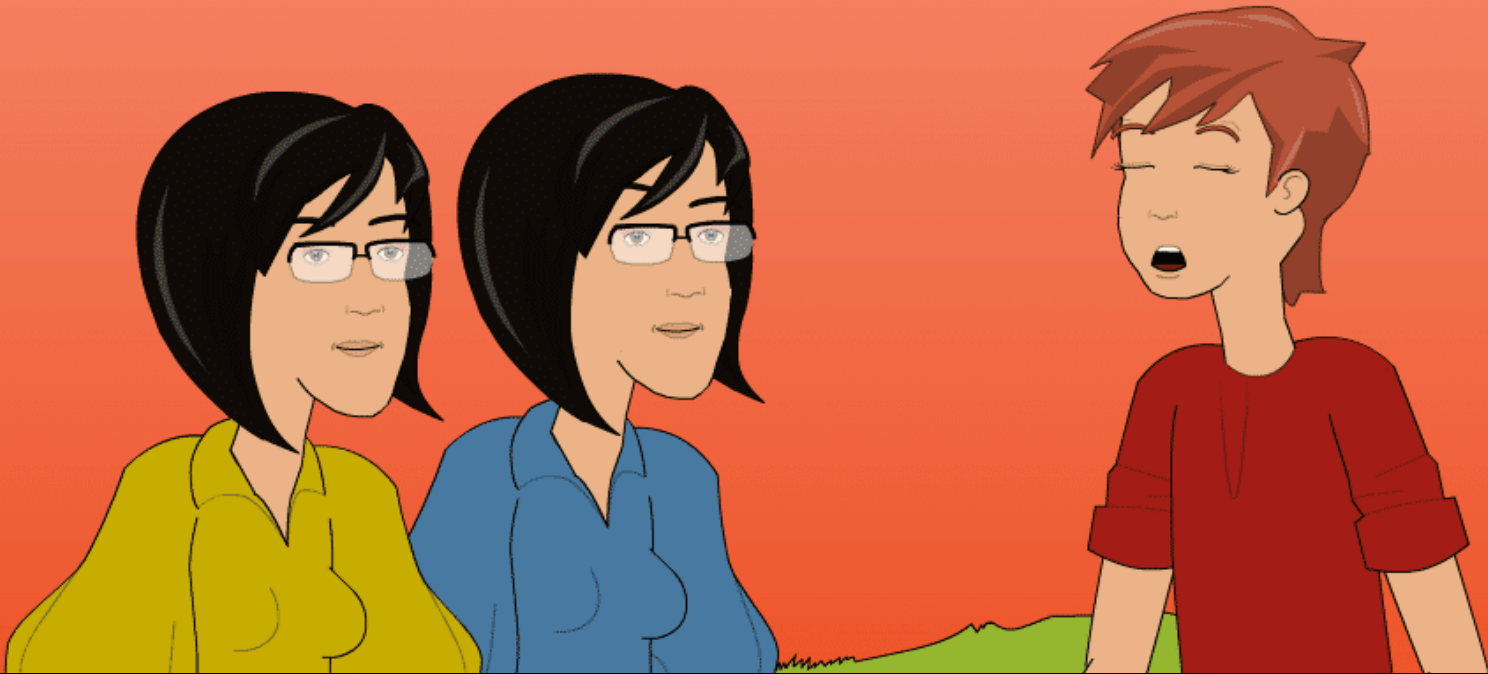
You talk about energy measurements, but today we have the technology to create an abundance of renewable energies where the cost of producing something would be near zero: zero marginal cost production. So I believe we don't need things like energy certificates anymore. Also, in the same way, we could have an abundance of production that I believe is much better shared, not via a scientific centralized elite group, but decentralized: where each individual becomes a prosumer (both producer and consumer).

And not for money or energy credits, since wherever there is abundance, there is no need for currency. People will produce and share (plus consume what others produce) for free. That's the basic idea!



DECENTRALIZED:

That's what I'm talking about! If you centralize production and distribution, you will inevitably end up like Fascism, Totalitarianism or Authoritarianism, and not because of bad intentions or designs, but because you would be allowing power to become centralized and eventually controlled by a few 'elites'.



Nonsense! No one person or group of people can take control of a highly technological society! We want to educate people to be engineers/scientists, to be able to get involved with managing various parts of the society.

People will be educated up until the age of 25, and then allowed to work until 45, when they can retire with the full benefits of the Technocrat society for free. Even if someone refuses to participate, he/she will still have access to all of what we offer. But I do have to mention that if you apply my system, I recommend that you only accept your own citizens to be part of it. Avoid opening it up to people from other regions until you get your own region 'in shape'. Military protection will be necessary until all of the surrounding regions become technocratic, too.



OPEN-SOURCE:

Oh man, there we go again... Separating yourself from others, risking elitism with a centralized plan, having rules as to how people can work, and within what ages... I really expected you to be thinking more openly about this TECHNOCRACY, and don't come again with top-down plans as to how society should be structured, because that's the mistake all of the earlier discussed systems made.

Here's what I propose to get rid of all of these top-down, bottom-up ideals, and make sure no one gets to become a 'dictator', or otherwise control or stagnate progress: the source of all work and inventions is open, fully shared across society. That's all it needs to progress; that's the only rule. So if you start with a design for a house (blueprints), and you open the design for everyone to build their own house, then they can build upon your original design without losing time and effort creating their own design from scratch. This approach significantly reduces their work, as they use an already existing design that they can improve, modify, or otherwise adjust however they see fit. By allowing this kind of copying without restrictions, you encourage others to open up their own ideas for new blueprints, designs, source code for software, and for those who strive to improve upon them to share their improvements. I am talking about rapid, continuous incremental updates stimulated by this idea.



Imagine someone taking the open-source design for a house and adding a new kind of solar panel model to it to make it more efficient, and then open sourcing that design as well. Now we have an open-source design for that kind of house. And the updates will come along the way from all the people around Mars, with no boundaries, no one "in control". You see!? No one can control that, since you made the information of building that house available to all. You will create a huge community of creators, innovators, and improvers, while making cooperation the 'force' behind society.

The same thing applies for everything: software that can be improved and made into many flavors to suit many needs (different interfaces, purposes, compatibilities with hardware); blueprints for tools that can be used by anyone for whatever purposes; hardware that anyone can improve and use (make your own smartphone from other people's designs and ideas). 3D printers already work this way, where people from around the world share their designs and improvements, so anyone can make 3D models of those designs, using their own printer that was "printed" by another printer, all open-source. It's all of the cumulative knowledge of all people, available to and for all people.

So I agree with DECENTRALIZED but I add the open-source rule to the mix to make it viable.



We cannot be more happy OPEN-SOURCE! This will accelerate the sharing of stuff between people and improve cooperation.



How can you be sure that people know how to make these things? Are they experts? What about big projects like dams, transportation, managing Mars' resources, doing science!?



Good point TECHNOCRACY! The idea of open-source is actually the basis of science. It is accepted in science that if you conduct an experiment and present a hypothesis, you have to make all of your observations and details open to the scientific community, or else no one will take your experiment as valid, as they need all the pieces of your research to test and verify your claim. Science is already based on this open-source methodology. I propose to make it mainstream and apply to everything. Unlike science where it is crucial to present your work for peer-review, other domains like the production of stuff (toys, gadgets, recipes, and so on) should not 'force' people to open up their work, since they will likely do that once they recognize the value they get from being able to use other people's efforts. And by the way, I hope this way of cooperating and transparency will make those scientific open-source studies become more mainstream open as well; not only open to other science groups, but open to the entire public.

You see, this approach of not forcing anyone to open-source their work will be an emergent process. It's so good because people are truly free to do whatever they want with such pieces of open-source work, and they will, as the people of Earth are already showing with all kinds of open-source projects at the moment. Imagine making all of the patents, inventions and ideas on Earth completely free right now, where you then tell everyone on the planet: "You can do whatever you want with these ideas - sell them, invent more and share, improve some and keep them private, etc.. Do whatever you want, it's up to you!" You will quickly see many of them improving, inventing more, and then sharing all that, mainly for free, as Earth has shown there are many more people who prefer to engage in sharing behaviors rather than the opposite. Those who choose to not share their improvements automatically become irrelevant to the procession of continual advancements. Get it? None of this is related at all to one's religion, sex, gender, age, credential, nationality, etc.. You just provide tools for all, and watch it grow.



TECHNOCRACY:

The bridges, and roads, and resource management, and all such projects OPEN-SOURCE.....how are they built and managed using your method?

OPEN-SOURCE:

Ah, right. Well, I am only talking about the method of making everything open, not how society should manage such projects or what they should build. I see no difference between what you propose when it comes to such big projects (experts arriving at decisions), and what I propose EXCEPT that I encourage such projects to be open to the public. So, if a group of engineers build a bridge, their work is open-sourced for future improvements. When some other engineers need to build a bridge in another part of the world, they will be able to base the design on that previous one to speed up the work and improve upon it. Plus, if a group of 'evil' engineers :) decide to try to spy on the population for whatever reason (or do any other damaging stuff with technology), anyone can see that when it's open-sourced.

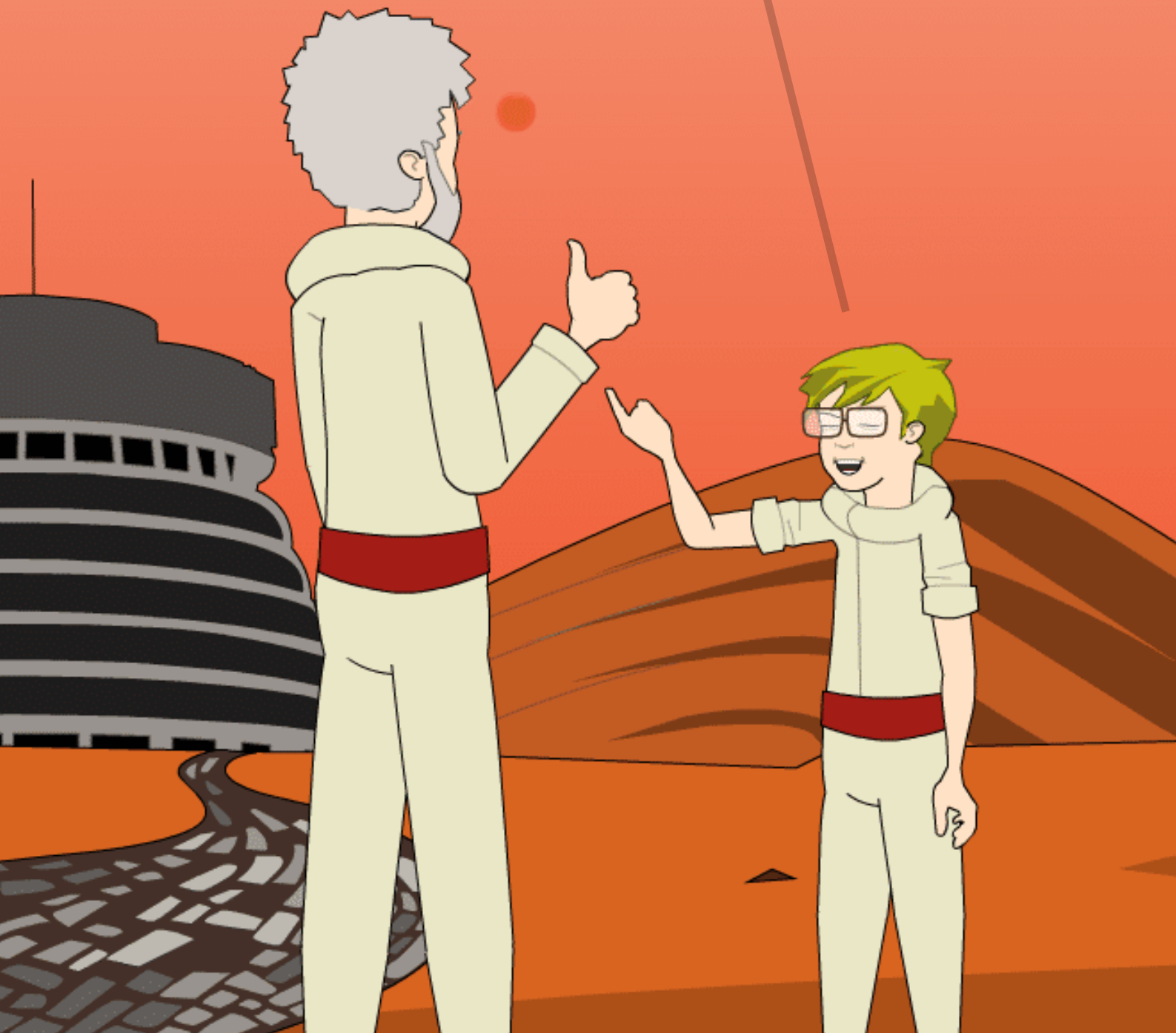
As this notion of open-source gets into people's heads, closed source projects will become increasingly unpopular and will force big projects to open up their blueprints/work. Imagine telling people that they are not allowed to photograph a mountain or some other place in nature because it's not 'open' for that, it is 'private'. That would be quite strange, weird and unacceptable to most people. I see that same thing gradually happening with closed source projects, as people discover an invention's blueprints, or a software code, or any kind of work (recipe, video, photo, etc.) is not being shared with the rest of the world for free.

And when it comes to experts...many people today on Earth do all kinds of important and huge projects in this open-source style and are not experts in those fields.

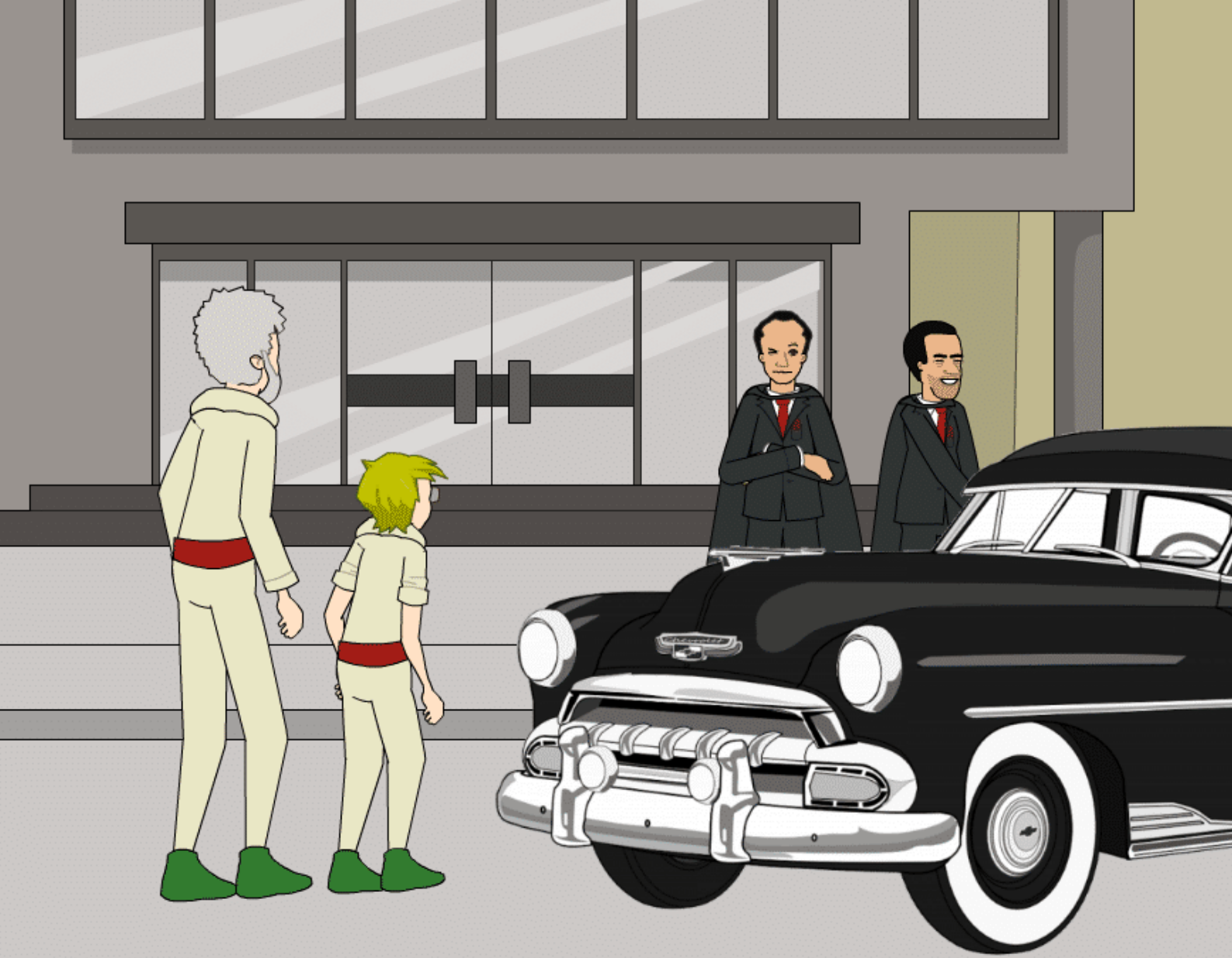


*Virtual history
museum?*

*Yes, and for
the last time :)*







Old dude: *What is interesting this time kid, is that these folks are all focusing around science and technology. On Earth from about 1900 on, the shift was towards these scientific and technological domains, due to their rapid growth and development. But these people had different approaches. First, Technocracy, envisions a more rigid and centralized mode of organizing society around science and technology, while the other ones (open-source, sharing and gift economy, and decentralized) believe it works best as a complete decentralization of technology and scientific research, a more chaotic integration of them based on a few rules that will exponentially spark great progress and stability.*

Let's start with technocracy: The technocracy movement was started in the United States around 1919 by a group of scientists impressed by the results of the mobilization of resources and production during the First World War. It became more visible during America's Great Depression in 1930, after the money system had crashed and the technocracy movement proposed a bold replacement of politicians with their system of engineers and scientists.



Their plan was specific to the North American tribes (USA, Canada and Mexico), rather than world-wide. They conducted a survey of America's energy and natural resources, and studied the corresponding industrial evolution that unfolded post-World War One. The group's aim was to design a new system of production and distribution for North America that would provide a better standard of living for people, while conserving non-renewable resources, ensuring 'an economy of abundance'.

Kid: Hold on please. North America?

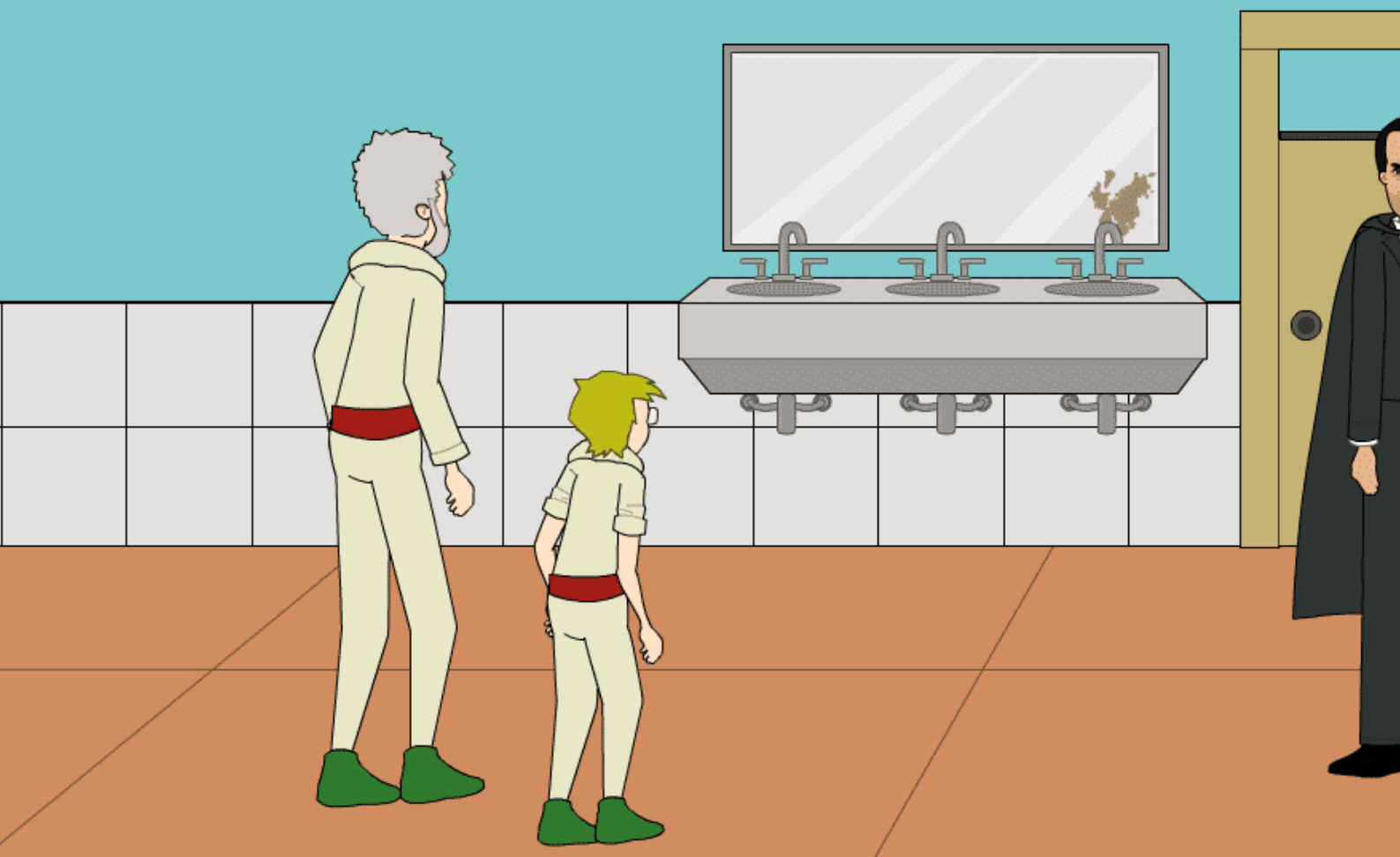
Old dude: Yeah....that's a region on Earth. They said they were choosing this location alone, because it was the only one capable of achieving this abundance through technology. Military power, therefore, was a must, to protect it from the rest of the world. But they planned that once this system was in place and working, they would freely help the other nations to achieve this goal.

Kid: I foresee problems with this approach of separating yourself from the rest...

Old dude: *Indeed. But technocrats were one of the first to showcase in good detail how technology is replacing human jobs and creating unemployment, and how artificial scarcity is maintained to keep the price system/money-game going. For instance, their 1937 magazine exemplified, among numerous other examples, that many citizens of their tribe were dying from water pollution due to improperly installed and maintained plumbing systems, and while the cause and remedies were very well known, it was not profitable within the money game, and thus not a priority for such a situation to be solved. The technocrats said that in the world they envisioned, such situations would be approached without interference from any interests, but instead with direct focus on the well-being of the citizens. In their publications at that time, they showcased in detail, and in 'abundance', how the technology of that time could work to bring about such a system, while also detailing the inherent issues of the profit world ([source](#)).*

They even proposed that Earth's yearly calendar should be changed to a simple 1 to 365 days numbering, instead of how it's currently broken up into weeks and months. They envisioned a world where the workload is reduced to only four hours a day and the working class should 'perform' work only between the ages of 25-45 ([source](#), [source](#)).

They also said that they were not trying to overthrow any government, as they represented an educational non-profit movement, and it's up to people to bring about the change.



So, it includes economic security as long as you remain a citizen; guaranteed healthcare for everyone; scientists instead of politicians; only citizens can live and work under this system; all people (regardless of color) can be members of technocracy, except those of political posture; use of energy certificates as a mean of tracking resource use; removal of the need for a price system, and the creation of abundance.

The only obstacle is the human animal, they said, as there is plenty of technology and science to obtain a world of abundance for all, but humans are in the way. Their behavior is what prevents this from happening, but their behavior is the result of their environment. They said:

"One does not abolish or prevent war by pacifistic speeches, or by other means either, so long as foreign trade and the manufacture of munitions of war remain profitable. Neither does one abolish disease while poverty, malnutrition and other disease-breeding conditions continue unaltered, nor so long as the economic well-being of the medical profession depends upon the prevalence of disease in profitable amounts. Nor is crime ever abolished, either by coercive measures administered by officials whose activities are only slightly, if any, less socially objectionable than those which it is sought to suppress, or by any amount of moralistic railing or inculcation of doctrines of 'brotherly love,' so long as there continues to be offered a standing reward to all those who will 'gyp' society successfully. Granted the offer of the reward, socially objectionable activities follow as a consequence; withdraw the reward and these activities automatically disappear. It is the Price System itself, the rules whereby the game is played, and not the individual human being which is at fault"

(source)



Kid: *Hm...interesting.*

Old dude: *This group was basically something that communism envisioned, yet they brought science and technology to it (not saying they were influenced by communism though). They were entirely focused on pragmatic goals: not 100 types of cars, but one really good one; not nonsensical stuff, but useful stuff; not eyecandy things, but things that can help you and make your life easier.*

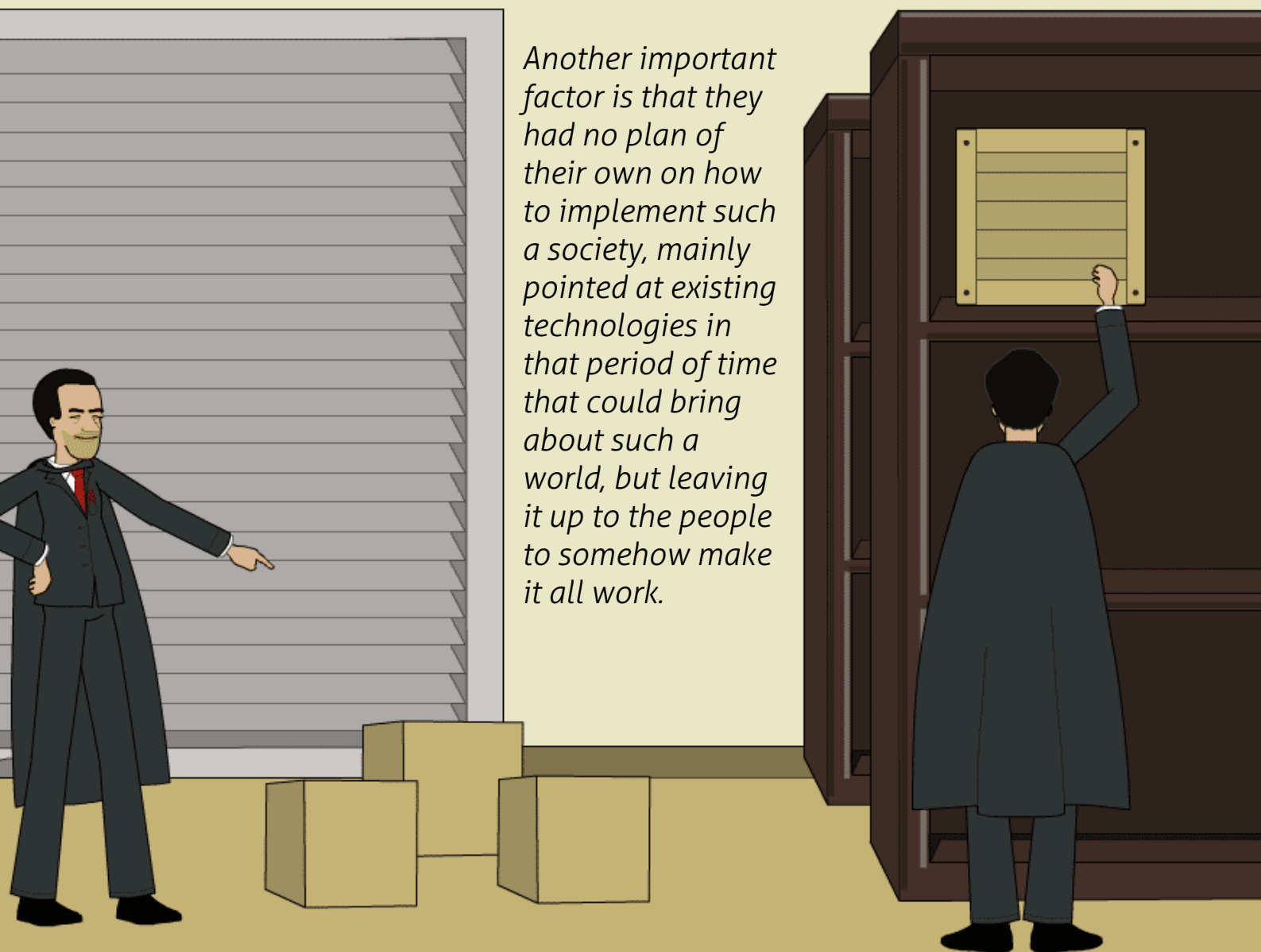
Kid: *But who decides what is nonsensical? Or useful? I don't get it...*

Old dude: *Well, neither do they, because it's virtually impossible to have an answer to that. As an example, these ideas were picked up by the USSR and China tribes later on, the same tribes that had adopted communism before. But now, years later, they tried to implement a sort of Technocracy as well, mixed with other interests, and the end result was similar to that of trying communism: a dictatorship, although many of the leaders of the tribes were now engineers or other kinds of scientists. It turned out that the engineers were even deciding how many types of toothbrushes should be produced, and in what colors.*



This may be the big failure of technocracy, as you observed, even if it was never put into practice the way it was originally envisioned. It demands a rigid system applied to a dynamic society, even if they argue to the contrary. However, their proposals are very clear that their vision was one of pragmatism, something like "what is the point of making blue shoes, purple shoes, shoes with a Chewbacca logo :), or whatever. Make one pair of good shoes!".

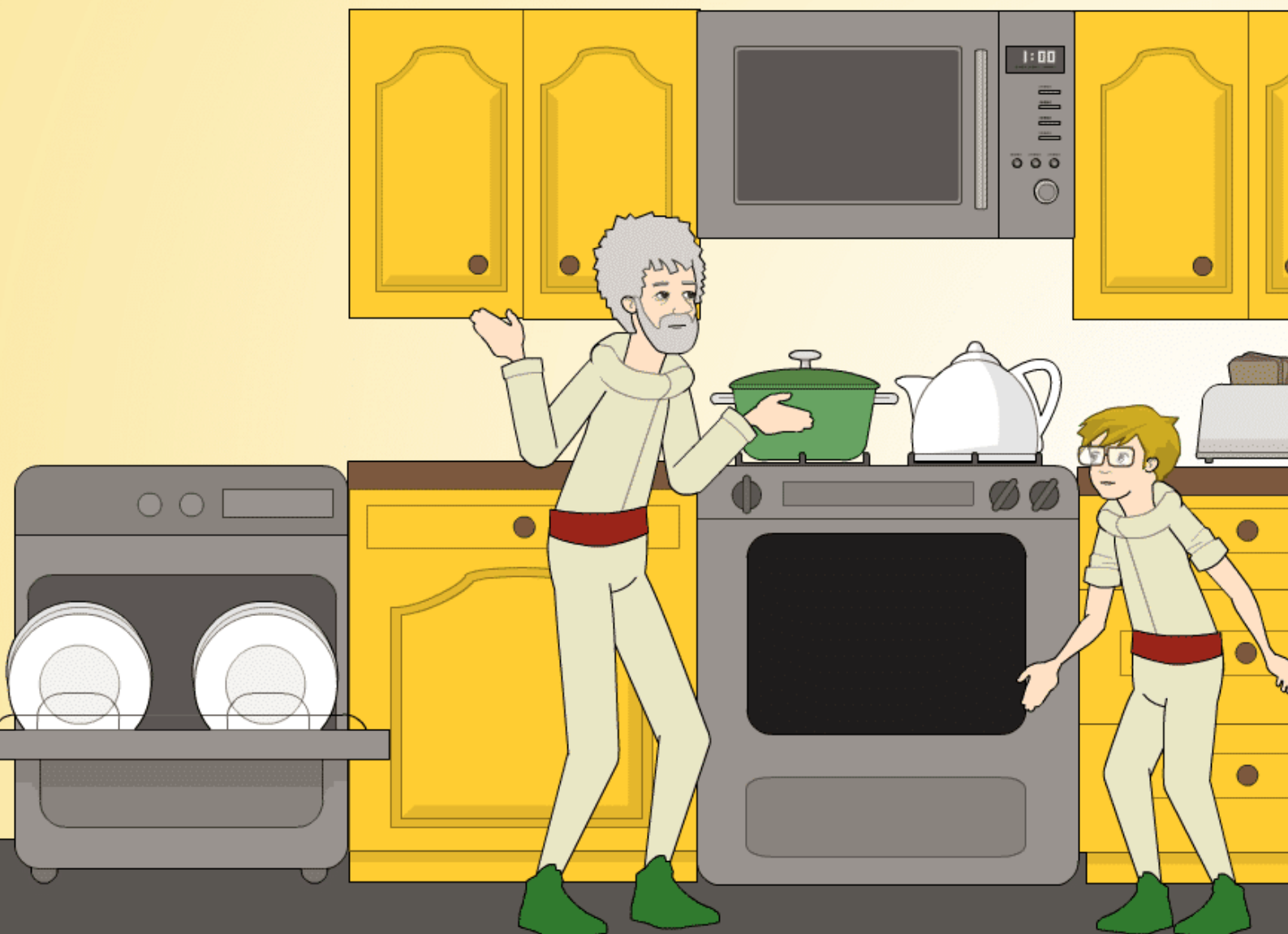
Like others before (communism, socialism), their system poorly defined what they meant by abundance, or what equal status means. They were thinking in terms of birth control for the population to not exceed the capacity of their resources. They wanted to measure everything in energy units, which is quite unimaginable as far as what that means in a dynamic world. They also put the power into the hands of engineers, not recognizing that by doing this, it will change the engineer's' behavior to where they can transform into dictators, or how limited they are in what they can do for the population, and by what decisions they can take. The world's societies are very complex to try and define and direct through science.



Old dude: *But the other approach of using technology is very interesting.*

Throughout most of human history, gifts and the sharing of all sorts of 'stuff' were a 'thing'. Many humans give stuff for free without asking anything in return, others share their tools/stuff for the same reason. If we think of food recipes, they were always shared, modified, improved, changed, re-shared again. There are thousands of variations of perhaps any food/recipe out there. If you make a pumpkin pie, the recipe you use may have been the result of hundreds of mixes of pumpkin pie recipes. One may add ginger, others more sugar, others coconut butter, and some others put yet more ingredients, remove others, and so on. This remix of recipes has no author, no owner, and all of the details for how you can make a pumpkin pie, or whatever, are open for all to see and use, reuse, share them again. We are used to this today, right?

Kid: *For sure! I never thought of recipes as belonging to anyone, you're right.*



Old dude: Yes. It would be extremely ridiculous to get arrested because the pumpkin pie that you made at home with the ingredients you bought, had a 'closed source' recipe that you used without asking the author for that. Wouldn't it?

Kid: That would be outrageous!

Old dude: Well... While it sounds ridiculous, many recipes on Earth today are proprietary; not allowed for use, reuse, sharing. MCDonald's, KFC, Coca-Cola and probably all food and drink producing companies have their recipes protected in this way ([source](#)).

Kid: Really!? Would you be arrested if you used their recipes?

Old dude: In theory, yes! This is the same exact thing that's happening with software; you know, the coding that allows you to browse the internet on your phone, or watch a video on your computer.

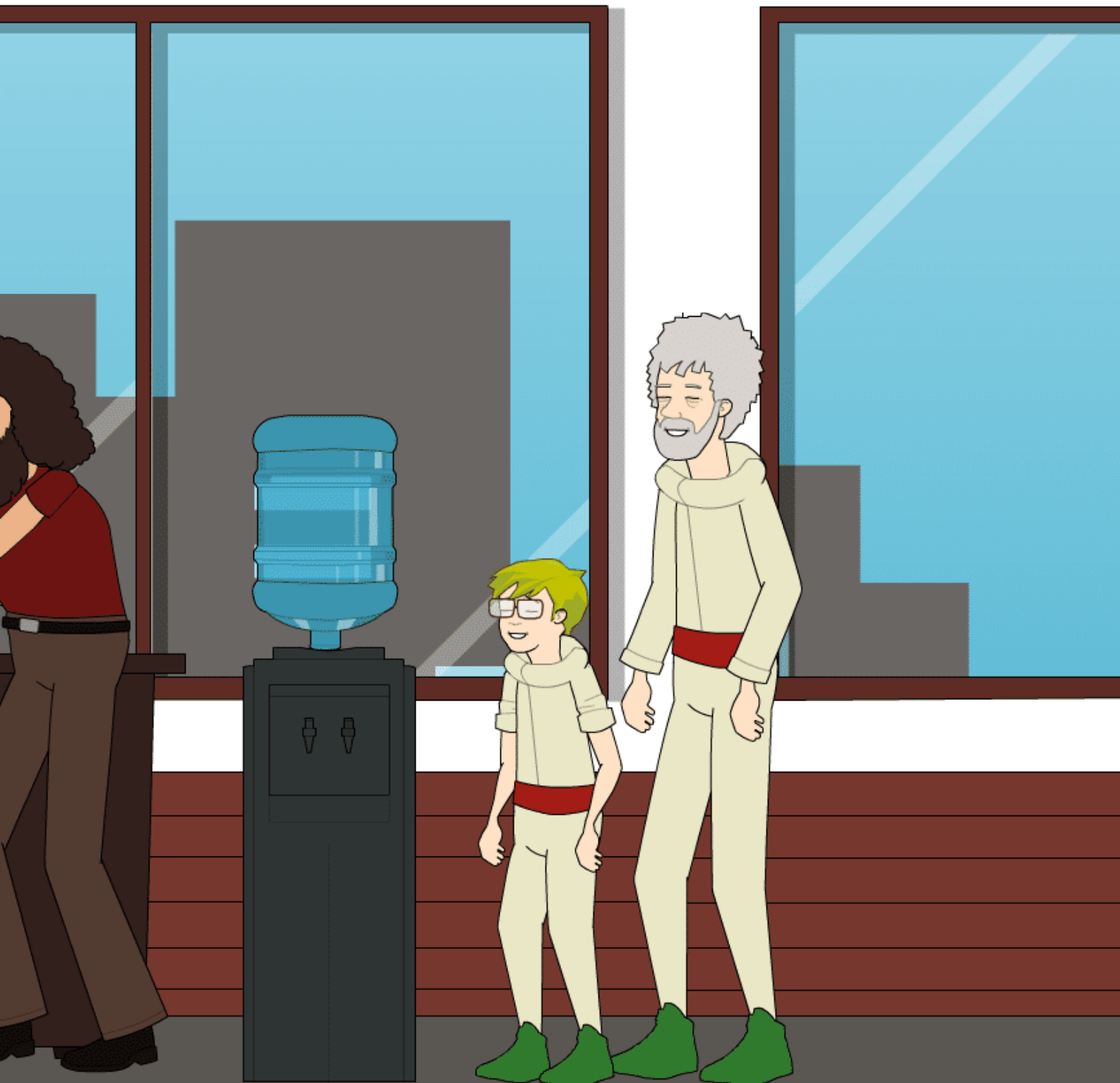


Old dude: *This kind of closed source, proprietary approach is very deeply embedded into the technology. If you buy a printer or a personal computer, you are not allowed to take it apart or change the software, even if you 'own' it. In 1983, an American computer programmer was having trouble with his printer. He knew how to fix it, but he was not allowed to touch the software because was closed-source. That pissed him off to the point where he decided to write a piece of software that will allow 'machines' like printers and other hardware to work, but this software will be fully open-sourced for anyone to use, share, modify, and re-share (he named it GNU).*

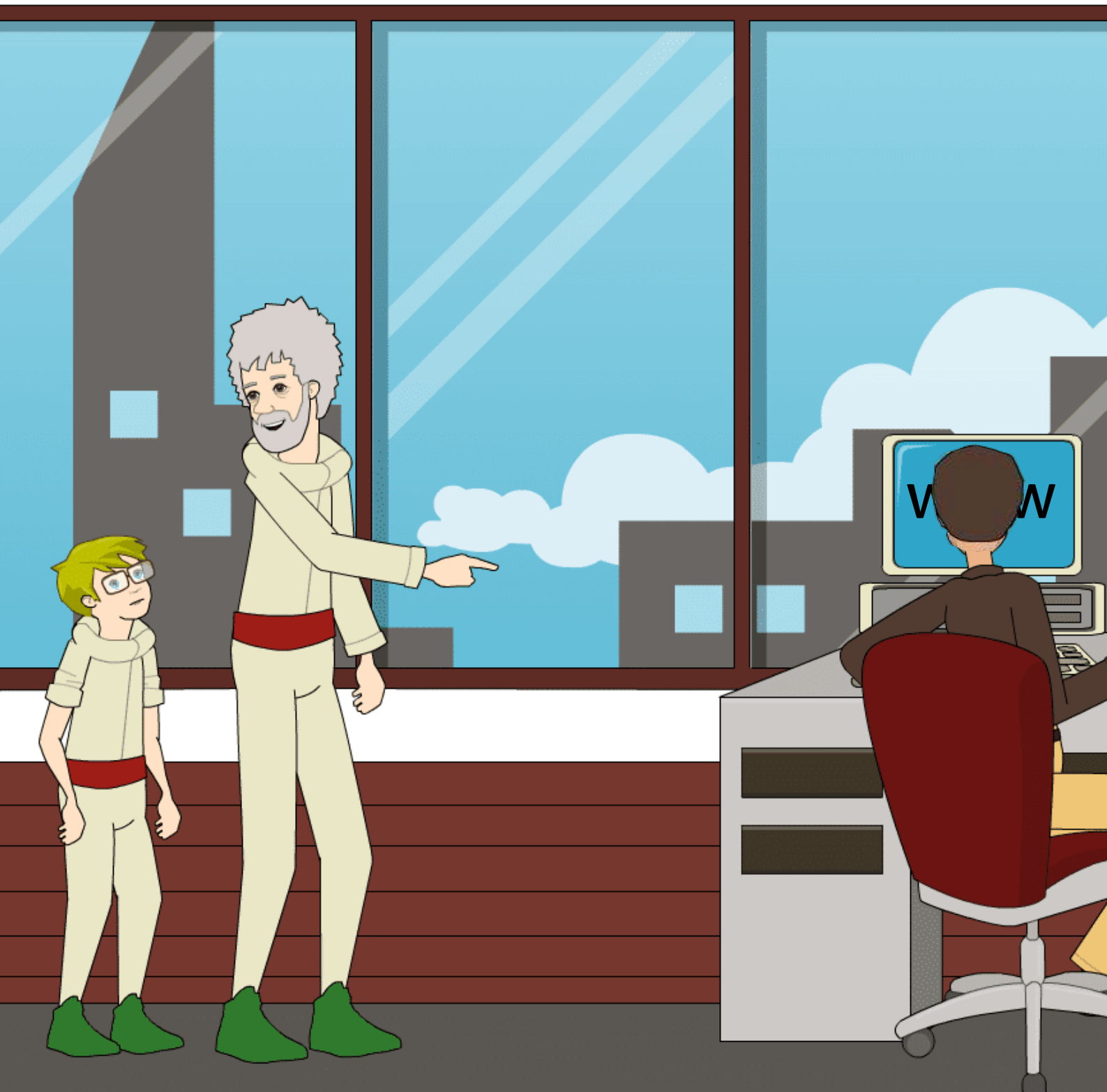


Old dude: *In 1986, he founded the “free software” movement, which stated the idea of openly sharing software with a single rule: if you use the free code, you **MUST** share any/all modifications you make to this code under the same ‘free’ rule. You can even make modifications to the code and sell it in its new form, but you must also provide the source code for all of your software.*

Kid: *Smart dude :). And that rule seems fair!*



Old dude: *In 1990, back when the internet was mainly a kind of data sharing phone line (simple communication via email) and web pages did not yet exist, a programmer from England invented a piece of software to convert complex lines of code into what we now recognize as a web page: text, menus, images, videos, etc.. He made it possible for web pages to exist and to be accessible to others (wikipedia, facebook, youtube, google, and all other websites on Earth). The browsers that you use are what enables this decoding to take place and transforms complex lines of code into the 'goodies' that delight our eyes, and this browser is based on what this guy invented and gave to the world for free. By the way, that's the difference between the internet (simple communication between computers and networks) and what became the world wide web (web pages with all of their goodies).*

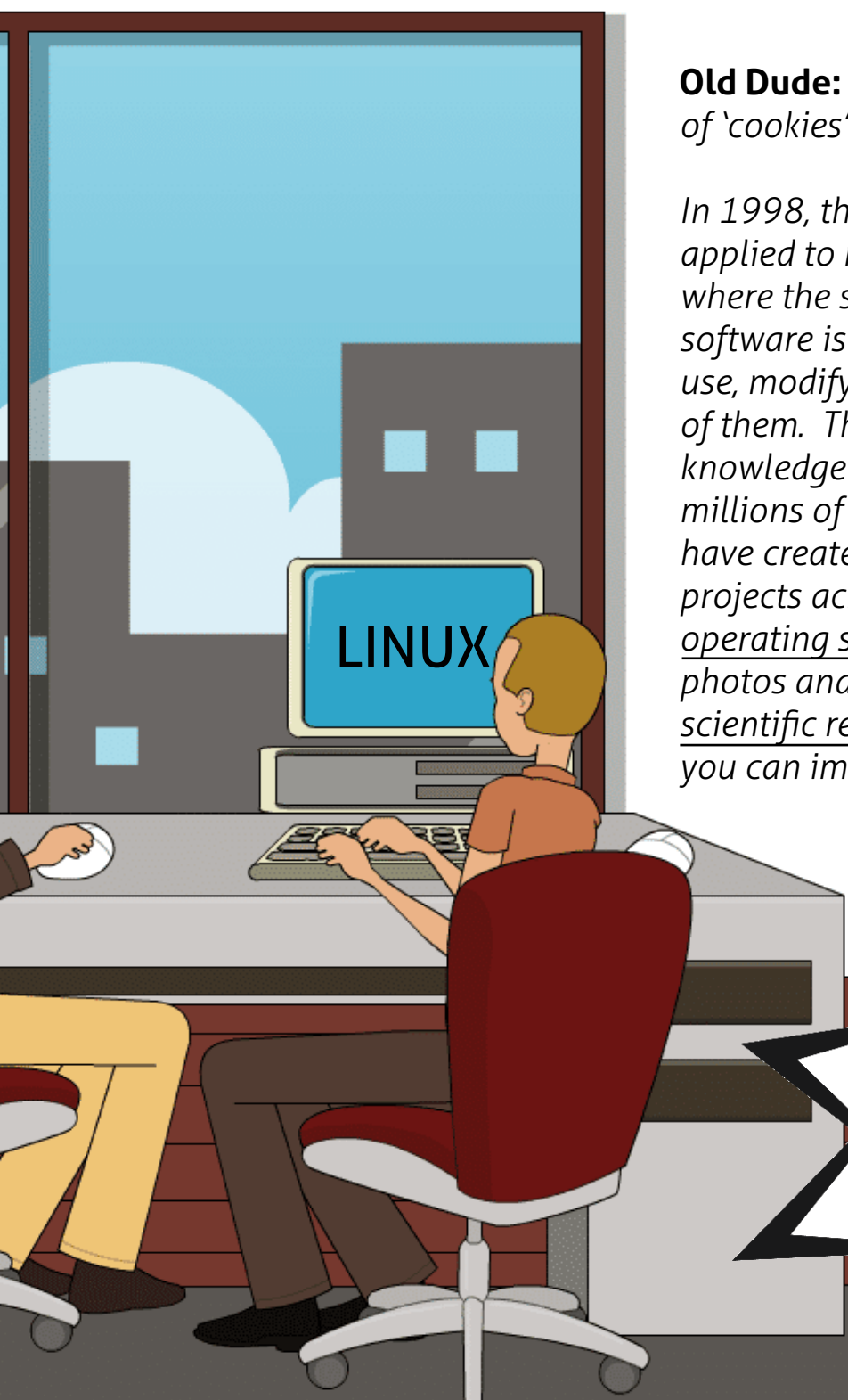


Old dude: He released this as free software for everyone to use, without restrictions. As a result, it took off and became what humans use today, the world wide web and enabled much more cooperation opportunities between programmers. In 1992, a guy from Finland took the American printer guy's source code (which was already much more complex than just making a printer work properly :)) and made this code much better. We now refer to it as Linux, or GNU/Linux. GNU/Linux is basically the core software (kernel) that allows all related hardware and software to run properly and it has become the leading kernel used by Earth's supercomputers and servers (source).

Kid: Oh wow! So these 'recipes' allowed others to make more and more digital 'cookies'?

Old Dude: Haha. Indeed! Many kinds of 'cookies'.

In 1998, the term "open-source" was applied to represent this approach, where the source of any piece of software is made freely available to use, modify, share, or any combination of them. This idea of making knowledge free spread like a virus and millions of people around the world have created a plethora of such projects across all domains: education, operating systems, hardware, music, photos and videos, programs, open scientific research, and anything else you can imagine.



???: Sorry to interrupt...that's very interesting though.

Who is he?

*I think he's
that 'special
guy'.*



???: *Well the only
thing special about
me is that you are
all a part of me.*

A circular arrangement of diverse cartoon characters, including men and women of various ethnicities, ages, and professions (like a firefighter and a king), all looking towards the center text.

???: Sorry to break the party, but I invented all of you to help me more clearly understand how human societies have tried to organize its members for the past 300-400 years, so that I can better make sense of what solutions there are to properly organize a society. But I need to get out of this story now because we've reached the present and there is a slight flaw in our story.

Kid: *What?*

???: Oh I just asked myself a question again :).

Ok. Imagining how a colony on Mars may be organized is a very good way to put all of these ideas from history into perspective, since many of them, from communism, to socialism, technocracy and the like, conceived of their ideas somewhat detached from reality, as if their ideas would be suddenly implemented somewhere untouched by an already existing system, ignoring the present human animal and offering too little details on how to move from what already exists into what they proposed. It's as if they were planning how to organize people on Mars. Get it? ;)



We have 7+ billion people on Earth: Hindus, Muslims, Christians, teachers, engineers, artists, people of all ages, tons of different beliefs, many different needs, across many climates, and so on. We are going to start with those people, and we will likely always have these huge differences between cultures, so it's best to strive to find a way for how a saner society can emerge out of this. We cannot expect any kind of new global societal approach being suddenly implemented. Reality simply doesn't work that way.



I chose to present Technocracy and open-source/Sharing Economy together because they are in contrast with each other, much like capitalism was in contrast with communism and socialism. So, these last two systems focus a lot on technology and how IT is changing society. Both of them are about how to best harness IT, but one is primarily centralized and based on experts, while the other is highly decentralized and based on everyone's input, and we have a ton that we need to learn from both. Open-source/gift/sharing gives us an opportunity to study how technology impacts a society because it is happening right now, under our noses. So let's see what we can harness from it.

Notation: Free and Open-Source Software (FOSS)

The advantages of open-source and the gift/sharing economy:



1. SECURITY AND RELIABILITY:

since everything is in plain sight, thus completely transparent, everyone can examine any projects: check if scientific and technological research was conducted properly; test if a piece of software has any 'bad' intentions or bugs to uncover; evaluate how well a hardware design can perform or what materials may be needed for a certain hardware to build; all of these and more are available for full inspection. How could anyone take over or maliciously hack such an open-source project when all of the bits and pieces related to that project are in plain sight!? There is no way to lie about or hide anything within them when everyone has full access to their source code. It is like taking a pumpkin pie recipe, adding some kind of poison to it, and then sharing it with the world.

Of course the world will see the poison listed in the ingredients :).

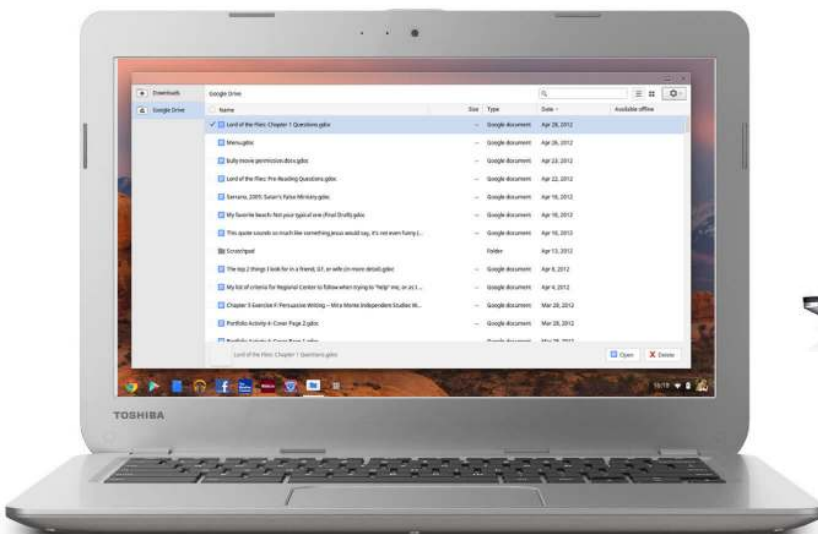


2. CREATES HUGE DIVERSITY:

GNU/Linux, as I said, is a kernel (the core software that makes the bits and pieces of a computer/mobile function), but an Operating System (OS) is (in a way) the interface between you and this kernel, which allows you to create documents, browse the web, install an app, watch a movie, use a webcam, and so on. Since *GNU/Linux* is FOSS, numerous operating systems have been developed around it, accounting for a wide variety of tastes (needs), by the global open-source community. For example, the Android OS that you may have in your smartphone provides an interface between you and Linux, but I also have *GNU/Linux* on my computer within an Operating System that is called Ubuntu. The two are very different from each other in regards to their interfaces and other factors, but both emerged from the same core 'thing'.

So let me provide an example of how much diversity there is in the FOSS world. Before I switched to *Ubuntu* as my OS, I was using the proprietary (closed-source) Windows and could barely customize anything about it. Plus, every time I needed to add a new piece of hardware (webcam, mice, printer, etc.), I had to install that hardware's related closed-source driver software so that Windows would recognize and be able to manage it. Not installing that additional software would be like putting chewing gum in a toddler's hair. If you don't make him aware of it, he will continue with his life without noticing it's there. :) But there are so many people writing code for Linux that you will find drivers for nearly all types of hardware available out there, so it knows how to communicate with most hardware. No more chewing gum in a toddler's hair without being noticed :).

CHROME OS



UNITY



ANDROID



Plus you can make the interfaces of FOSS operating systems look like anything you want to, even mimicking Windows or MacOS interfaces, because many people around the world have taken the liberty of editing it all kinds of ways and you can take advantage of their work. You can also learn how to do that as well.

But let me emphasize a very important point here: in order for a webcam to work when you plug it into your laptop/computer, or in order for a wireless gaming joystick to work when it's connected via bluetooth with your smartphone, there must be a piece of code on your Kernel/OS that is able to both identify that 'thing' and make it work. Someone must manually examine the technical aspects of that specific piece of hardware and write code for it in order for it to work. It doesn't happen by magic where any piece of hardware you make will automatically work when you plug it in. The already huge number of various types of hardware out there, plus new ones that are constantly being added, make this is a very significant challenge. But the Linux community (people all around the world) are able to quickly write pieces of code for these hardware devices so that they work 'by default' (as soon as they are plugged in), because there are so many people focusing on it. So, what the *GNU/Linux* community does in regards to developing software for managing a wide variety of hardware highlights one way of creating and coping with diversity. Overall, people create many kinds of programs for the Linux based Operating Systems - you can have a look for yourself at [OpenHub](#) (search engine for FOSS software).

CINNAMON



GNOME



UBUNTU TOUCH



Thingiverse is a similar approach for physical objects designed to be produced by 3D printers. So imagine this: millions of 3D model designs available for printing nearly everything (toys, tools, drones, etc.), all of them remixed in so many ways by people around the world - because they enjoy doing that; now you have a 3D printer printed by another 3D printer - again all FOSS. So, you go onto this website, search for a drone, download the file on your computer and open it with a FOSS software, print the drone's parts, order the FOSS hardware for it to work, assemble it, and you now have a drone. Within this process, you can make your drone pink, change the design, add a logo, and so on. You can then share your remix with others. All of what you have done is made by no one, yet by everyone.

This kind of diversity and the ability to remix is already built-in. You can create far more complex 'things' than many industries can offer. Today's 3D printers are still limited, although you truly can download and print a fully functional drone ([see here](#)), but they are continually becoming more and more capable of printing almost anything, even electrical circuits, and it's not far fetched to imagine that in only a few years, you will be able to print 100% of that drone's parts, removing it from your 3D printer as a fully functional drone with no assembly required.



HAND ORTHOSIS



WORKING HAND CRANKED POWER GENERATOR



FULLY ASSEMBLED 3D PRINTABLE WRENCH



This has already spread so much that you can basically make a video that uses all FOSS materials: footage, photos, music, the program. etc.. You can learn for free, write and publish books, make games, build your own smartphone, construct your own computer, communicate, enjoy, teach, whatever. With an internet connection and a few other tools like a 3D printer, it is possible today to access pretty much any service and create many goods in FOSS format.

So the diversity is HUGE! Now combine this with the 'sharing' thing/movement, where people share their skills and stuff, and you immediately end up with a breed of openness and sharing all around the globe, proving that it's possible to create diversity, cooperation, and complex goods and services directly within the community, without any leaders or experts.





3. EMPOWERS COOPERATION AND REDEFINES EDUCATION:

Today there are many dedicated groups and schools that teach people of all ages (including children) how to create all kinds of stuff via a 'hands-on' approach, and it all emerged from or are empowered by the open-source movement. Children learn firsthand how to build, test, and cooperate with others. [Maker Movement](#), [Hackerspaces](#), and other 'movements' now exist where organized and cooperative humans create a huge variety of 'stuff'.

As an example, the largest manufacturer of commercial drones in the US (present. 2015) rose to that level due to the many volunteers, kids, and non-experts who played around with free and open software and hardware ([source](#)). Some of these drones are more sophisticated than some military drones, and half of their 180 developers are not experts. I recommend this [50 minute video](#) with the creator of the company explaining the maker movement and their open-source drones.

This also proves that education occurs better within such communities of people because they get to directly experiment, learn from one another, improve on their own, take risks, and have no monetary 'goal' interfering with the progress, because they are able to play while they learn and learn while they play.



People that are involved in FOSS projects are usually motivated by what they are doing and not monetary gains.



4. EFFICIENCY:

In terms of resources and energy, it costs far less to produce things. Let's say you want to build a house using a big 3D printer. Instead of spending time developing what the blueprint should look like, what materials to use, and so on, you already have access to thousands or millions of FOSS blueprints that you can use. You might decide to integrate a new kind of battery system in support of the already integrated solar panels, but that is 20% more efficient than any previous FOSS models out there. Sharing your updated blueprint for that new invention will cut energy costs for many others who choose to adopt your new model for their own homes.



Since it is shared with everyone, research in any domain does not need to be repeated, and diverse improvements emerge very quickly from all around the world. What would be the point of me developing a 3D design for something that has already been designed and tested!? It's far more efficient to not start from scratch with any kind of project, so you can spend that time on improving already open-sourced ideas. To take this idea a little further, if the research on a specific disease is made open-source, then no one will need to waste time re-conducting the same research that has already been completed somewhere else, giving everyone a much better chance at finding a cure or a better treatment, because they are starting on the backs of other people's work.

In this way, all of these processes become faster to develop and integrate. At the same time, because there are many more people focusing on the existing open-sourced understandings, any faults that may exist within all previous research are much more quickly discovered and corrected.

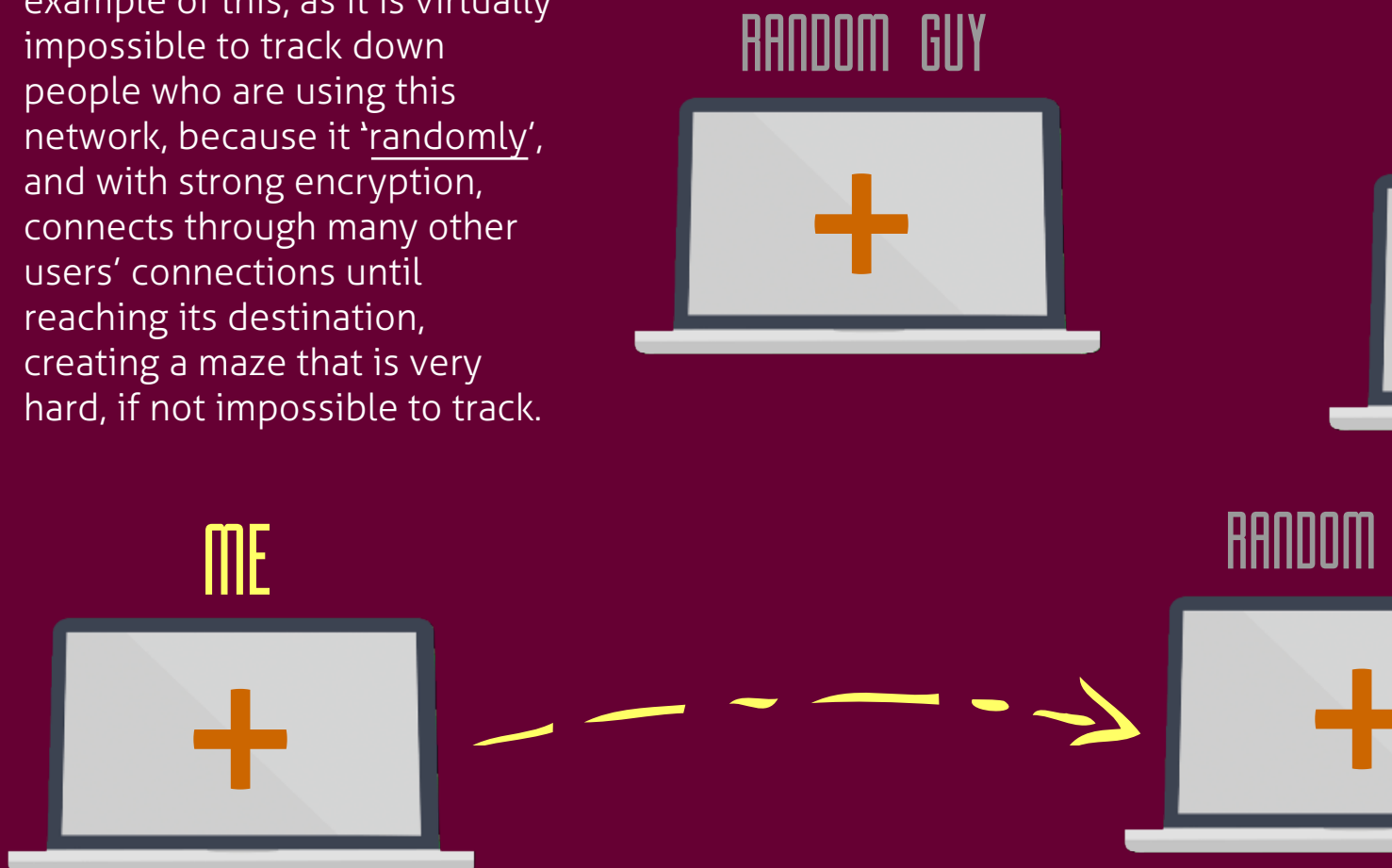


The open-source/sharing approach is growing very quickly and provides a perfect example of how people can cooperate and collaborate to create all sorts of valuable things without a monetary incentive. But more importantly, it is a proof of how diversity and complexity can arise from such cooperative groups, where being an expert matters very little. It's all based on 'hands on' developed skills. They also provide an example of production and distribution simplicity, eliminating the 'middleman' in virtually all cases.

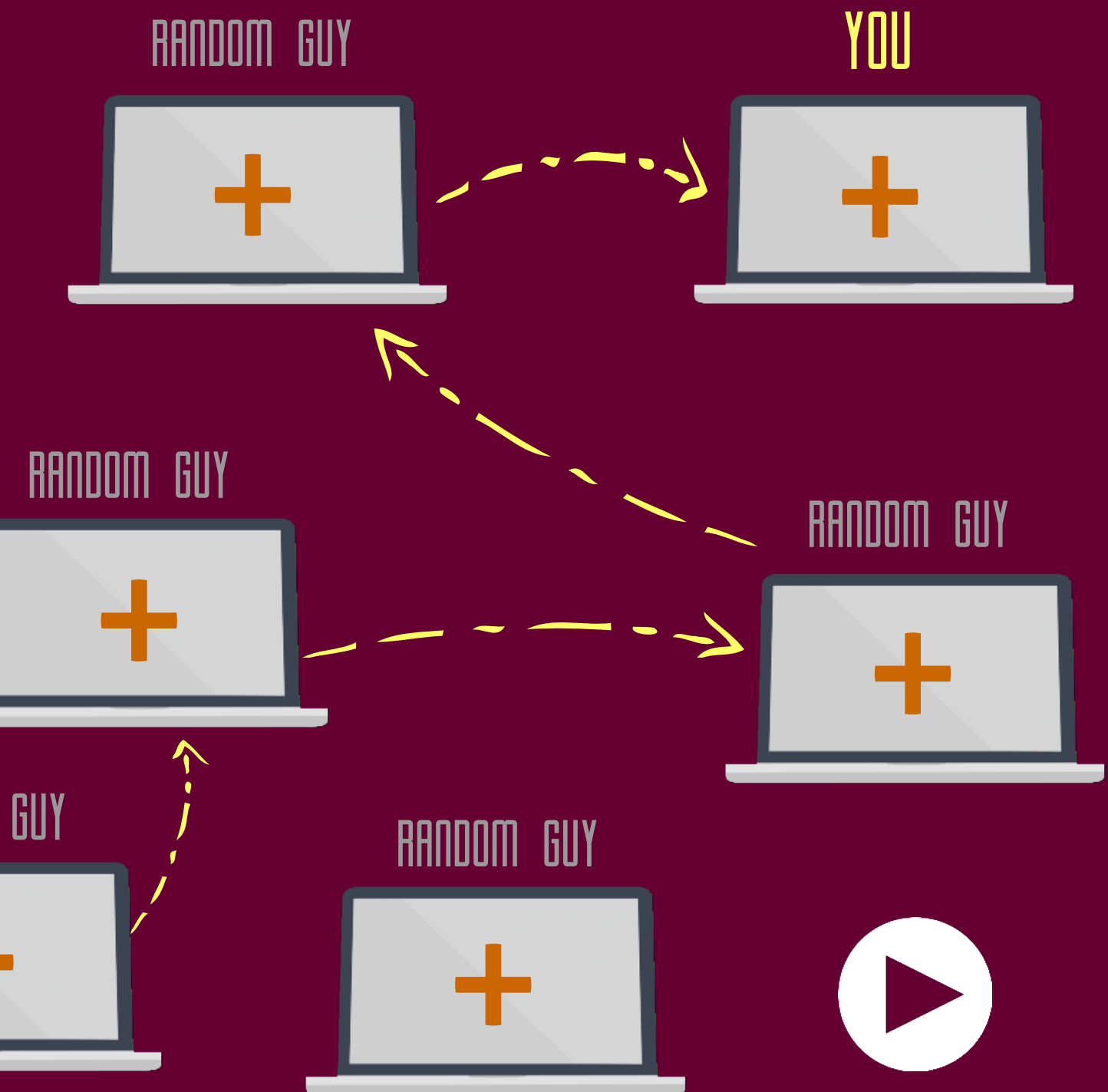
As good as it looks, however, I think it's not sufficient to make a big enough impact in the world, and I will explain why. Here's my argument(s):

As with anything that develops within the monetary system, these groups of people are limited in what they can do, and their project choices often reflect the culture. Decentralization, for instance, is a great idea for staying away from big corporations/governments that may try to take hold and control communication, transportation, production, and other open-source facilities, but it's not so good when the same tools allow 'bad' people to plot terrorist attacks, sell guns or child pornography (abusing children for that), and so on.

The IOR Browser is a good example of this, as it is virtually impossible to track down people who are using this network, because it 'randomly', and with strong encryption, connects through many other users' connections until reaching its destination, creating a maze that is very hard, if not impossible to track.



So, you could sell drugs, write about anything you want, post whatever videos you want, and do pretty much anything. You can also find pretty much anything: from free libraries of books, to hiring criminals to kill your wife, stolen credit card numbers that you can use to make online purchases, professional journalists communicating securely, etc.. Therefore, even if TOR is super useful for secure communication and browsing, it also reflects the culture (and system) we are in.

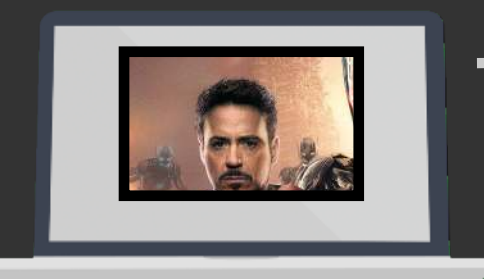


As another example is a peer to peer (p2p) technology (like [BitTorrent](#)) that basically allows people to share massive amounts of files between them by breaking the files in small chunks (creating a 'torrent' indexing file) and distributing them across many computers, without a middleman or any kind of centralization. The torrent file only contains the information for how the pieces of the file(s) (a movie for instance) should be shared between computers. It does not contain the actual movie, or whatever files it has indexed. [The Pirate Bay](#) (TPB) is a website, founded in 2003, that made it possible for tons of torrent files to be uploaded, sorted, and downloaded at will, allowing it to emerge as a leader in filesharing for many years. The issue with it? Since technology reflects people's values, humans mainly used this website to share closed-source (not free) movies, music, and pieces of software between them. As a result, TPB quickly became associated with online piracy.

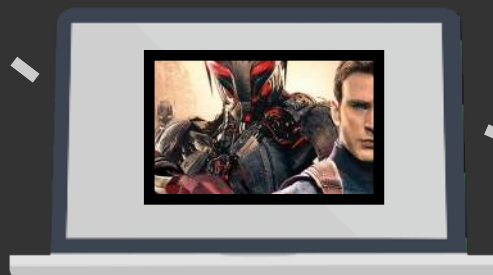
Huge movie and music companies battled TPB and spent massive amounts of money to take them down, but consistently failed at their attempts. They eventually arrested the people who made the website, as well as others associated with it, which then caused many of their servers to go offline. These industrial interests recently announced that they finally killed TPB for good, but after a month of blackout, Pirate Bay came back to life again and continues to thrive. Keep in mind here that TBP is just a 'thing' that allows access to these kinds of indexing files, which are not the 'thing' that gets downloaded when you use them.



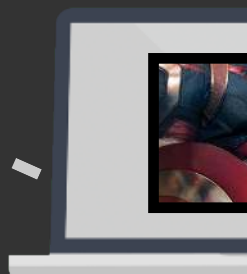
A PIECE



A PIECE



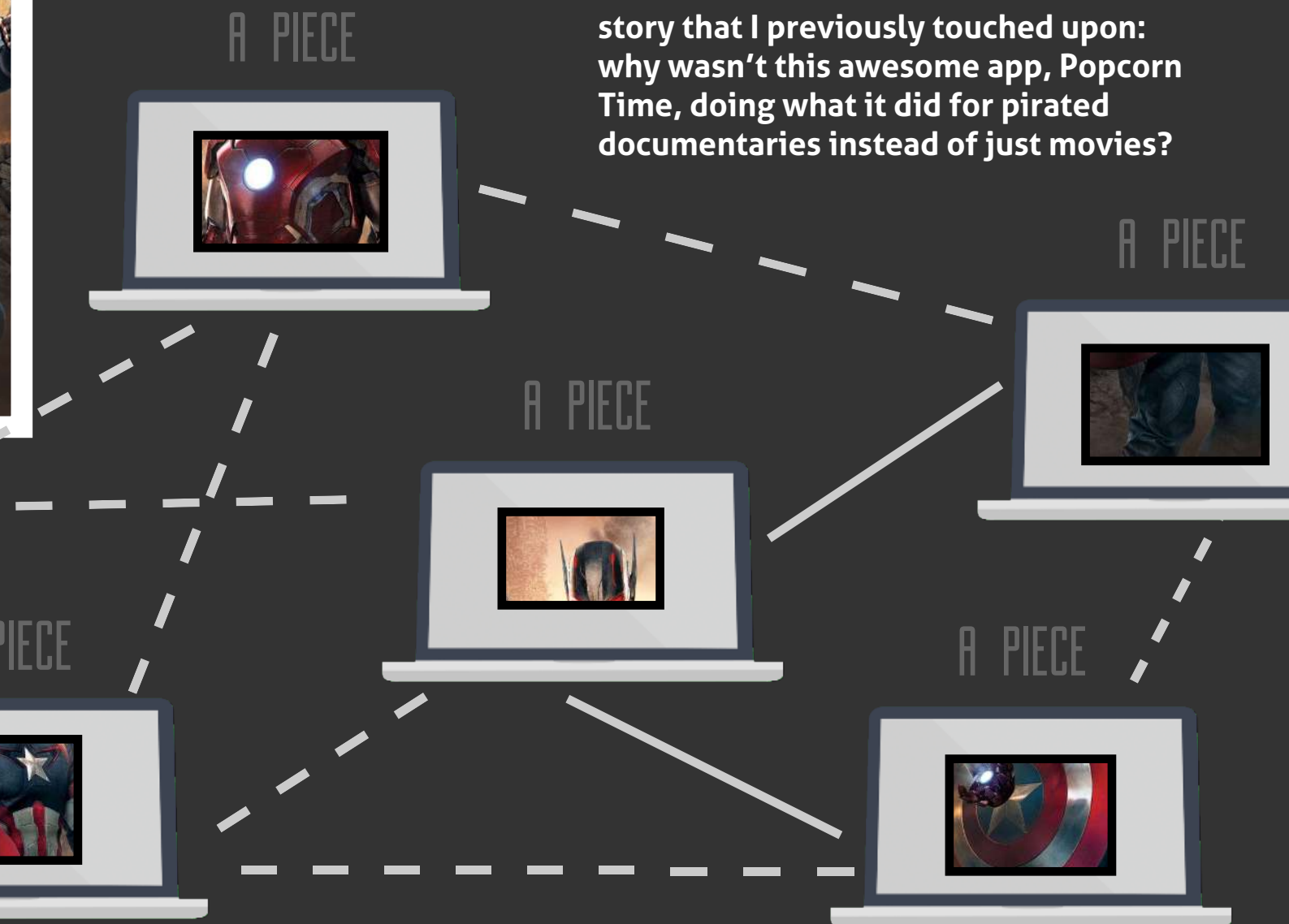
A P



The moral of the story?

As long as the source of something (hardware, software) is open, you cannot ban or otherwise censor it, as it will eventually be adopted by someone else and brought back to life, as long as they have the means to do so. This is something that happens on a daily basis. About two years ago, another service based on peer to peer technology emerged that was better than Netflix and Hulu combined. Popcorn Time allowed users to browse through huge catalogues of movies and TV series far more diverse than that of Netflix or Hulu, and to watch them with the click of a mouse, making 'piracy' so easy that anyone could take part in it. The app quickly became available for all operating systems, including mobile, and again, after many fights with the same big movie and music companies, it was announced some months ago that the project was taken down forever with their website shut down, and their members prosecuted. And again, a few weeks passed and the same application was brought to life by other people, fully functioning as if nothing had happened. As with Pirate Bay, people took the open-source code of Popcorn Time and implemented it somewhere else.

But there is another side/moral to this story that I previously touched upon: why wasn't this awesome app, Popcorn Time, doing what it did for pirated documentaries instead of just movies?



When they were in the early days of production, I contacted them to suggest adding more documentaries and lectures to their 'illegal' library, because I was curious to see what they would say. They, of course, kindly replied that people are not interested in documentaries or lectures, but in movies and TV series. Interestingly, they now have a documentary section to their app that is so poor and has so few titles that it would be ridiculous for anyone to sue them for it :). If you try to 'illegally' download a movie using p2p technology, you will find many peers (other people seeding the movie) even for the most retarded movie out there. But if you want to 'pirate' documentaries, you will rarely find any active peers, even for highly educational documentaries or lectures. Great technology - stupid people!?)

I want to show you how any technology, no matter how 'awesome' it is, still reflects the culture. Why aren't they using the above technologies for other purposes like organizing freely available lectures, making an awesome p2p communication tool, a science news system, and so on!? More than likely, there actually are many such p2p and open-source alternatives, but then why aren't people hyped about those and making them really popular!? Culture!

I am not putting down such technologies, as they are fabulous, are super useful, and are bringing a lot of progress, but I need to point out that these tools are integrated into, or are heavily influenced by, the monetary system and the culture that has evolved around it.



VS



3D printers can be used to print functional guns, or encouraging the ever-growing consumption of plastics and other materials as people try to make businesses out of the technology. Open-source software can be directed towards profit-based projects, such as making Linux compatible only with certain devices (due to contract terms they have with some manufacturers) - for instance 80% of Linux kernel contributors are now paid and working for various companies. Android, even if it's based on open-source software, pushes Google's products because it is still owned and supported by Google.

Consider that, by default, Android will only accept apps from its own app store. Even if that is done mainly for security measures, it directs people towards a centralized environment where there are 'rules for profit'. Ad Blocking apps, for example, cannot get approval to be added to the Android app store, although they help users get rid of intrusive ads and secure the device against the tracking scripts used by various ads, all because Google decided that didn't fit in with the larger 'profit-motive' goals of the system.

And yes, because it is open-source, you can uninstall Android and install a different version that suits you (unlock it), but very few are aware of this option or are skilled enough to do it. It's also quite revealing that even if, let's say, a search engine is open-source and p2p, as it becomes popular and many people are using it, the people who control this search engine can then put rules in place to serve their own interests. And they can do that because of its popularity and encouragement by the money game.

See this video as an example of how Google, even if it is partially a 'transparent' entity, is biased on its search results pretty much all the time, and for all kinds of reasons -



The same thing may happen with 3D printers, as big companies can easily take over. If Disney releases some proprietary 3D models that you can only buy and print from their own services, and it advertises that to the entire world (they obviously have the means to do that), it would be rather easy for them to become one of the most popular 3D printing 'entities' (businesses), even in a massive world of better open-sourced models to choose from than what they offer.

The internet itself is somewhat of a level playing field, with an abundance of 'stuff' to choose from, yet Facebook, Google, Youtube, and a few others have become the big players with very little competition, and they account for most of the internet traffic. Why isn't a decentralized FOSS search engine the most used search engine? Because Google has the money to maintain its 'monopoly' through advertising, profits, hiring people to work for it (even people from the open-source community). Why isn't a fully encrypted and open-source social network the most used? Because Facebook is so big now that people don't even know of any other social network. Whatever is 'served' to people seems to be whatever people use. It is not like people take the time to choose the most fair and beneficial services out there, even if that would help them and spare them some money.

Disney



Linux-based Operating Systems are overall more reliable, customizable, user friendly and secure than proprietary OS systems like Windows or MacOS, yet only about 1.5% of desktop users are running Linux. Because of that, there are far more applications developed for those environments than Linux. Since I began using Linux about 4 years ago, I've been closely following the development of a professional video editing software. There has been little progress in that area, while many of the developers have complained that they do not have the time to manage the very tough task of creating such a video editor (they have jobs to pay for their life, so no time for these projects).

All in all, no matter how interesting and potentially progressive a piece of technology is, it will always reflect the culture and the system that it is part of. While thinking that these open-source technologies will eventually overtake their proprietary counterparts may be true in some cases, after a long period of struggle, but as I exemplified above, they too become polluted by the money game even if that happens.

That being said, let's debunk some myths, starting with the myth that technology is going to save us, to change society, to lead us to a world of abundance, equality, and security.

FACEBOOK

1.44 BILLION USERS

GOOGLE

3.5 BILLION SEARCHES
PER DAY

YOUTUBE

1 BILLION USERS



THE ILLUSION THAT SCIENCE AND TECHNOLOGY ALONE WILL CREATE THE BEST SOCIETY

Both Technocracy and now the modern Open-Source and Decentralized movements spin around the idea that technology is the key to creating a better society, to solving today's problems.

The printing press was invented some 600 years ago, allowing people to quickly print many books and share their ideas with the world. This was a huge thing back then. Just think about the fact that before this invention, they could only copy books by hand. It was like moving from paintings to photos. Many people of that time were sure that this marvelous technology would bring peace on Earth, since they could now educate all of the world's people. Later on, the telegraph, radio, airplanes, TV, satellites, and the internet were all considered to be tools that would bring people together, unite humans of all colors and ages, and would create abundance. The reality, however, was that people indeed wrote books on science and educated others, improved communication and brought the world closer, but we also got many nonsensical books that transformed people into fanatics and dangerous or moronic creatures, planes used to better destroy entire cities, communication devices to spy, and other tools to kill, coerce, enslave, and exploit. Wars got 'better' because of these tools, and the 'ugliness' of the human animal has grown even greater as billions are still starving today while the world is possessing huge technological potential that could quickly solve these issues.

There is absolutely no doubt that with today's technologies and scientific knowledge, we could cure most diseases, feed all people, provide for all of their necessities for free, and overall solve all/most of the world's problems while satisfying all/most of people's needs and saner wants. But the issue is not with having the technological and scientific means. Let's explore further.



metabolism - 1928



In 1928, another movement called Metabolism, formed exclusively of engineers and architects and based on technology, developed in Japan. They thought of structures (houses, buildings, and entire cities) as flexible, adaptable, organic growing 'things'. They recognized that infrastructure must be designed with change in mind, for it to adapt to people's needs alongside advancements in technology. Architects built conceptual models, and even a few functional real-size ones, all toward solving the most pressing problems of their day (population growth, resource management, etc.).

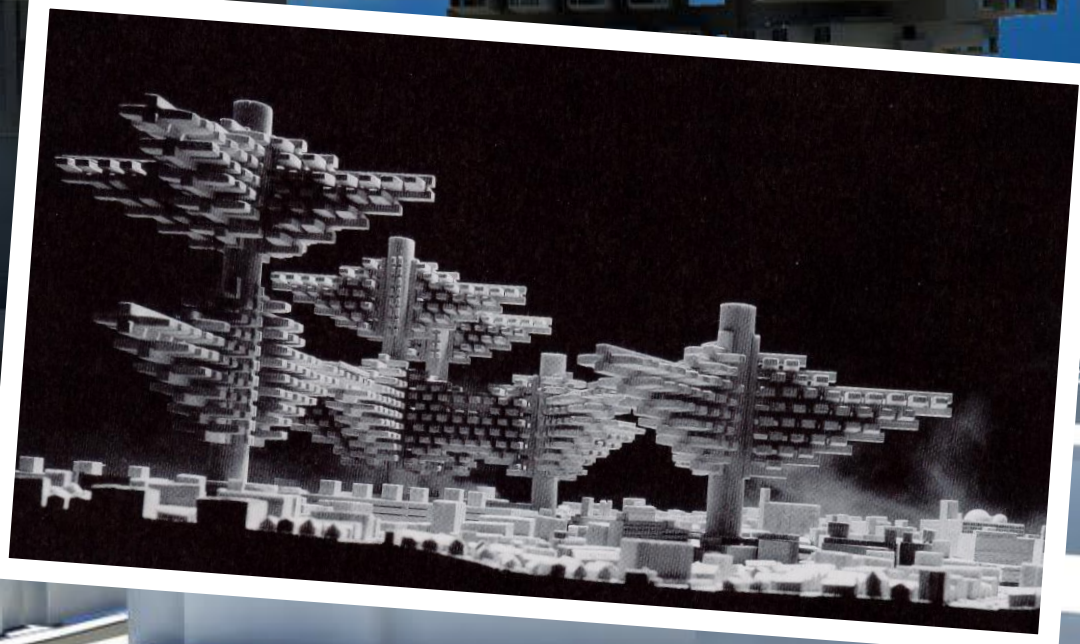
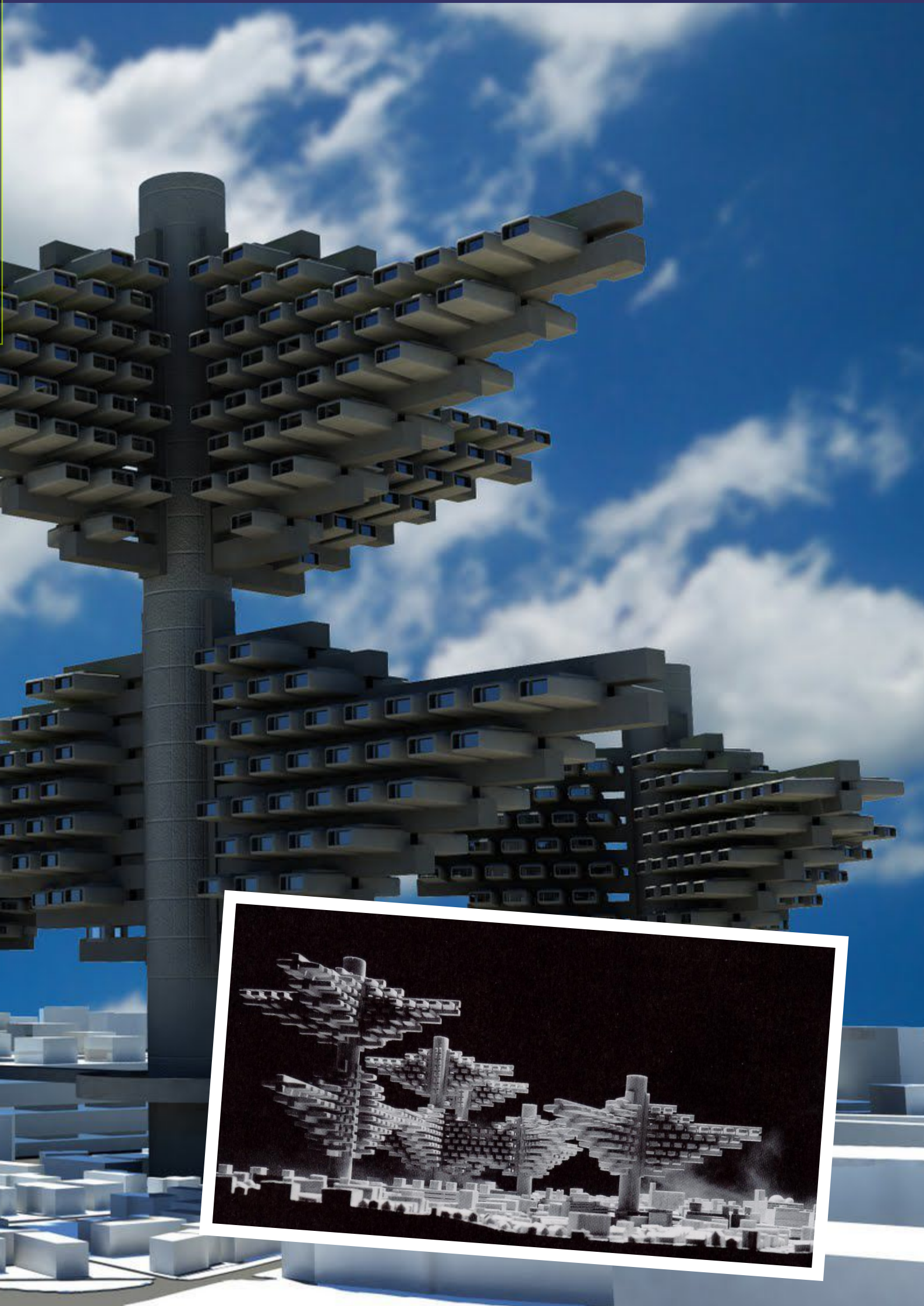


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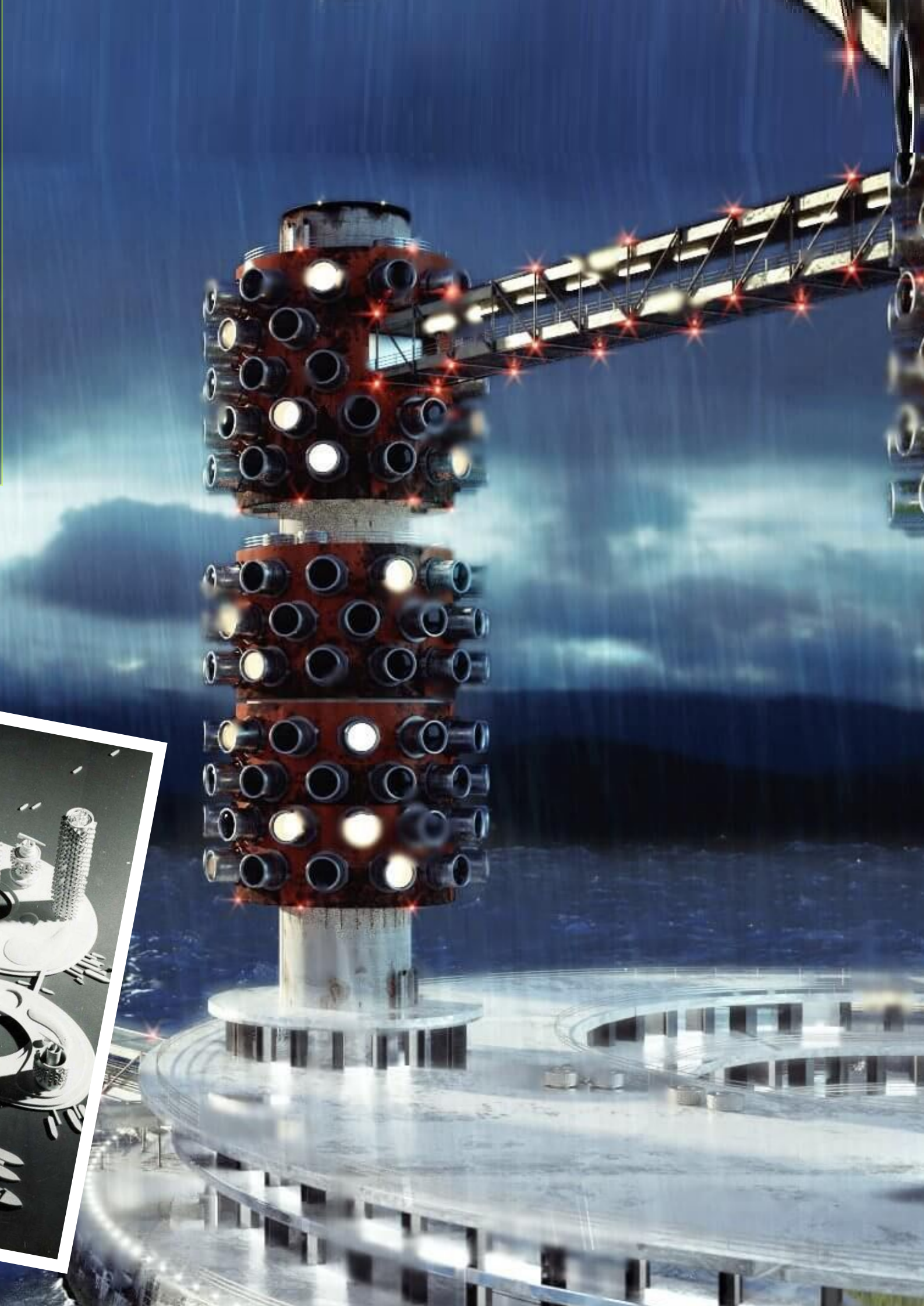
The movement grew and by the 1950s, they had developed ideas that included a 300m tall tower that housed the infrastructure for an entire city. It included transportation, services and a manufacturing plant for building prefabricated homes. The tower was vertical "artificial land", onto which steel, prefabricated dwelling capsules could be attached. They proposed that these capsules would undergo self-renewal every fifty years and the city would grow organically, like branches of a tree.



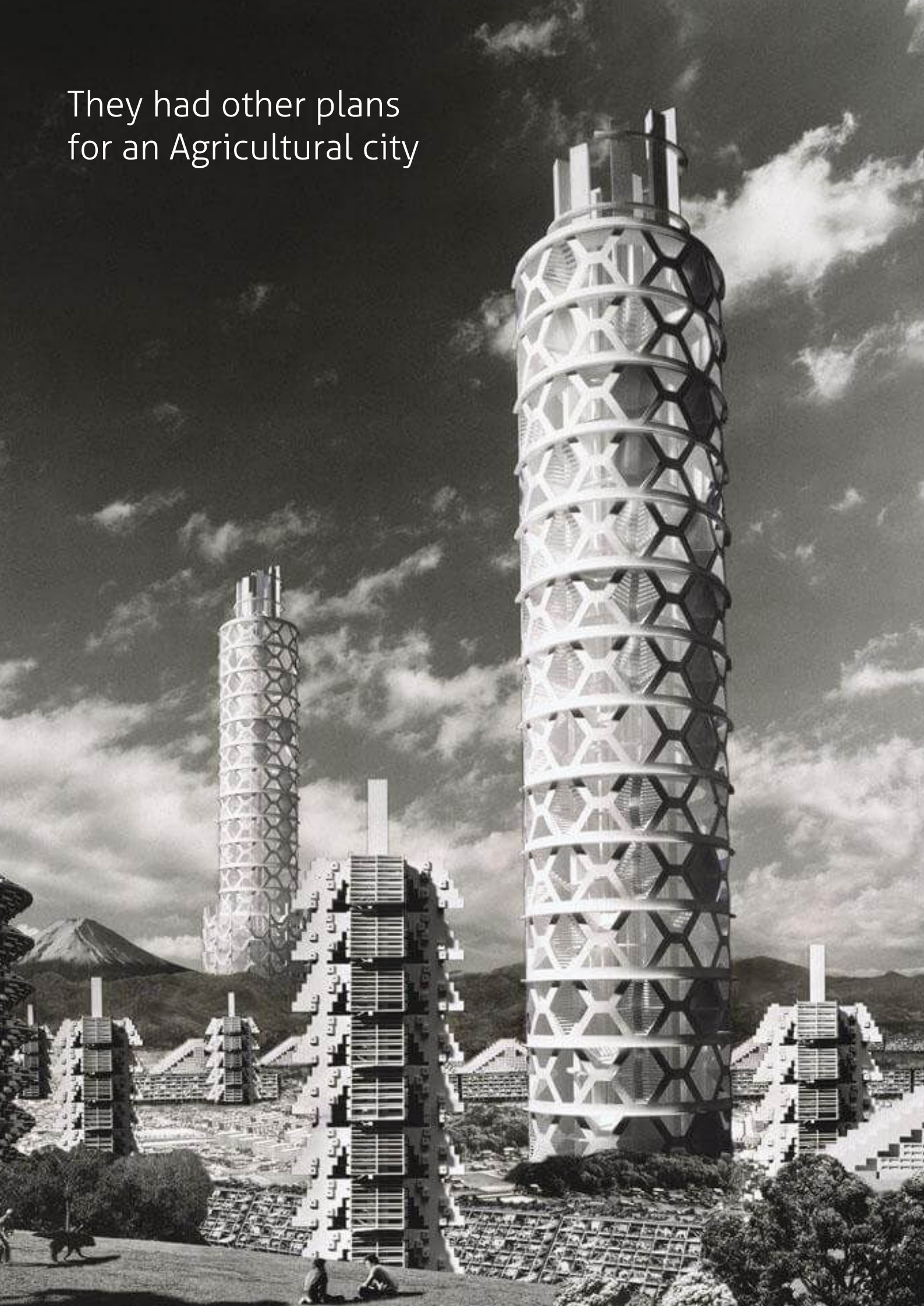


Metabolism proposed a project called "Marine City" that would float free on the ocean, free of ties to any particular nation and, therefore, free from the threat of war. The artificial ground of the city would house agriculture, industry and entertainment, while the residential towers would descend into the ocean to a depth of 200 metres; self-sustainable, flexible, clean and safe, earthquake-proof, impervious to flooding and away from the mainland's urban sprawl. The project is based around steel rings, measuring over two miles in diameter, on which towers would sit holding 1250 magnetized living units that could be easily replaced without causing any damage to the structure. The circular foundations would float on bottle-like forms boasting rich aquaculture farming.



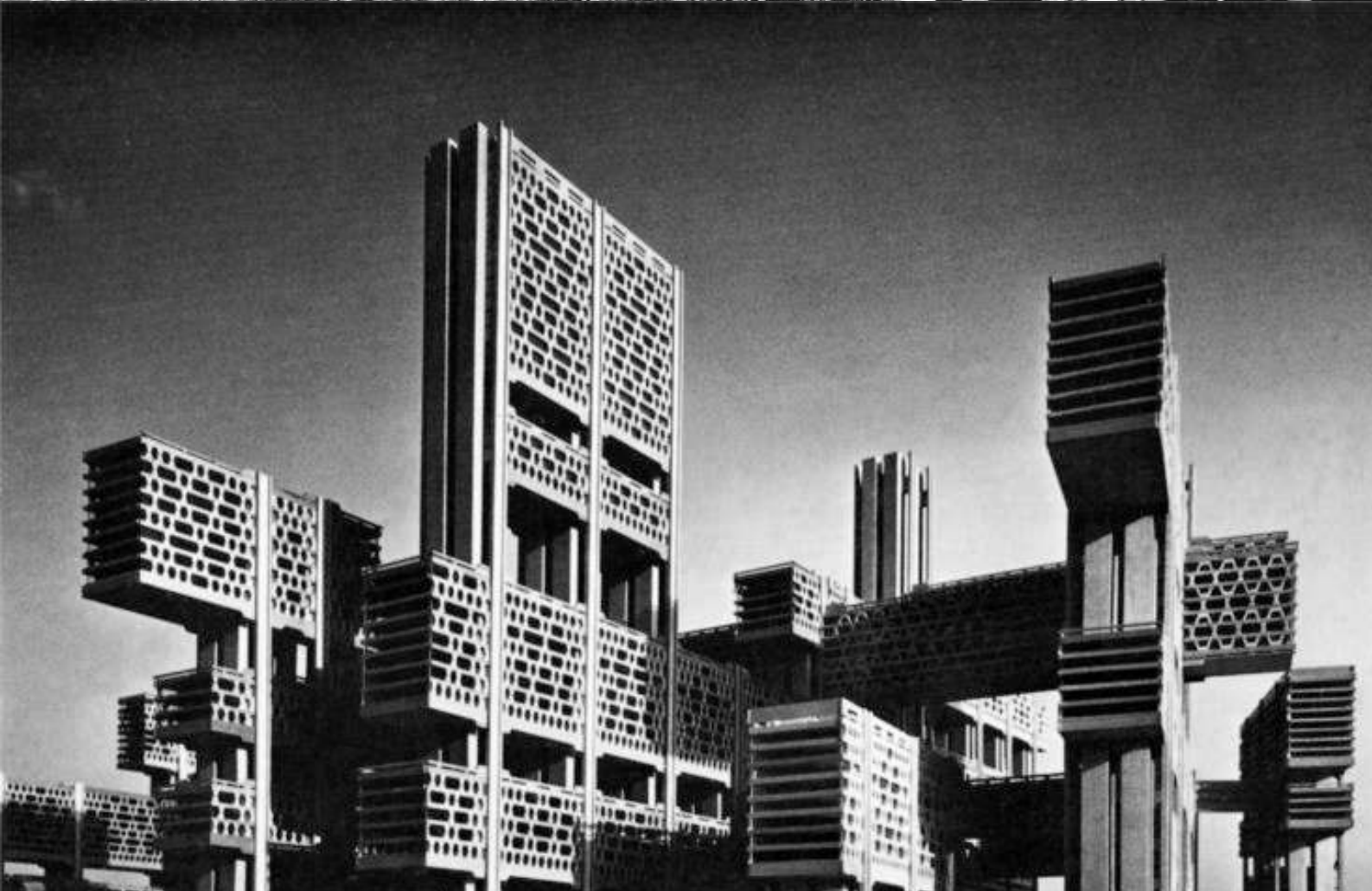


They had other plans
for an Agricultural city





or Tokyo Bay
plan for
housing over
10 million
people

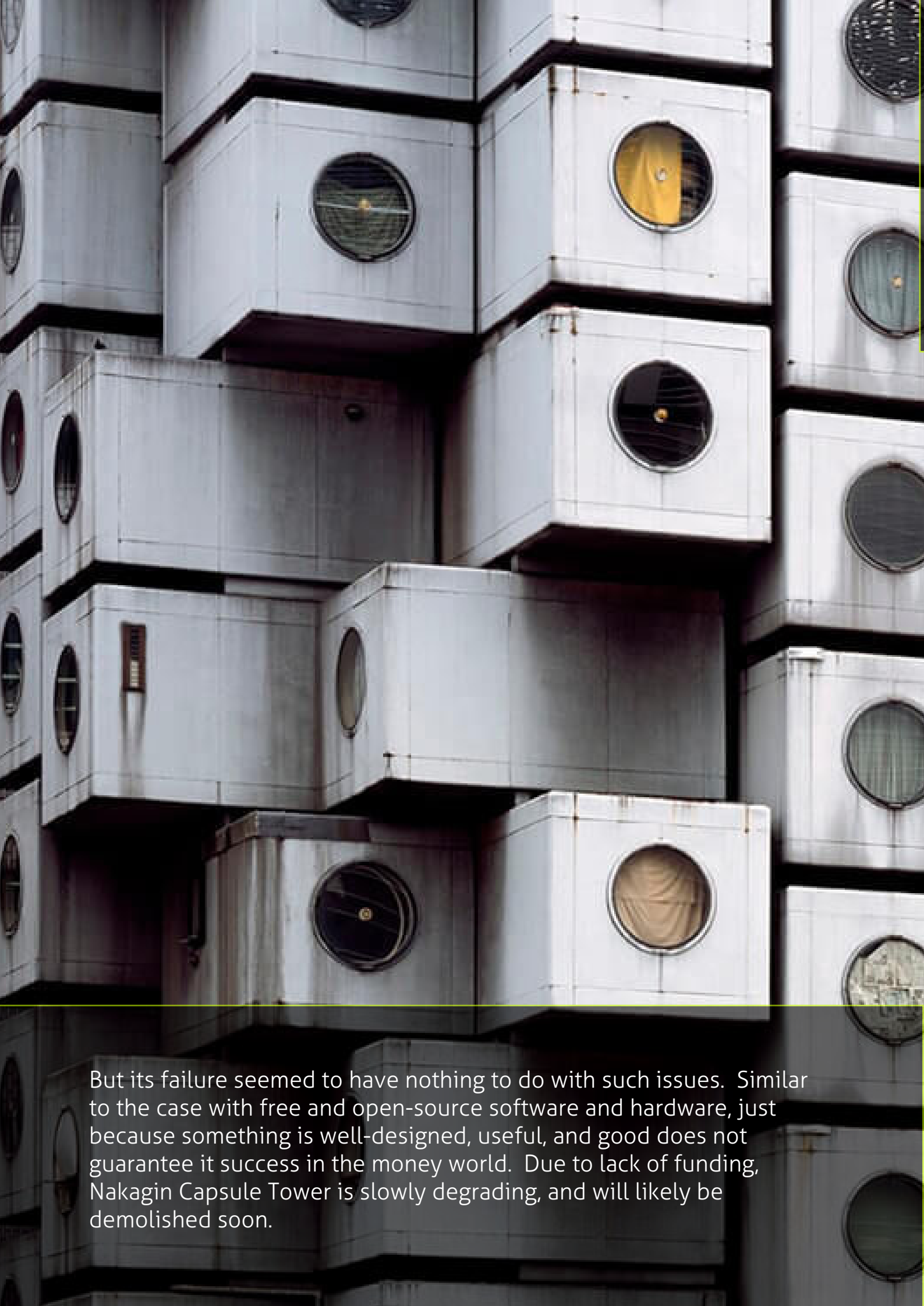


Although the movement was known world-wide at that time, and some of the engineers also served as Japan's architects, with some of them responsible for the restructuring of the nation's infrastructure, only a few of their designs were ever put into practice, and then only on a very modest scale that often did not represent their 'organic' model. Broadcaster Centre, Broadcasting Tower, Hillside Terrace, and the 'famous' Nakagin Capsule Tower were some of their creations.

I used the word famous above because while Nakagin Capsule Tower was a very efficient building in theory, with the ability to dynamically add additional capsules (apartments) to it on request, and the capsules included all of the amenities (a bed, storage cabinets, a bathroom, a color television set, clock, refrigerator and air conditioner, plus other extra options), it was never really used as intended for people. Today (2016), only 15 people live within it and it functions as a hotel for \$30 a night. There are also some innate structural issues. For example, if you need to remove a capsule near the bottom for upgrading, all of the above capsules first have to be removed, which obviously creates additional logistic issues (do you ask all of the 'above' inhabitants to move elsewhere until all of the work is completed!?).

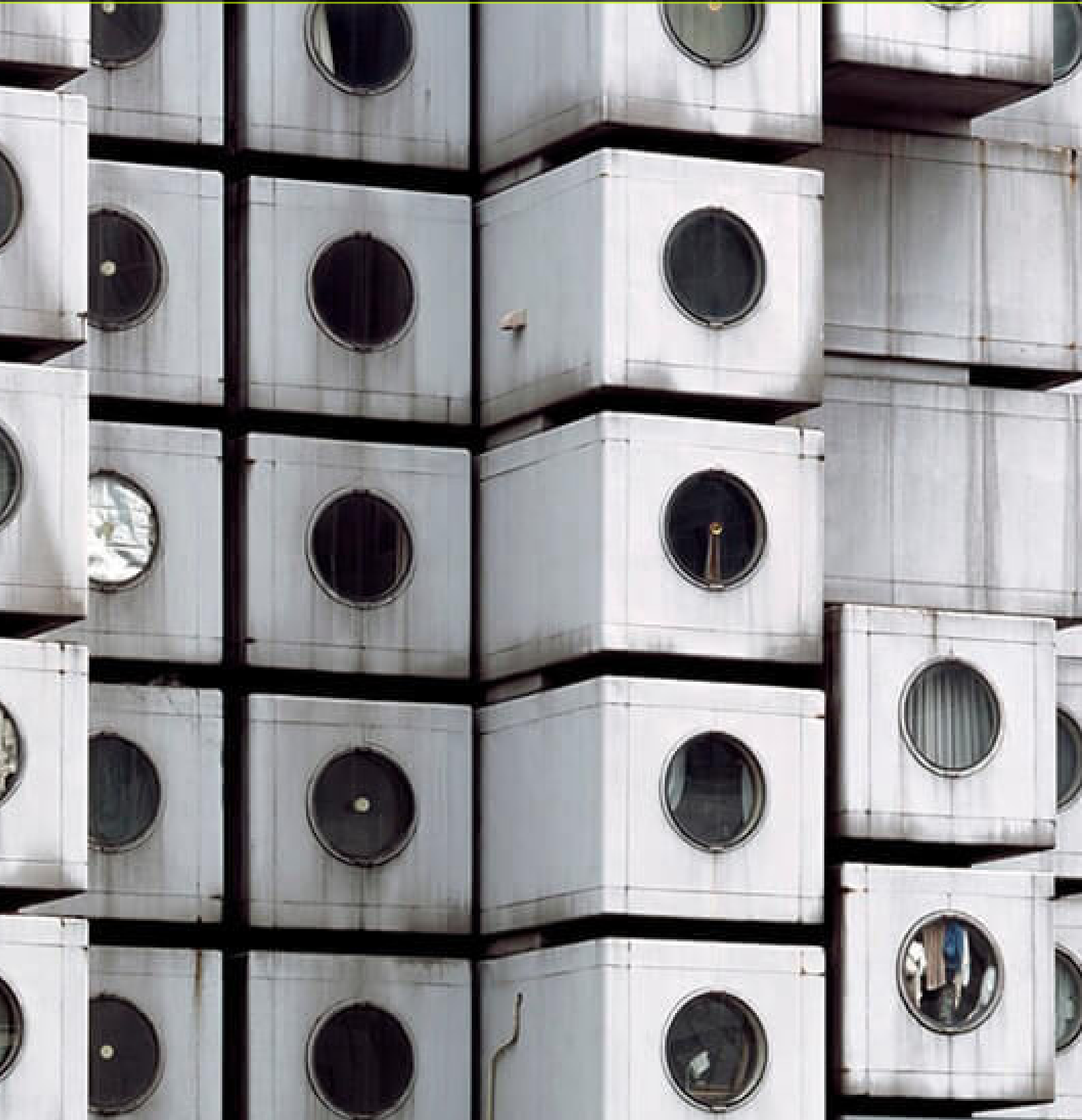






But its failure seemed to have nothing to do with such issues. Similar to the case with free and open-source software and hardware, just because something is well-designed, useful, and good does not guarantee it success in the money world. Due to lack of funding, Nakagin Capsule Tower is slowly degrading, and will likely be demolished soon.

In a way, Metabolism was a form of technocracy that was applied briefly, but only from an architectural perspective (they still envisioned money, politics, and such). While they had some detailed plans for sustainable cities and building architecture, and they tried to put some of them into practice, it never took off. As a side note, many of their members were influenced by the writings of Karl Marx. You can watch this 1h 30min [video](#) about the Metabolism movement, and there's more info about the movement [here](#).



project cybersyn - 1972

Meanwhile in 1972 in Chile, they realized that you can't leave people in charge; you need computers to make decisions, or at least to help arrive at decisions, so they did exactly that. They were implying "No more dictators or technicians with limited abilities!".

Although the technology back then was rudimentary, they managed to build a nationwide network to monitor industries: resources, production, distribution. All of the data was fed into a central computer where scientists and economists were able to take more educated decisions based on it, because now they had direct information about how their production and distribution facilities worked. As an example, 50 thousand striking truck drivers blocked major streets and access passes across the country. Based on the data they got from this network, the government still managed to supply food to their citizens with only 200 trucks by knowing what roads to use, where to deliver, etc.. The system they created worked great in this case.

The system was envisioned based on the human nervous system, because they thought of it as a dynamic, reactive system that constantly adapts: what is needed, and where. So in a way, it was decentralized by relying on external nodes outside the network to feed it with data for arriving at decisions, but in another way, it was centralized because people in the control room still made decisions that influenced the overall network, as well as the economy. They were, again, like other groups proposing science in place of government. And while they actually succeeded in putting it in place, the project ended in 1973 following a revolution. Once the new government was installed, the network project was discontinued.



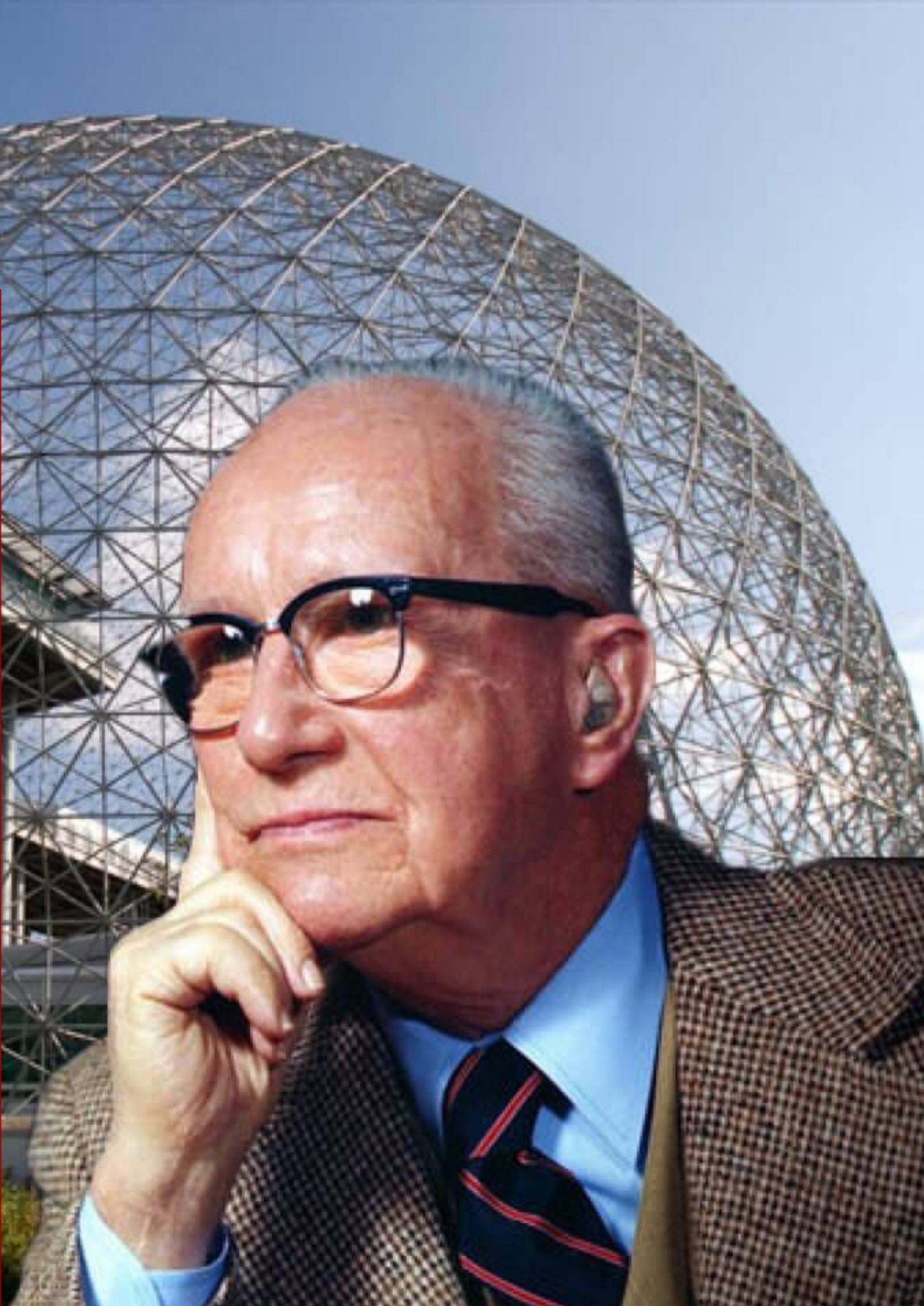
Heres more info on it: [wiki](#),
[documentary](#), [book](#) - [download](#).

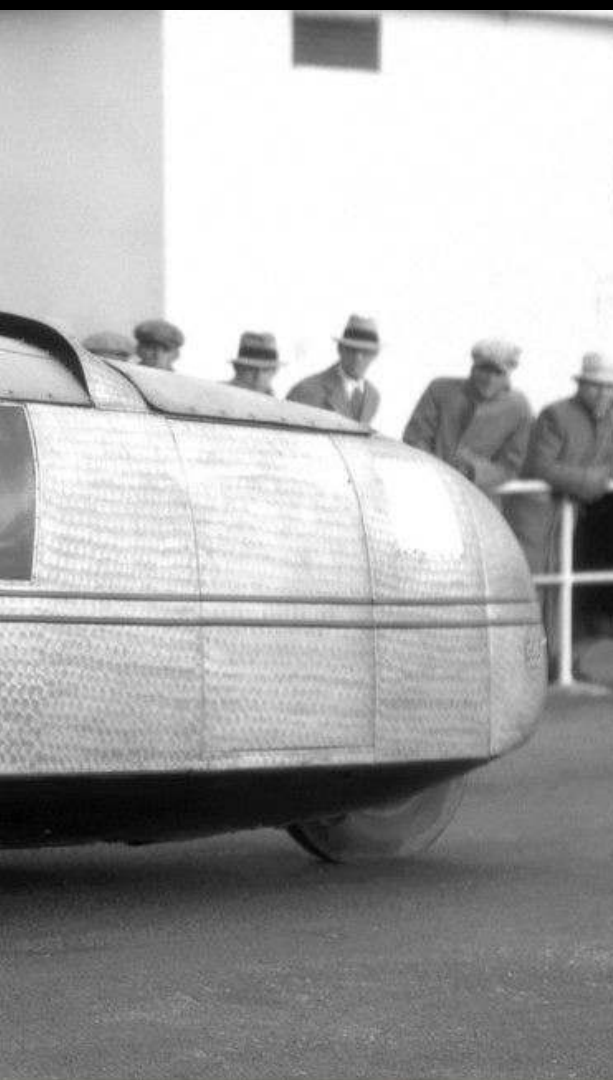
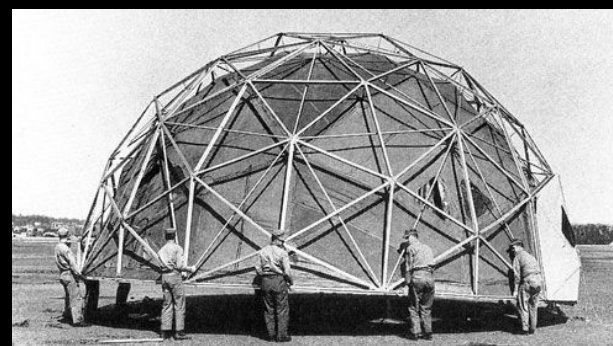
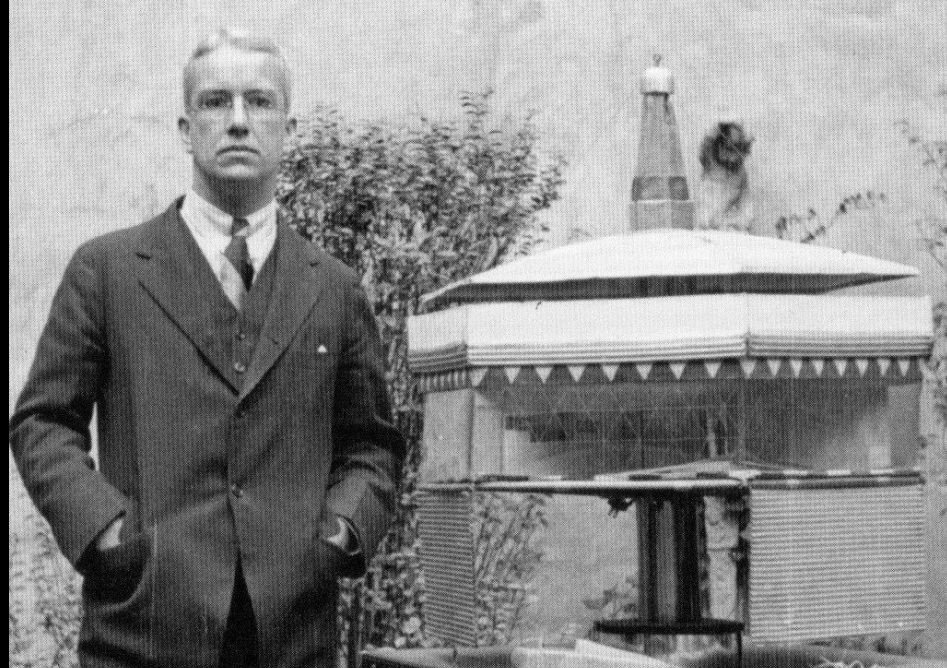
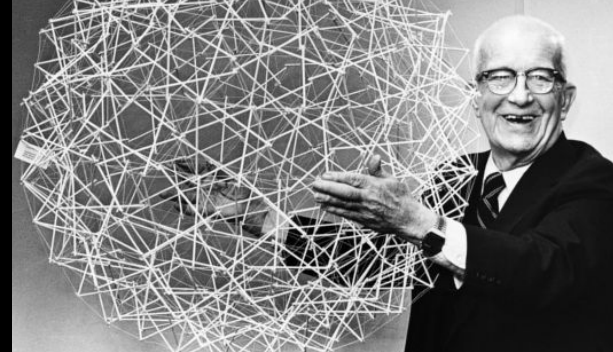
buckminster fuller

In a way, R. Buckminster (Bucky) Fuller was somewhere between Technocracy and Metabolism. He designed many houses, some cars, and other structures with the objective of utility in mind. Aircraft technology is the key, he said, as it is most efficient in terms of resources and energy, and that kind of technique should be applied to build houses. He became famous for his dome structures, designed to resist earthquakes, hurricanes, etc., and which were very simple to build and deploy. When asked why he chose the geodesic dome as a preferred structure, he said that you live inside one for all of your life, your head. His ideas focused on reflecting nature, somewhat similar in thinking with Metabolism, though there is no evidence they were connected in any way.

He viewed Earth as a spaceship, and again, that science and technology could bring about a new kind of world for all of us, one of care for all humans. He even invented the World Game to teach people about the management of resources and dealing with global challenges, projecting onto a big map the availability of resources and the world's problems. Although he became famous for his geodesic dome, the modern Dymaxion car he made in 1933, and the prefabricated home designs that he believed could help house everyone on Earth, all of those became largely forgotten. For a while, there was a kind of revival movement in the 1960s around his ideas, as people again believed that such technological solutions would revolutionize the world. Many groups started to build their own homes based on Bucky's inventions. He was a star for a while, and very well known in America, but overall his ideas seem to have faded away almost entirely today. Watch this [documentary](#) to learn more about him.

So, again, ideas like building more with less (as Bucky said many times), better designed and smarter to make the world a better place, failed. His motto was: "You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete."





As we've showcased numerous examples here, many have tried this and failed. In each case, it was not a technological failure, but rather one of not fitting within a system and culture that is driven by money. Many millions were aware of these ideas, but in vain.

This clearly shows that having a well-designed technological plan to make this world a better place (without problems and to create abundance) does not guarantee that will work, not even when you experiment with it to prove that it works. The money game is very powerful and too integrated in every culture and tribe.

FOR A PERFECT EXAMPLE, LOOK AT CLIMATE CHANGE.. There is a humongous amount of evidence that climate change is created by human activities (mainly profit-driven) and that there are numerous technical solutions for solving it, but is that happening?

Are these plans, which are based on science and technology toward reversing and dealing with climate change (perhaps the biggest issue right now for all Earth's creatures) and backed up by the entire world of science, being implemented just because they are 100% factual and feasible? Hm....no.

Then what makes you think that, even if it's backed up by all scientists around the globe, presenting a detailed plan to improve our worldwide society will be enough to implement it?





There are thousands of ideas, blueprints, and designs of all sorts of cities and buildings that are clean, self-sustainable, and so on. There is no shortage of these. The Venus Project is such a project that claims to even have blueprints for many of such similar designs and ideas put forward by groups like metabolism, technocracy, Bucky Fuller, and others. But even if that is true and you have a detailed technological plan to revamp society, this is not enough at all. If it was only about that, then Masdar city would have succeeded to change the society, as it is a self-sustainable city. The same goes for Kibbutz communities or other self-sustainable communities.





If you are still not convinced and believe that having a mind-blowing technology (say, nuclear fusion for unlimited energy) will solve something inside the trade game, then consider the following:

502,000 PEOPLE DIE EACH YEAR

because of contaminated water, and over **1.8 BILLION DO NOT HAVE ACCESS TO SAFE WATER**, even though there are \$15 plastic water purification bottles for sale on Amazon, plus an abundance of other related technologies out there.



AROUND 9 MILLION PEOPLE DIE each year of hunger, and more than **870 MILLION ARE STARVING** ([source](#)), while we already have the technology and resources to fully feed them all ([source](#)). Heck, we could even transition to a different diet that would need little to no animal products to get rid of the huge mess that creates (both environmental and health issues), but that's also not happening ([source](#)).





Despite the fact that we've had electricity for over a century, and today we could power the entire world via renewable energy sources (zero marginal cost), over **1.3 BILLION OF US ARE STILL WITHOUT ACCESS TO ELECTRICITY** and **2.6 BILLION** are without clean cooking facilities ([source](#)).





SOME 55% OF THE WORLD'S POPULATION DO NOT HAVE INTERNET ACCESS AT ALL, while the rest of us pay for access that we could have for free. Taking my own internet as an example, I pay for a 2MB/s download speed and typically consume around 1GB or less per day (and I download lots of stuff). But let's go crazy with this and say I get bored and decide to 'pirate' five full-hd video documentaries per day, listen to lots of music, video-chat using Skype, etc., so that I end up using more like 20GB per day. Ok now, if I were to use all of my available internet speed all the time, that adds up to 172GB per day.

So, even if I was bored and 'pirating' stuff, I could only make use of around 11% of my daily internet allotment. That means that I could share my internet with nine other bored 'pirates' for free.

So, to make this short, we have the technology and bandwidth to let everyone on the web for free, or very close to it.



**INTERNET
USE <5%**



Science and Technology have made it possible for humans to live well into their 80s or 90s today, but worldwide **LIFE EXPECTANCY AVERAGES ARE AROUND 67** years, because so many still do not have access to these 'treatments' and die in their 50s or 60s, and even younger (source).





Even more dramatic is that some **27 MILLION PEOPLE**, on top of what we've presented so far, **DIE EVERY YEAR FROM PREVENTABLE CAUSES** (things that are solvable with today's science and technology):

from workplace accidents, to not having access to basic health care like vaccines, to the direct/indirect influence of tobacco, alcohol, and other toxins, or being killed by other people (even committing suicide), all situations that are a direct effect of the money game (poor food/products/education, negligence, not enough money, and so on).

300,000
BURNING

355,000
TOXIC
AGENTS

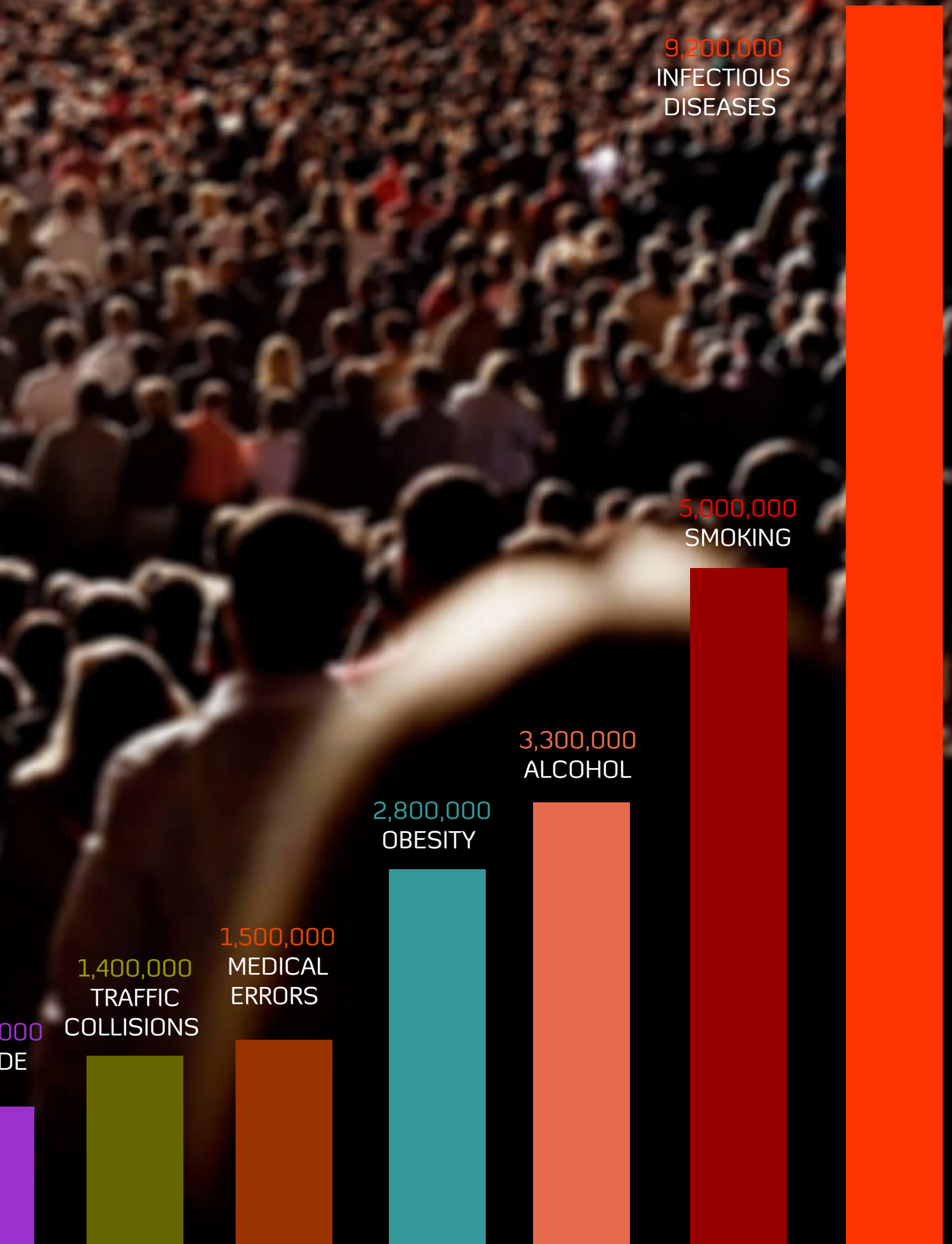
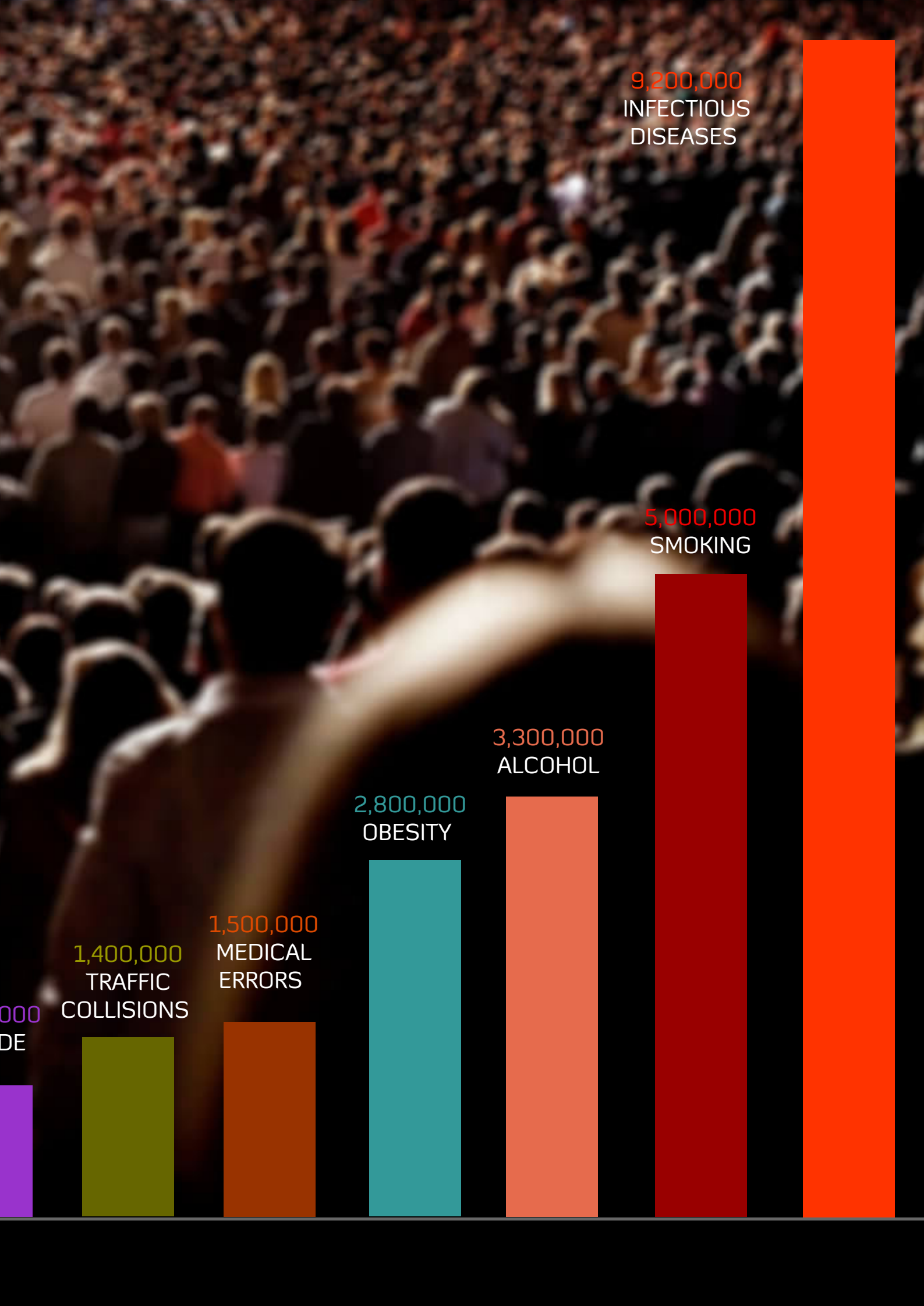
368,000
DROWNING

437,000
HOMICIDE

556,000
FALLING

694,000
COLORECTAL
CANCER

1,000,000
SUICIDE



Combined with those who die from starvation, it's the yearly equivalent of the entire population of Canada (some 36 million people) dying from preventable causes, and this is only a rough estimation, as the actual figures may be much higher.



Keep in mind that these are parents, brothers and sisters, grandparents, people with dreams and ideas, unique creatures with great potential that will never again exist in the entire universe. And the counts above are only of the people who are dying.

The amount of preventable suffering experienced by those who survive these situations is countless.





**THERE ARE ALREADY
MANY MORE EMPTY
APARTMENTS AND
HOMES THAN
HOMELESS PEOPLE**



**MORE CARS THAN
PEOPLE CAN DRIVE**

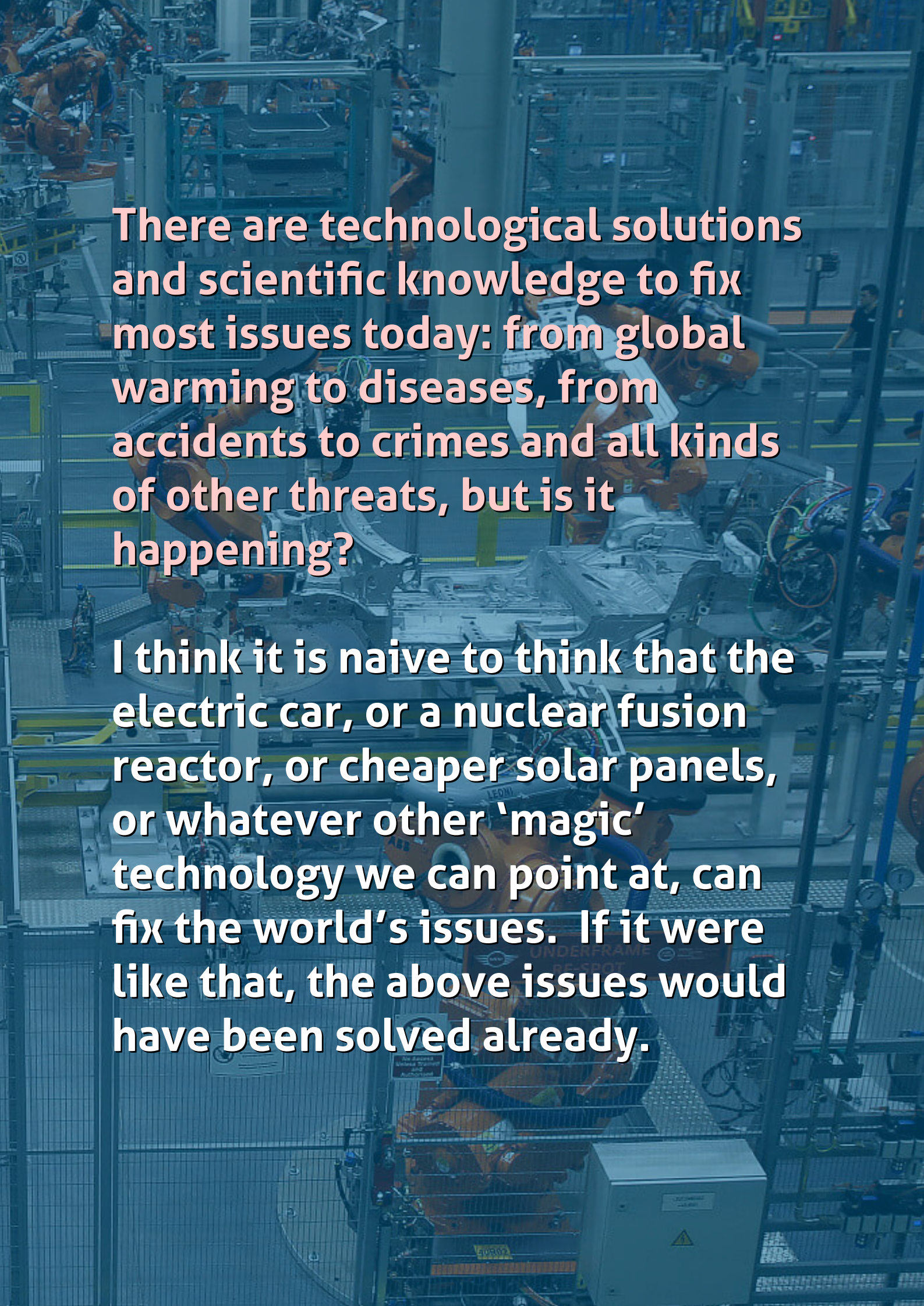


**MORE CLOTHES THAN
PEOPLE CAN WEAR**



**MORE GADGETS THAN
PEOPLE COULD USE**

**AND YET SO MANY PEOPLE
LACK ACCESS TO THOSE**

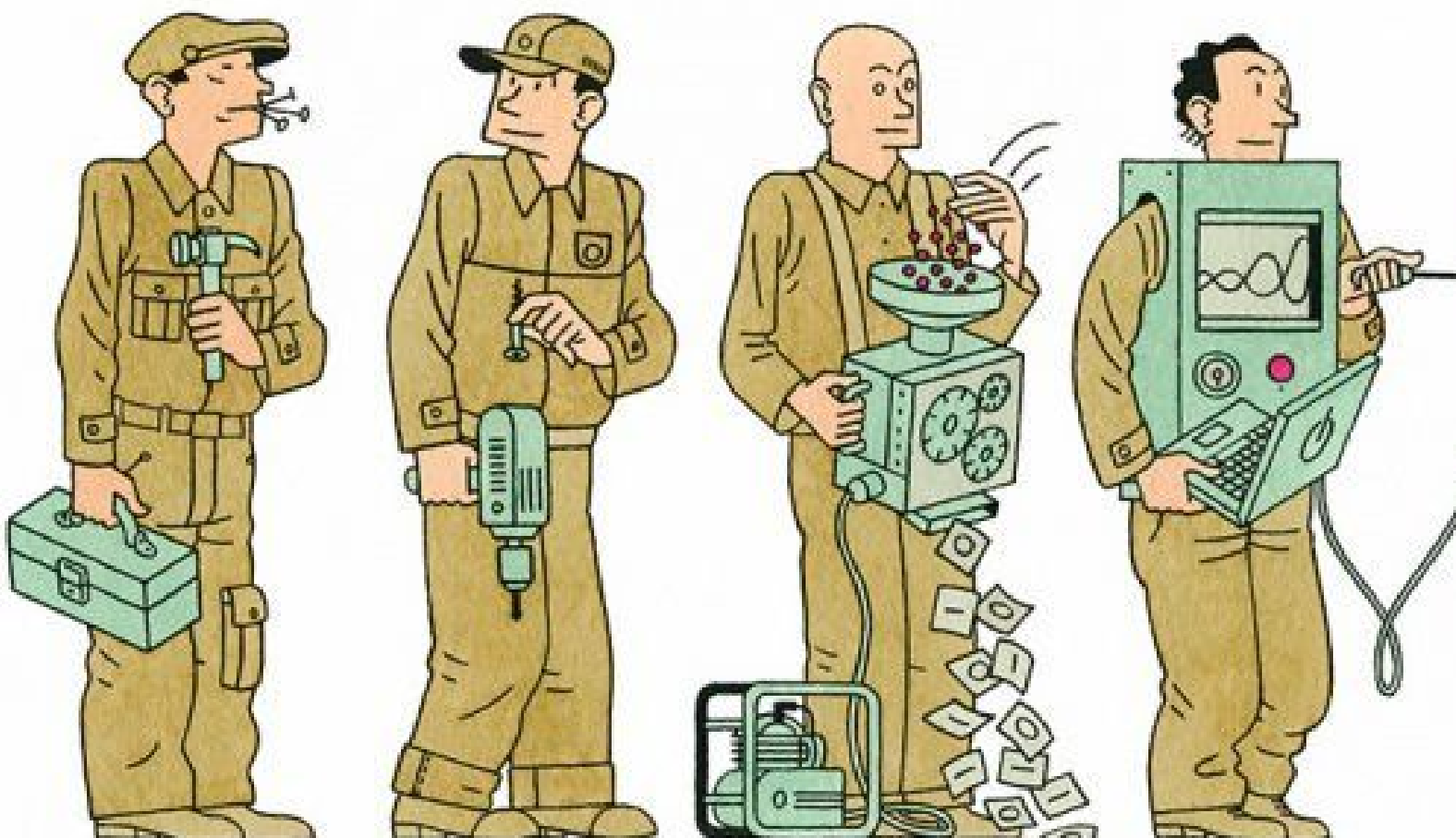


There are technological solutions and scientific knowledge to fix most issues today: from global warming to diseases, from accidents to crimes and all kinds of other threats, but is it happening?

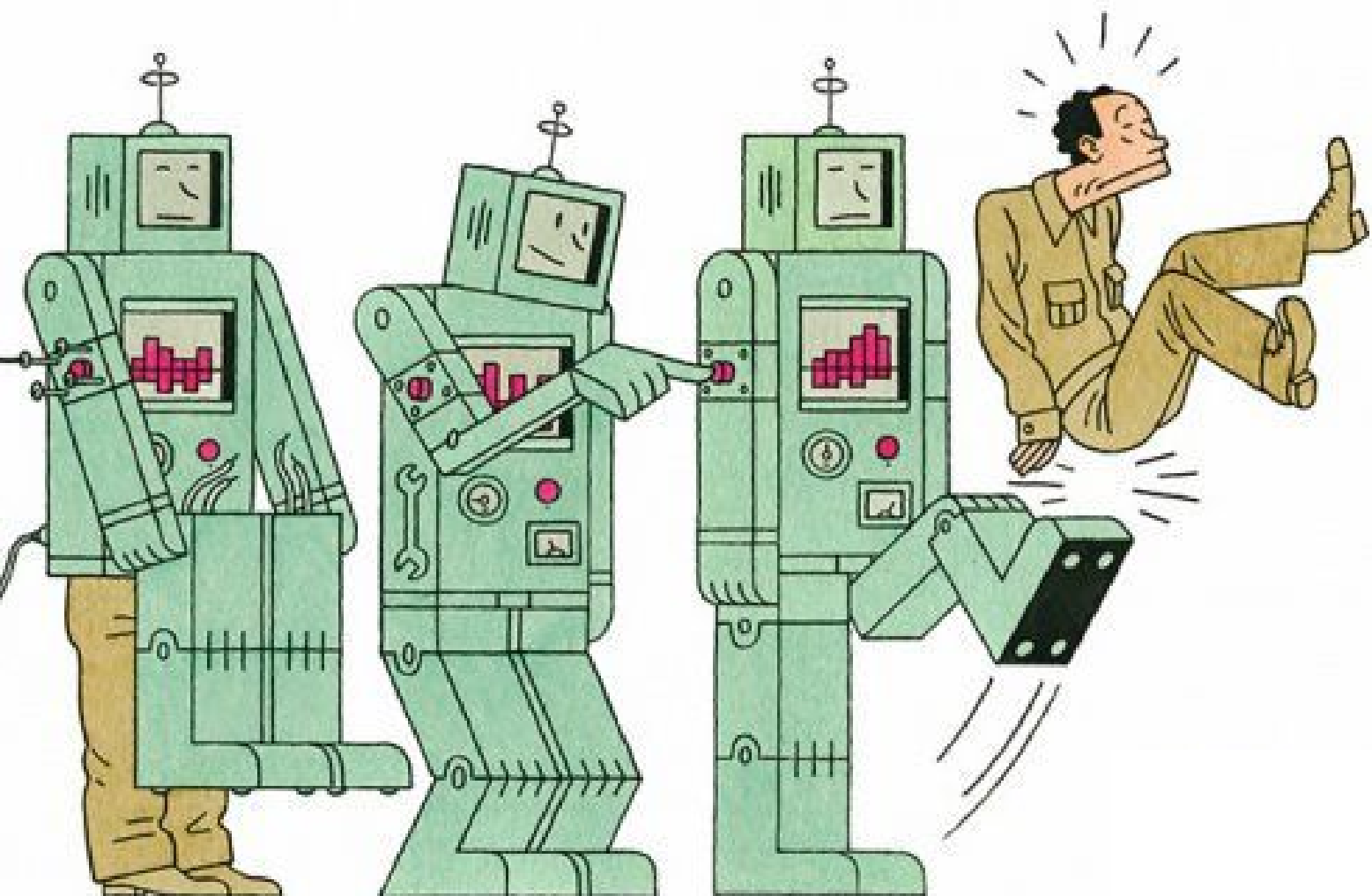
I think it is naive to think that the electric car, or a nuclear fusion reactor, or cheaper solar panels, or whatever other 'magic' technology we can point at, can fix the world's issues. If it were like that, the above issues would have been solved already.

One more possible myth about technology is that automation will replace most of the jobs and therefore will force this money game to change.

We've argued in many articles that this could be the case, but what if it's not? Dog hair stylists, social media managers, online advertisers, app developers, interior designers, fashion critiques, internet stars like youtubers, all sorts of start-ups, and all sorts of new and non-automatable jobs (non-automatable because of their subjective nature) are always being invented, and I'm unable to detail if such jobs will be enough to keep the money game from crashing (because I cannot know what jobs will be invented and how they will affect the entire system). I just want to make you aware that new jobs, no matter how pointless or silly or 'just for the sake of employing people', are always invented (these studies and others argue that technology, in fact, creates more jobs).



Then add in the fact that all kinds of tribe rules are used to slow down automation. There are many tribes that do not finance many projects if they do not employ a certain number of people, despite them being able to do the job better with machines instead of people. There is also a financial cost to automate many jobs that can be automated. I still know many people who work in Windows XP and Microsoft Office 2003 and wonder that if companies can't even keep such software updated, how long will it take them to automate their business. Just look around, there are so many jobs that could be automated today. Some could have even been automated some 100 years ago, but are they!?



Then, even if all of this pushes the money world to change, what solutions will most likely be implemented? Maybe a monetary patchwork like a Universal Basic Income (UBI) for everyone will be implemented. It's a monthly payment without any strings attached, so that job insecurity vanishes. No one would have to do anything to get this monthly payment that, in theory, should provide for the basic needs of all who receive it. Let's look a bit closer at that, since this idea has become a popular notion lately. What this proposal says is that all social benefits, such as the maze that has been created around healthcare (papers and rules, deciding who is 'fit' to receive these benefits or not, etc.) would disappear, replaced by just giving all people (rich or poor) a certain amount of money each month and let them decide how to spend it (take care of their health, buy alcohol - whatever they want to do with it is up to them).

For sure, in theory, such a payment would help so many people, including myself, and let's say that all of the experimental studies show that people become more kind with each other when they are given this unconditional payment, and they spend more time on education, helping the community, etc..

So let's suppose all of that. BUT: Can we really expect that this will be implemented quickly enough or in that 'perfect' state across all tribes? Wouldn't all kinds of rules be applied such as: you have to be a 'natural' citizen of this tribe, or never leave the tribe, in order to get it? Wouldn't this privatize all state run services like healthcare? If so, we're already well-aware where that can lead (more focus applied to profit-based schemes instead of human health across all of our most important services). What about wars? Corruption? Inequality? How does this approach address any of that? Will this incentivize even more competition between companies, as they would then gain new customers and, therefore, more profits to fight for, more production to manage, and produce more waste?



I've been on a sort of UBI for the past 2 years or so, and I can tell you that it's bloody hard to do anything more than living a very simple life (food, electricity, rent, clothes). And without any medical insurance, it is so expensive, and often impossible, to get 'fixed'. There is no way I can uplift my financial situation, even if I had the time - I can't just start a company and get rich; and I don't see how this will reduce competition between people as they will seek for profit even more than before - the rat race is not going to end, and is quite likely to even intensify. It seems to me that for such a thing to work, we would need many things to happen 'perfectly': from implementation to 'hoping' that these open-source and free 'things' will become better and much more accessible, so you can get to 'enjoy' their outcome for free and not have to rely on money, because UBI is not enough. But as we've argued above, this may just turn out to be an illusion under the money game, because things very rarely become free of charge, even when abundant within this system.

To put this simply, even with a UBI in effect, people will still be persuaded by advertising to flock to buy the latest smartphone, and their UBI won't be enough to afford it, so they will still seek for jobs that will be increasingly scarce due to automation to cover for such 'juicy' wants. People will still feel the need to take out expensive loans, companies will still seek to maximize profit (exploitation of people and the environment), and things may even get worse than before, even within the 'best case scenario' where this UBI indeed covers people's needs. Many people would have more money (extra earnings from different kinds of other jobs) to consume even more and perpetuate the money game much longer than it could last otherwise. So, take that into account.



ABUNDANCE ALONE IS NOT ENOUGH

Do you know what is the second most popular beverage in the US? It's "bottled water", despite the fact that almost all Americans have access to drinkable tap water. Bottled water sales have increased dramatically over the past few decades, despite the fact that tap water has become increasingly safer, abundant, and incredibly cheaper ([source](#)). As mentioned previously, there is an abundance of free software available out there, but very few are using it. The entire digital world is one of abundance, because everything in that world is nothing more than collections of 0's and 1's. A movie in digital form costs near nothing to replicate it billions of times, yet you are restricted from doing that and you still have to pay in order to access most digital stuff. Not to mention that companies are still selling physical DVDs and making a ton of money out of that in this day and age ([sales 2015](#)). It's mind-boggling to consider how much online stuff is currently being protected behind paywalls.

Therefore, even when the means of production and distribution are near zero marginal cost, there are still many ways to make a highly profitable business out of such things. So, don't expect that the zero marginal cost idea (abundance) will make things free, or significantly change society. Just look to the internet, where so many business thrive by selling 0s and 1s, or in other words, selling abundance.



Do you think it's unfeasible to produce goods (not just digital stuff) that are near zero marginal cost today? Well, you can power most factories with renewable energies, use recyclable materials, have everything automated and FOSS, meaning almost zero cost in terms of energy and resources, and produce everything from toothbrushes to perhaps cars at this zero marginal cost. But as you already know, it is not happening, and it is very unlikely to happen any time soon, if at all, within a money-based world.

It is true that you can find pretty much anything that is digital for free, but a good percentage of that is 'illegal' stuff, put out there by ordinary people without 'permission' (bloody pirates :)), or is free because it is based on advertising making you think it is 'free', all the while turning you into a customer without your knowledge. Interestingly, and despite the huge piracy issue, movie and music companies still thrive, even with an abundance of their stuff freely available online. The internet is actually a place where capitalism thrives. Facebook creates nothing, yet is the largest social network and one of the richest companies in the world. As a search engine, Google creates nothing, yet it's the most profitable search engine and business in the world. Amazon hardly sells anything of its own, yet it's the biggest retailer. Airbnb is perhaps the largest apartment rental service in the world, but owns no apartments.

And in the 'real' world, Uber is the largest taxi service out there, while owning no vehicles, showing again that although anyone could have designed a system like Uber for free (where anyone could respond to 'ride requests' and make a few bucks without owing Uber anything), but that didn't happen either. So it has made a very profitable service out of something that is so abundant (drivers).

As you can see, making a profit from abundance is something that is already happening in abundance today.



PROTESTS, REVOLTS, AND GOOD PEOPLE MAY MEAN NOTHING



In 1989 in Romania, millions of people took to the streets revolting against a dictator that made their lives too harsh. As with all dictators, he limited access to food and necessities of life, demanded how people should behave and what they could wear, he often dictated how science should be done, and so on. The people had enough of that shit and, on 21-23 December 1989, they took over the government following a bloody battle with the police and army where over a thousand people died. The dictator and his wife were 'arrested', and it was decided on 25 December that both of them should be executed for the 'bad' things they did ([source](#)).



The powerful dictator and his wife stood in shock with their backs against a building's wall, facing a few young soldiers armed with Kalashnikovs. The soldiers fired a couple of rounds and the two dropped down, full of bullets, dead. They even filmed the entire thing ([source](#)).

I can't emphasize enough how the Romanian revolution is the perfect example of how good feelings and well intended people mean nothing when it comes to change. This is a [video](#) with raw footage from the revolution and, if you understand the Romanian language, you will be shocked at seeing how these people had absolutely no idea what they were doing, where they were going, what they were saying (they gathered poets, lawyers, army officials, and other 'people with superpowers' to assemble a new 'government', as if those people knew how to solve technological and societal issues). But they were all so confident and 'in the action'. They swore with loud voices to care for the people, to never allow dictatorship again, to stay together and be united, and to bring a new world for all Romanians. Oh man, it sounded so good; like a movie thriller with action and a lot of drama. People were watching the TV live as the revolution unfolded, with 10,000 times more interest than a World Cup game final.







Many people said that the dictator's wife shit herself before the execution because she was so afraid. If you look at the dictator and his wife's lives before the revolution, you'll see two proud and egocentric creatures that made many people's lives miserable, and perhaps many people died because of them. But now 'justice' has been served and these monsters have been humiliated, terrified, and executed! How does that sound to you? Quite primitive I suppose, yet many people have participated in revolutions throughout history all over the world to bring about similar 'justice', killing dictators and other people in charge and proving how primitive both parties are.

But I would say that what is more important is that the revolution did not solve a thing. After the Romanian revolution and the 'elimination' of the 'evil', people went into streets, happy, cheering, singing, hugging each other with so much passion, and feeling free again. A New World was about to begin! Unfortunately, that only lasted a few days as the new government formed and things got even worse for some who then regretted the change in government. I am from Romania and know very well how, in the years since the revolution took place, people constantly complain about how hard life is in Romania now, and how corrupt the politicians are. Romanian life includes one of the lowest salaries in the world ([source](#)), a poor infrastructure, and lots of corruption, even at the system's lower levels (I can again attest that from my own personal experience). There have been many other Romanian protests over the years, but they had no impact, like spitting into the ocean. My parents say that, at least under the dictator, you had a roof over your head and a job security. But now in Romania, many struggle to survive.

However, the exact same thing happens all over the world and across all of human history.

Gandhi, Martin Luther King, Jesus, and so many others, marched and suffered for trying to urge for peace and a good society that cares for all equally. More and more inspirational videos with many millions of views, and image memes asking for peace on earth and equality, all spread on social networks like viruses. So many try to scream out loud that we need to create a better world, pointing toward the problems of today. Yet, as far as I can tell, there is almost no impact globally. Just look around the world and we still see everywhere these huge inequalities, disparity, hungry and angry people, exploitation of people and the environment, corruption, major abuses of power, and so on, despite all of these people with good intentions.



Plus, just because many are screaming about something does not mean it is a good thing. If you scream to ban Genetically Modified Organisms and you know very little or nothing about the subject and its implications, or if you have been led to believe a lot of misinformation, success with your protest may only mean a halt for the progress of science and technology. Instead of spending the energy screaming out loud about the problems of today and demanding solutions from 'nowhere', basically, maybe it is a far better idea to spend that energy deeply learning about and understanding the issue(s) at hand and working toward legitimate solutions, or else history will repeat itself over and over and over again, spinning the same wheel, eliminating leaders and replacing them with others, and never solving anything.

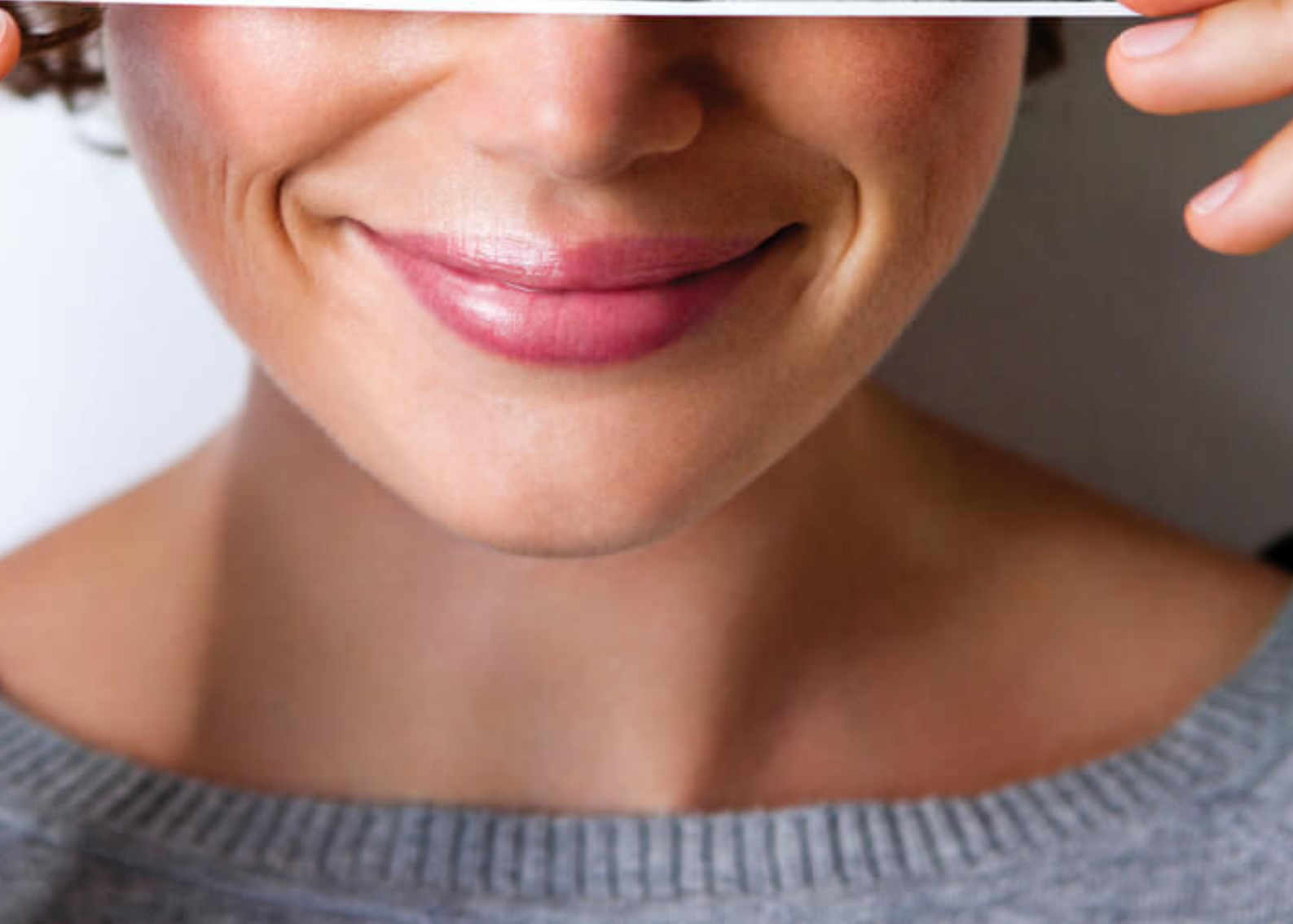


THE ILLUSION OF BUILDING A NEW SOCIETY

Some years ago, some kid at a supermarket called me "Sir", and I was like: "Excuse me kid! I'm a kid too, so why did you call me sir !?... " :)

I'm 27, and I realize how close I am to 30. I'm also shocked when I think about that, because it's like yesterday that I was 15. But when I was 15, I was thinking how I would be when I become a grown up, meaning when I would be 30, or 60, and it's nothing like I imagined. Now I am close to 30 and I can tell you that I don't feel like I finally 'arrived', nor that I left anything behind. You don't get old all of a sudden, that's my point. You don't wake up being 30, or 60 or whatever. You reach 30, or 60. And you never get old, but older.



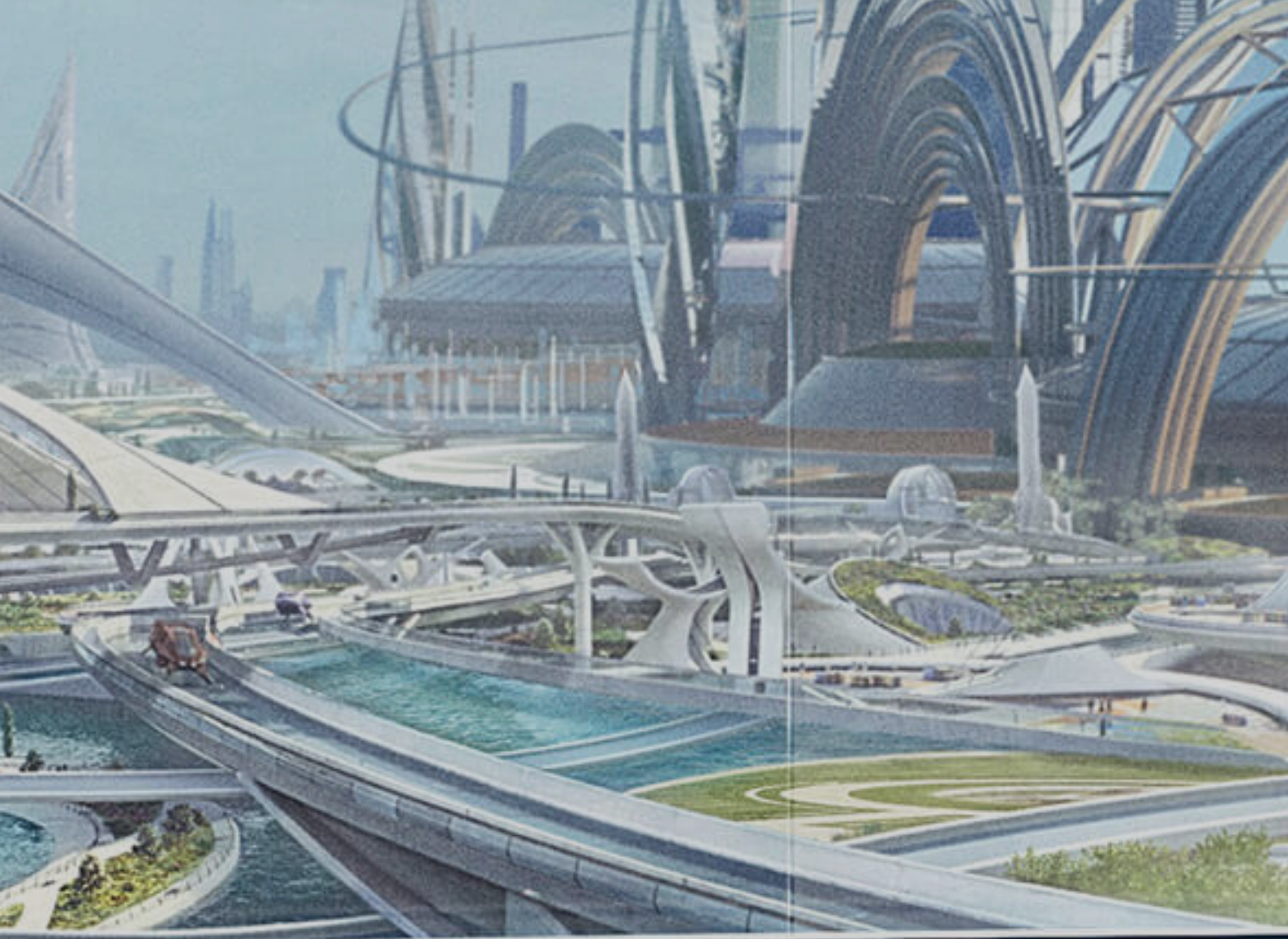


In that exact same sense, people should stop thinking of arriving at a saner society. It won't happen like that. We will strive to put out these ideas, try to encourage more and more people to work in this direction, build parts of it, help people adjust their values, and so on, but we will never 'arrive' at that kind of society, even if a society like that becomes a thing at some point, because it will happen much more like aging. We will not suddenly feel our knees become 'rusty', our skin become dry, or develop blurry vision, but it will instead build up gradually, becoming part of who we are.

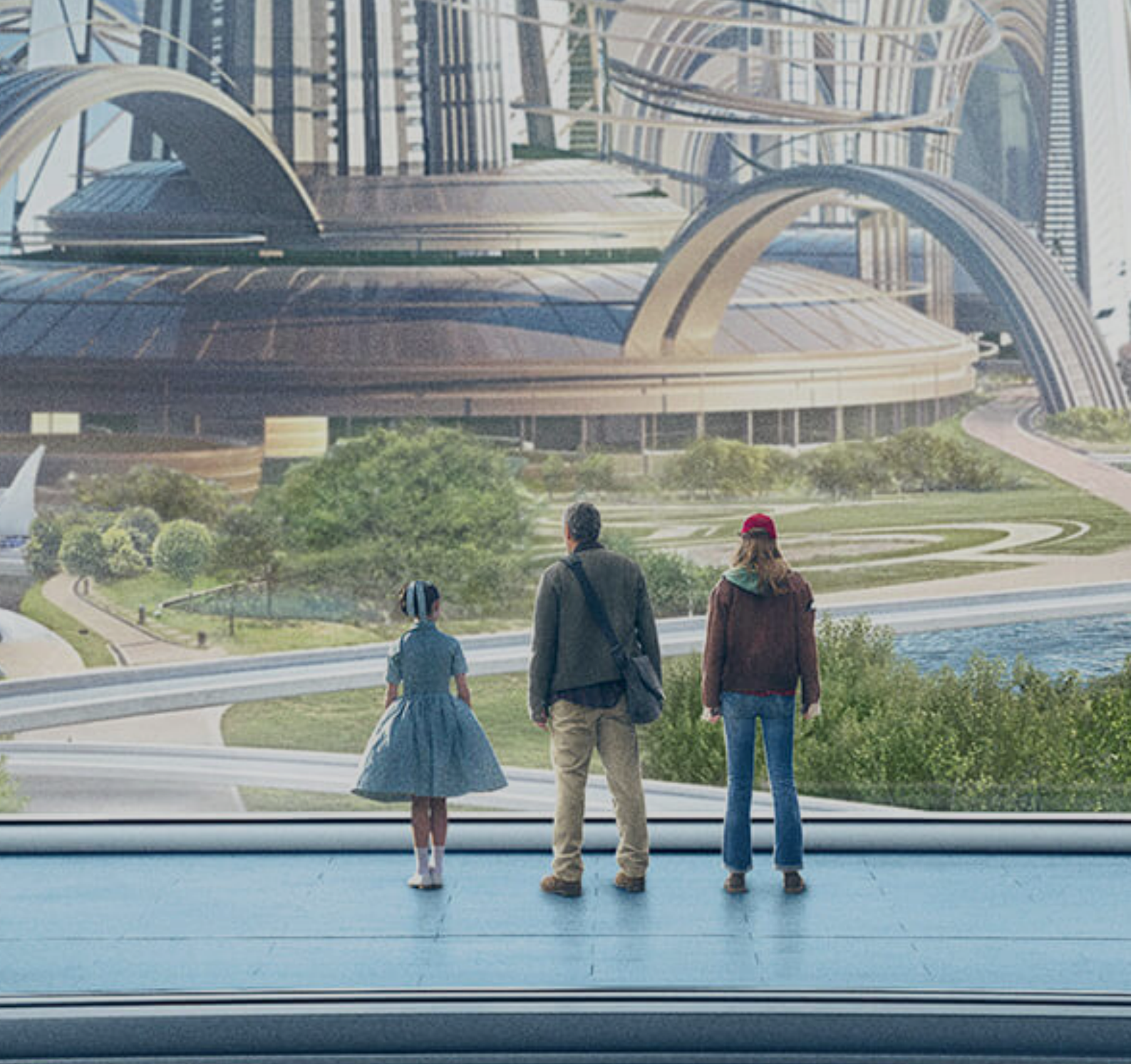
The same, but as part of a saner, never sane, society. We will become part of it as time progresses (changing our values, customs, rituals, ideas), and this society will continually improve, but never arrive at some imagined 'final stage'.







In a movie, have you ever wondered when the movie ends right after the two romantic-lovers get together, what happens after that? Do they get into fights? Maybe break up? How much will their love diminish over time? Will they become a boring and uninteresting couple? Or how about a movie about a utopian society? I want to know what happens after everything is ok at the end of the film: will that society eventually break up, will new problems arise, and so on? The ways that most movies end are representations of human imaginations that give a false sense of reality, and because of such notions, many may expect for a saner society to be put into practice as if it's a movie and might expect for it to happen on the 23rd of January 2070, or something like that.

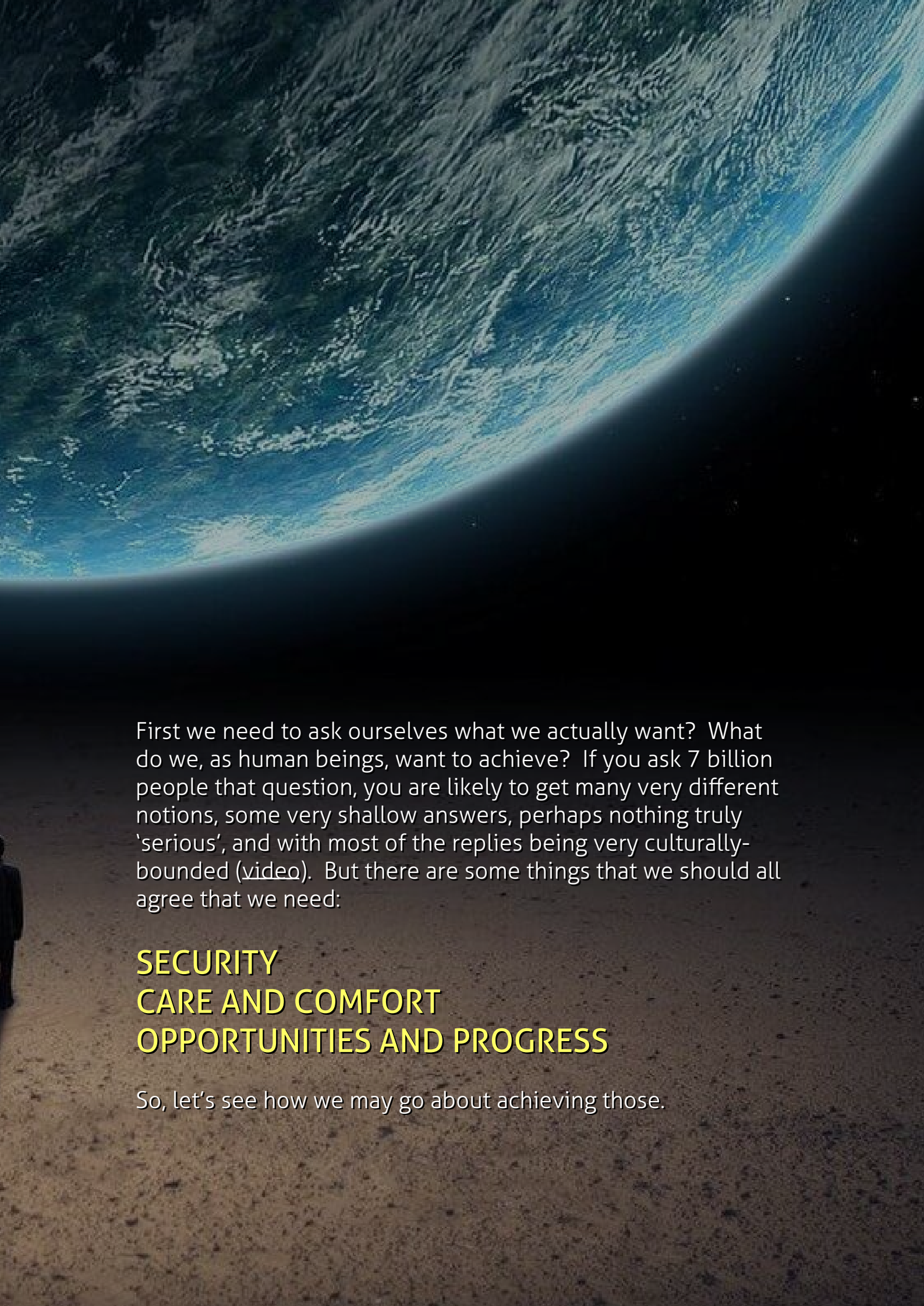


WE NEED TO GET USED TO THE IDEA THAT WE WILL ALL GROW RIGHT ALONGSIDE SUCH A SOCIETY, NEVER ARRIVING, NEVER REACHING AN END, BUT INSTEAD EVOLVE ALONG WITH IT. SO, DON'T EXPECT IT BECAUSE IT WILL NEVER 'POP' INTO EXISTENCE.

BEYOND THE GAME

The ideals behind Socialism and Communism were very bold, progressive ideas for their time, pushing for a world where we care more about humans and eliminate the rat race that capitalism has created. Technocracy focused these visions far better, by specifically pointing out that decisions must be scientific and technology is what solves problems, showcasing how technology at that time could go about bringing such changes. And then movements like Open-Source and Sharing Economy provide us with a great example of openness, creativity, cooperation, diversity, and how decentralisation of many kinds of services is possible, along with the advantages of doing so.

Still, all of these ideas have been seriously insufficient in terms of details and an overall plan for organizing a worldwide society, so we will now take into consideration all that we've learned, combine them, improve upon them, add more 'connections' and, ultimately, try to present a solution that I think is solid enough for 'clinical trials'.



First we need to ask ourselves what we actually want? What do we, as human beings, want to achieve? If you ask 7 billion people that question, you are likely to get many very different notions, some very shallow answers, perhaps nothing truly 'serious', and with most of the replies being very culturally-bounded ([video](#)). But there are some things that we should all agree that we need:

SECURITY
CARE AND COMFORT
OPPORTUNITIES AND PROGRESS

So, let's see how we may go about achieving those.

LET'S START BY THINKING OF THE IDEA OF 'IMMORTALITY'.

In recent years, the idea of making human beings immortal has come into serious light. More and more people have started to seriously considering the possibility and some are even working to make it a reality. It is nothing new, as many people in history have wondered about this, but today people are 'working' to achieve it through science and technology, putting 'immortality' into a serious light for the first time in human history.

One of the most promising paths to achieving this is by stopping the aging process. By far, the most deaths occur due to the effects of aging, as the body gradually becomes weaker over time and some organs eventually cease to function properly (or at all). Most people have been taught to think that aging is normal, and that we all are going to experience it as a 'natural' part of life. Wrinkled skin, poor eyesight, shaky knees, grey hair, Alzheimer's, heart disease, strokes, and more are things that we accept, yet we fight so vigorously to ameliorate and delay. We try to unclutter arteries to delay heart attacks, do exercises to strengthen our legs and arms, eat more healthy foods in the hope that we won't develop certain diseases or at least delay them, take pills to help the body with its once normal functions, undergo surgeries to fix some defective parts of us.

'Band-aids', in the form of pills, surgeries, or constant care, are what humans use to deal with the effects of aging. For many, thinking about these issues as symptoms of a bigger problem is just too out of this world. It is so strange to even consider that a solution might be possible to stop these symptoms all together. But in reality, this is not far from being achieved. What we have to do though, is to first recognize and accept that 'aging' itself is the problem, and all of the other things are only symptoms of the core problem.





Today, we recognize in detail the societal problems we face: environmental destruction and pollution, exploitation and slavery, corruption and bribery, poor products and waste, and so much more. As in the case of aging, many people die every day because of these problems (starvation, accidents, exploitation, lack of healthcare, etc.), and the similarities continue with so many people thinking that these issues are a 'natural' part of life, i.e. there will always be people profiting from others, lying, corruption, poor people, wars, destruction of the environment, and so on. Some people feel that there is nothing we can do to stop them.

We use many 'band-aids' in the form of laws, rules, education, infrastructure, punishments, technologies, and so forth. But just as it is with the symptoms of aging, we are only able to slow things down under best-case scenarios (maybe less slaves, less waste, less crime, less pollution, fewer poor people), but there is nothing in sight ensuring that these issues will ever be solved, no matter how much we strive.



People today often live well into their 80s, and due to the 'band-aids' applied to aging, it's expected that life expectancy will be extended to 100 or more in a relatively short time. In effect, it's a way of delaying the inevitable. The challenge that we should tackle is not like that of making people live a bit longer or suffering a bit less, but rather like putting a stop to aging altogether. Of course, what I mean by that is that this is not about reducing pollution, conflicts, waste, poverty, and so forth. It's about putting a definitive stop to what creates these symptoms in the first place.

These symptoms are not the problem, but the effects of the core problem. Can you imagine not getting old? It would be weird, right? And how awesome! You could do so many things and not go through the pain of growing 'dysfunctional' over time! But can you also imagine living in a world where most of the problems that we face today do not exist at all? No wars, conflicts, crimes, destruction of the environment, poor people, people who suffer, and so on. I'm sure that in both cases, this might look like an utopian dream, but I will accept the challenge of explaining why neither of them is. However, if you do not understand the details of both eliminating aging and societal issues, you will see that it is impossible to measure the viability of them.



LET'S GIVE IT A SERIOUS TRY.

When it comes to aging, it seems that there is no one single cause that triggers it, but rather a variety: from cell loss, to DNA mutations, or a 'programmed' cause (shortening of telomeres), such as described in this short video



All of them can be categorised as forms of accumulated junk and damage, while the shortening of telomeres looks to be 'preprogrammed'.

Because of all of that, there are a variety of proposals as to how we can deal with aging. Some of the causes are already well understood, and some almost not at all. Since aging encompasses such a complex set of events, it is not possible to find a single 'cure' for it. There is no magic pill for curing aging, and there more than likely will never be. But let me stress this point: imagine how the human body accumulates all kinds of junk and damage over time, starting before birth, and from the age of 40 or so, more rapidly starts to cripple. A broken leg, exercise, effort of any kind, coordination, will become more and more difficult to accomplish or heal, while memories and eyesight will become increasingly blurry. If your body did not go through this process of aging, the issues above, and a lot more, would not have a chance to occur. You would only have to deal with diseases that affect people up to the age of decline. So this proposal to put an end to aging will essentially allow you to return to how your body was in your 30s. As you can probably imagine, this would be a HUGE, almost unimaginable leap for humanity.

With that analogy in mind, let's see what causes we can identify for today's global problems, and what we can truly do about them. There is no single magic solution for today's problems either, but as science is doing with aging, we will try to merge a battery of solutions into a clear path:

WE ARE GOING TO LOOK AT 4 ASPECTS:

- 1. THE ACCUMULATED JUNK AND DAMAGES: TRADE**
- 2. SIDE EFFECTS: HUMANS**
- 3. CLINICAL TRIALS: THE CITY**
- 4. QUACKERIES AND SHALLOW SOLUTIONS**

1

the accumulated junk and
damages: trade





Living is a dangerous thing for humans. While that might sound a bit nonsensical, it refers to how the functions of the human body will work less and less well over time, and that is the result of eating, breathing, walking, cellular divisions, exposure to all sorts of chemicals, compounds and molecules that are 'natural' (Earth-bounded chemicals), as well as things like the shortening of telomeres as described in the earlier video.

As an example, as you age, some of your body's cells start to divide/renew more slowly than usual and damaged ones cannot be replaced in time, creating numerous issues with your body which then lead to the definitive impair of the organ or sub-system they are part of, which in turn can bring about a complete failure of the body; you as a living creature. Imagine the cells of your skin, where the older you get, the division and renewal of those cells occurs less rapidly. Your skin becomes less elastic, and thus wrinkled. Or arteries that accumulate 'junk' over time and develop blockages that prevent enough blood from reaching your heart, and that kills heart cells (we call that a heart attack). But even simple breathing creates 'free radicals' that are known to cause damage to the body over time.

Junk that gets inside and outside your cells over time, and damage to the DNA of cells that causes them to misbehave, are all things that cripple the body. All of that describes the accumulation of junk and damage in the body.

Shifting to the monetary system, the junk and damage are the effects of trade. Trade is to social systems as the accumulation of junk and damage is to aging, so trade is the 'junk' that we need to get rid of.

The "I need/want it, but I have to do something to get it from you" approach is very problematic, because it's caused by differential advantage which leads to a need for trade, and trade leads to the craziness that we've been highlighting all along. So, let's say that the thing you need is a new medical treatment for a type of cancer, and a pharmaceutical company's scientists just discovered and control it. Now you can see how problems will arise and escalate pretty quickly. From small scale things such as restricting someone to access a piece of software, to big ones where there are restrictions to food, health, security, shelter, and so on, they are all dangerous. Where there is trade, there is scarcity of products and access (artificially created or not). People usually accuse money as being the issue, but money is just a representation of trade.



Bitcoin is a new kind of currency that is not controlled by anyone, as it is a bunch of digital keys that are translated into 'currency' automatically. Many people have convinced themselves that it eliminates all of the problems that we face around the world with money, since it's not controlled or created by banks. It is automatically created and managed by software, so you can't create infinite bitcoins (thus infinite consumption), it is anonymous, it is based on very secure transactions, and so on. But it faces the same differential advantage issues as 'real' currency, since a few people now own as many bitcoins as the rest of the bitcoin owners combined ([source](#)) (even more unfair than in the 'real' world, with 'real' money). Bitcoins are also being used to buy weapons, illegal drugs, conduct scams, and so on ([source](#)).

No matter what currency you might develop, as long as there is trade, there will be major problems. Remember: trade created the need for currency, not the other way around.



The solution to this is simply 'abundance', but it's not that simple! If we do not properly define what abundance means and how we can go about creating it, it could mean anything to anyone.

While researching all of the ideas that we've examined in this book (communism, socialism, technocracy, etc.), I never came across anything about what those who proposed abundance actually meant by that term, and this concept of abundance is at the core of the most important solution for a functional and saner society. Some people have a little difficulty understanding how we can create an abundance of goods and services for all people, and how people will react to living in a society like that.

How will you use a service if it cannot serve all of its requests? Who is going to have that rare painting? How can you create an abundance of transplant organs when the world is in such a need of them?



We need two things to make a world where trade is obsolete: create an abundance of goods and services that are trade-free, and educate people. As we have seen creating an abundance of something is not enough, so we also need a shift in values.

FULFILLING WANTS:

First, we should not think of abundance in terms of gross quantity, but instead of its ability in fulfilling any request.

For instance: you don't need a separate DVD for every person in the world. Instead, you need to have a streaming service that instantly serves a documentary (or movie, or whatever) to all of the people requesting it at any given moment. Algorithms can predict how much network traffic may be required for that particular documentary streaming, and then provide the needed resources (hardware, bandwidth) on demand. It's absurd to assume that all the people in the world will stream that documentary at the same time, therefore, it may be useless to prepare for that.

This same idea of creating abundance applies to just about everything. Food will be created by the same algorithms, observing what people eat, request, take and what resources are available, etc..

So imagine it as a kind of rent-based system, but with no money needed in this society. Let's say we apply this to apartments. By observing what regions of the world people visit, an average of how long they stay and, of course, the available resources for all such areas, we can determine how many apartments need to exist for a specific region so it can cover the requests.

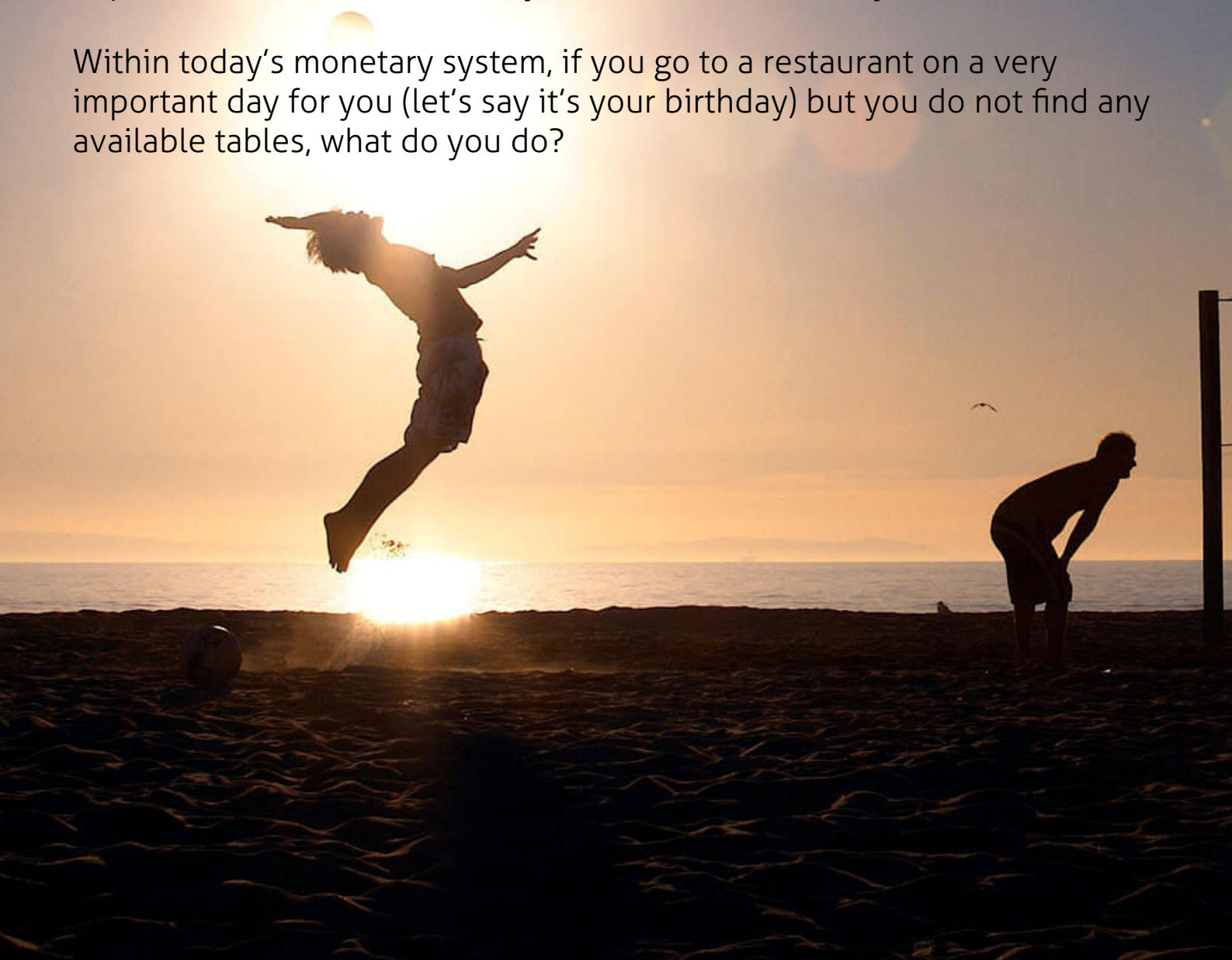
Then consider shopping carts. How many shopping carts are needed for a supermarket? Abundance means as many as are needed to cover all requests; not as many as there are people in that town or in the world. It may be a bit risky to try saying this method will work for everything, but it seems to work quite efficiently in most situations and it also seems to be the best approach at our disposal for most things: analyze big data and return suggestions based on the techno-scientific approach.

WANTS NOT FULFILLED:

Personally, I find it impossible to assume that every request to watch a documentary on that particular streaming service will be able to do so flawlessly. Someone may occasionally find that the stream or delivery is not working properly or running slow. But, if overall, that service delivers well to most people with rare exceptions, it is a successful system.

This is not something new. You and I come across such “errors” all the time. For instance, if I have the money to buy a particular laptop but it’s not available for the next 14 days in the region I live in, although I have the power to buy it, I simply have to wait for that availability, as you also would. Sometimes I want to watch a YouTube documentary, but find the streaming service to be extremely slow. It often runs fine if I go back the next day to see it. Of course, those are rare exceptions. Within a global society where we strive to eliminate the need for trade, those improvements will not be delayed until there is ‘money’ available to fix it.

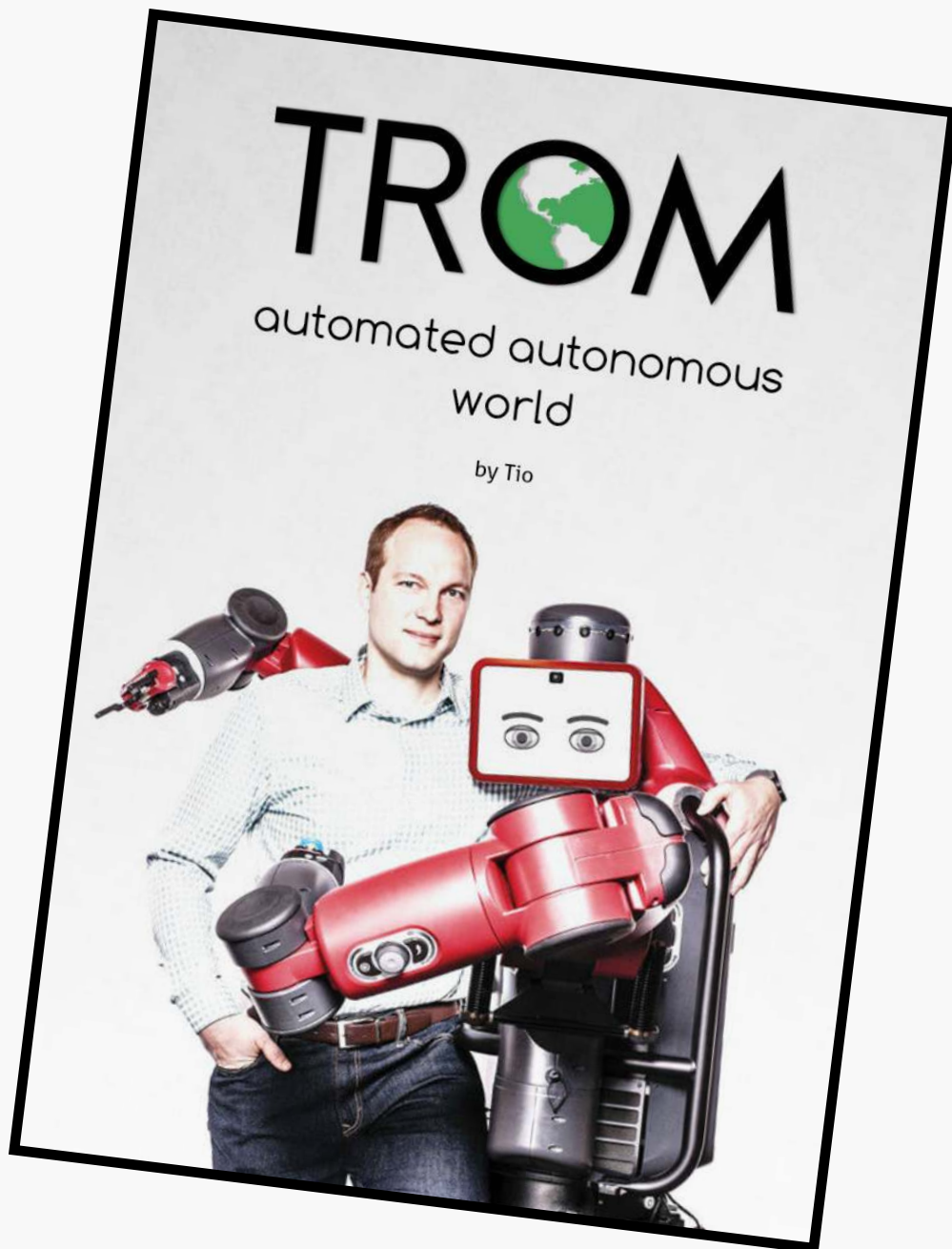
Within today’s monetary system, if you go to a restaurant on a very important day for you (let’s say it’s your birthday) but you do not find any available tables, what do you do?



Your birthday is only once a year and this is your favorite restaurant, so you really want a table at that restaurant. You can equally access the restaurant as anyone else, but that doesn't help you when the restaurant is full. More than likely, you will disappointedly accept the situation and go to another restaurant. Your favorite restaurant couldn't fulfill all requests, but people are quite used to living with this situation in today's trade world.

I live near a beach where there are two football fields, and three volleyball fields. All are open to the public and anyone can use them anytime they want. Sometimes my friends and I use them, but sometimes we have had to wait when it's busy; or we come back later or the next day. On a couple of occasions, we joined the other people already using it.





We wrote an entire book on how we can achieve an advanced level of automation and digitization that will make things/services/goods abundant and easy to produce and distribute. We showcase in detail the technical aspect of how we could create abundance with today's technology, so we recommend you also read that book to get a clear picture on how this can be achieved.

But the core idea here is that abundance does not mean "a thing for each individual", it is actually based on a sharing approach and access system that is less energy and resource consuming than today's methods where most things are scarce. This may seem counterintuitive at first sight, but is very easily demonstrable.

TROM

the 'property'
of waste

by Tio



We also recommend our article "The 'Property' of Waste" to understand why today's system is actually extremely wasteful and super inefficient compared to the one where most (all) of our needs and wants could be fulfilled. You will also understand why and how the notion of property will change and become meaningless in such a society of abundance.

But another thing you need to understand is that you should not project that a world of abundance is 'perfect': just doing whatever you want and have whatever you want. We are mainly talking about a society where we strive to eliminate the need for trade so that we eliminate the biggest issues in the world, and to do that we need to create abundance for all, but this world cannot be achieved by technology alone and so education is the second key ingredient. And this educational ingredient is a constant movement. A movement of challenging values and changing them, accepting new values, learning how to solve problems, how to communicate, learning about other cultures and habits, and so on. Something we are doing constantly at TROM.

On the one hand we promote and explain in detail how we can create a trade-free world (achieving abundance and what that means), and on the other hand we are challenging people's values, teaching them about the world and science, exploring alternative values, and so forth. If we know how to present such a world (education) and 'make it happen' (infrastructure), we would need no laws, no police, countries and artificial separations. A scientific education and an infrastructure that will make trade obsolete, can (in theory) create such a wonderful society.

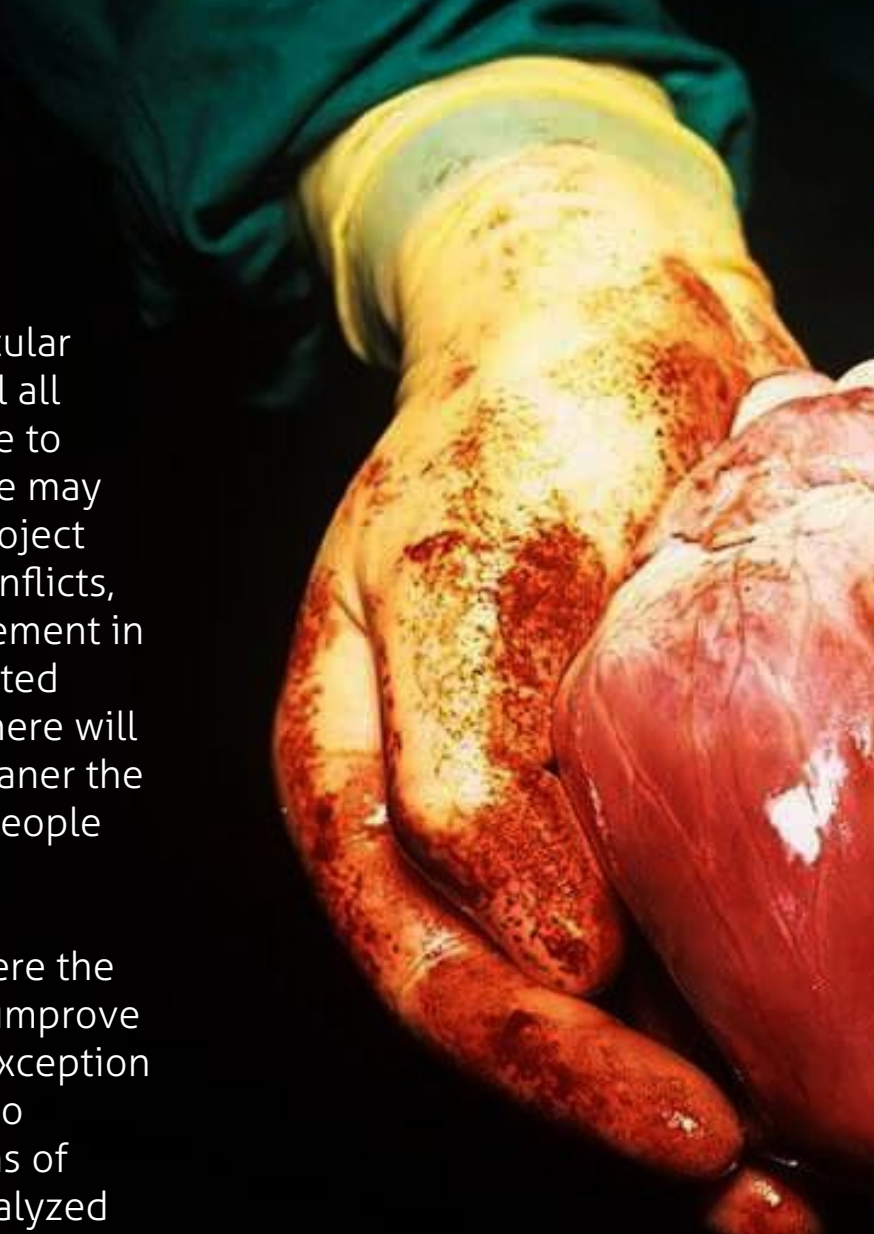
We detail in "The Science Vaccine" article more about the value of education for achieving such a worldwide society. Give it a try, it is not that long and can be extremely important to properly understand how a society without police and money, laws and cities, social statuses and companies, and so forth, is possible.

TROM

the science vaccine

by Tio





So, if the production of a particular item is not always able to fulfill all potential requests, but it is able to deliver to most people, then we may view it as successful. And to project that this would create many conflicts, disregards the 'educational' element in the 'equation'. The more educated people are, the less conflicts there will be. The saner the people, the saner the society, and in turn the saner people this society will create.

Needless to say, in a world where the prime motive is to continually improve society for everyone without exception (as there will be no reason to do otherwise), these rare occasions of light scarcity will be greatly analyzed and continually improved.

BUT THERE IS AN AREA WHERE CONFLICTS ARE MORE LIKELY TO OCCUR. NEEDS.

The word 'needs' refers to things that people must be able to access without delay. Fulfilling needs is different because people may react in a violent way (even when educated) when a request is not fulfilled, due to their urgent need. If a public restroom is busy and you really need to use it, you either wait longer or pee in the bushes. So if there are too few public restrooms in a given area, it is unsane for anyone to think that they can request that people pee less. It is a human need after all.



But, there are also situations where the need is a must, a life and death scenario; organ transplant, for instance. We know that this is something scarce and, although recent developments in medicine suggest that this can become more accessible in just a few years, replacement organs may not become abundant for many years to come. Even if an abundance of transplant organs does manifest, similar scenarios could occur in other areas of society, so the example is still relevant.

So, if there is a continued scarcity of organs for transplants, what will we, as a society, do? Well, how do they handle it today? They already have a computer-network system which gives priority based on scientific data such as: compatibility (genes, etc), age (younger, perhaps better chances), region (the closer the better), and so on.

And as the United Network for Organ Sharing (UNOS) says: "Specifics of waiting list rules vary by organ. General principles, such as a patient's medical urgency, blood, tissue and size match with the donor, time on the waiting list and proximity to the donor, guide the distribution of organs. Under certain circumstance, special allowances are made for children. For example, children under age 11 who need kidneys are automatically assigned additional points. Factors such as a patient's income, celebrity status, and race or ethnic background play no role in determining allocation of organs." ([source](#))

It seems like humans found a solution to dealing with scarcity in a humane way. This example is a proof that people are ingenious and they always come up with solutions, although the saner the society, the saner the solutions. That same scientific approach can be applied to any need that is scarce, until it is no longer scarce. But now let's imagine some situations in this kind of trade-free world and see how we could deal with them. ;)



YOU DON'T FEEL GOOD: COLD SWEAT, NAUSEA, DIZZINESS. SO WHAT DO YOU DO?

For abundance to work, we first need to eliminate reliance on humans from all (most) scenarios. The moment you request assistance from another human being, you create the need for a job, and that leads to social structures and possible trade (as depend on those humans to do something for you, they may ask something in return for that, or have 'moods' and 'attitudes').

We need to get rid of that potential wherever possible, even in this situation. How? You can use your smartphone, or other appropriately equipped devices, to accurately diagnose your symptoms and provide you with a treatment better than any human can, and all that is managed through FOSS artificial intelligence software. If your treatment involves taking pills, they can be automatically printed using the printer from the place you stay in, or a printer system near by. The treatment recommendations and prescribed medicine will be based on your own DNA makeup, so it is 100% personalized. If you are in need of other interventions such as surgery, you will be automatically scheduled to a robot surgeon near-by.

For a more complex set of treatments (like complex surgeries that cannot be automated by that time), you may need the assistance of humans (doctors). In order to solve the issue of relying on other humans for something, here's the key: when technology is applied without monetary constraints, we can easily adopt a global healthcare approach that focuses on prevention, instead of the highly profitable detection and repair system that we have today. This will make situations where doctors are needed extremely rare, because most health issues will be detected and handled long before they get to that point. However, as we discovered when researching our article on voluntarism, there are already a plethora of experts today who are willing to provide help for free (and they are already very reliable and work very professionally). You can imagine that the number of people doing this will significantly rise, diversify and become more specialized within a saner society. And since human doctors have access to whatever they need in this society, just like you do, there is no need to pay anything to any of them, nor are they motivated in any way to ask anything in return for their service (what the heck could they ask in return when they already have access to anything!?). More than that, abundance also means an abundance of such human volunteers.

So let's imagine an absurd situation where some doctor refuses to do a surgery on you because you are a Buddhist, or whatever. Well, there is likely to be another 200 surgeons nearby that will do it. And using robots to operate at distance (controlled by a surgeon from a remote location), the numbers of volunteers who can operate on you increases many times over. As an oversimplification, this is like posting on your social profile that you need a doctor for your surgery, and any doctor from anywhere in the world can then use such a robot to 'fix' you from the other side of the planet. In the same way, if you have a need and can't rely 100% on A.I. for it, your medical record (kept up to date by all kinds of devices) can be analyzed by doctors from anywhere in the world, who can then provide you with a very personal treatment plan. That's abundance using automation/technology and many volunteers.

ANOTHER SITUATION: YOU WANT TO DEVELOP A NEW KIND OF SUBMERSIBLE. NOW WHAT?

You will have access to a huge variety of existing digital FOSS designs, plus game-like simulators that allow you to experiment with such machinery in a virtual world to make sure it is fit for the real world. You can collaborate with other people, get help by A.I., improve upon current models, etc., similar to what is happening today within the 'makers' movement (but without artificial constraints like money).

Once you finish up the design, even though you have no 'credentials' or expertise in building submersibles, your 3D design is already safe enough for a prototype to be built. Ok, so who is going to build it? The whole system is based on A.I., so it will determine where each of the parts can most efficiently and sustainably be robotically built, assembled, and then delivered to you, or to a special location where the final assembly can be further tested. So what if a 14-year old kid constructs this submersible and dies while testing it because of some error in the model? Again, let's get absurd about all this.



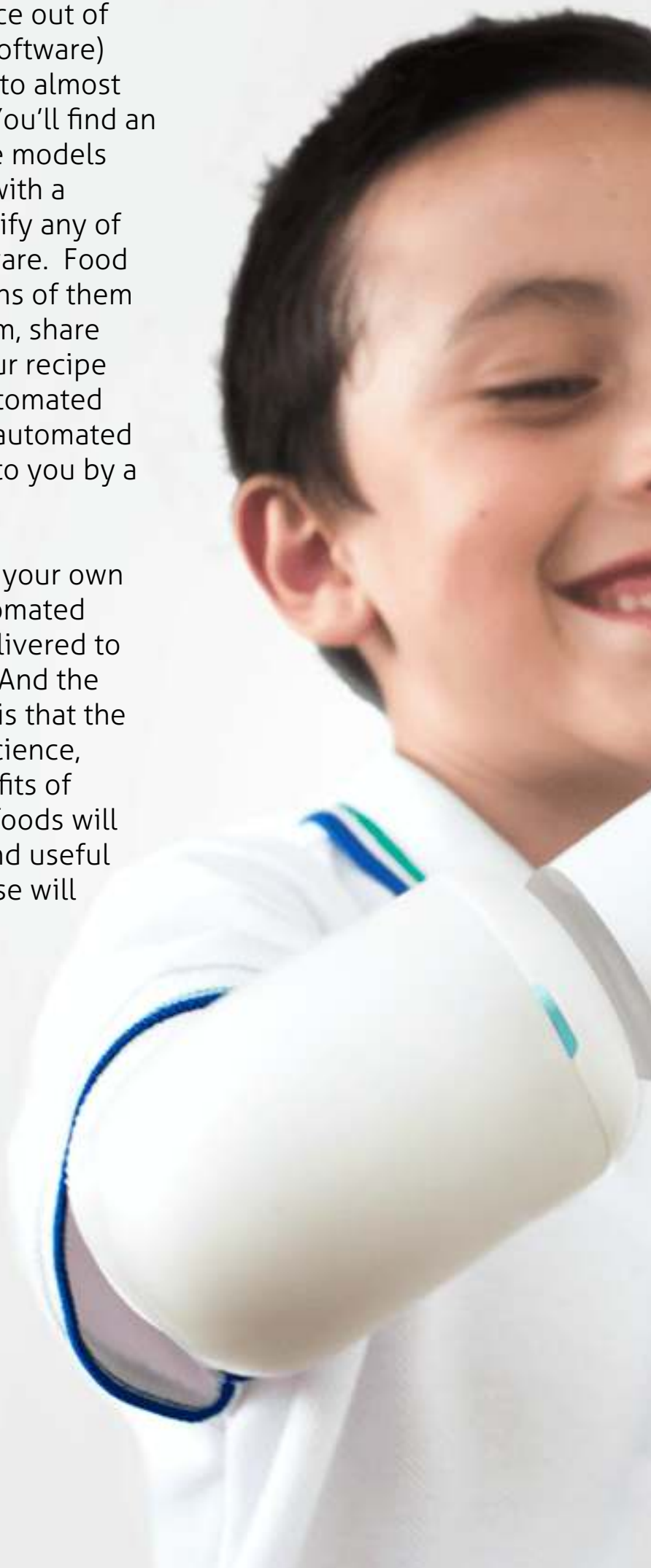
To plan for the idea that incidents like this are likely to happen, you must first ignore the safety procedures of the testing software or assembly line. Of course unexpected things can occur even with them in place, but with everything being open-source (in everyone's plain sight to allow for maximum error correction), the likelihood of occurrence is very low. And for that reason, you certainly don't want to ignore all of the people involved. In such a society, there won't be small groups like the maker movement, but rather a thousand times more such groups, while being much better equipped and organized because they won't be constrained by artificial limitations. As already witnessed today, these groups provide a wonderful breeding ground for children to learn and test perhaps anything (technologies, experiments).

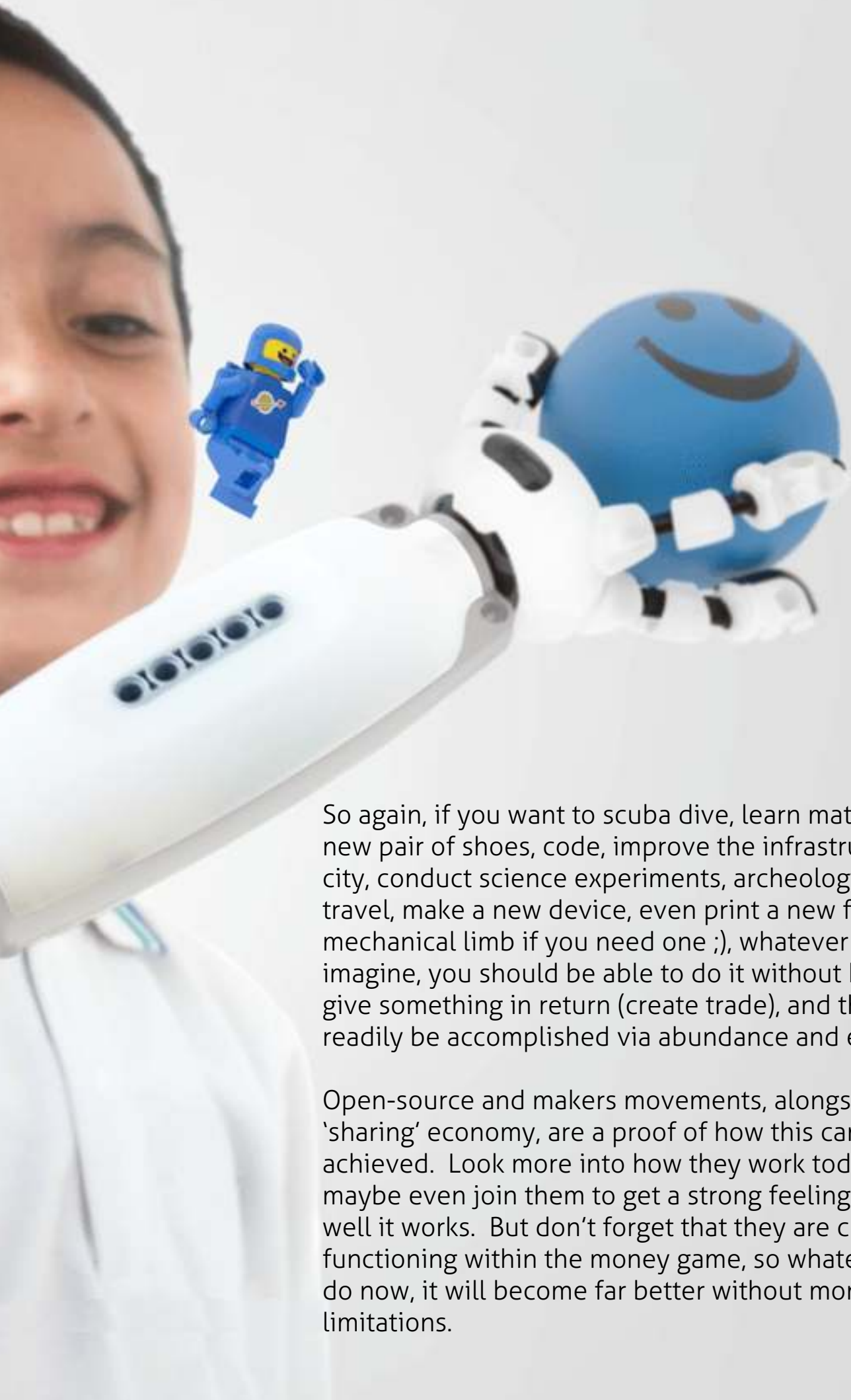
So I think our 14 year-old kid with her submersible will be fine, and if s/he dies because of some unforeseen mistake, the focus of the community will quickly turn its attention to solving the error to avoid any future incidents. The same thing applies when you want to use a boat, scuba dive, jump with a parachute, explore jungles, and so on: education, help from others, safe tools for you to use, etc. will allow you to do these things safely, without having to trade anything for them. It is almost like riding a bike today, where you have access to many kinds of bikes, safety gear, and places where you can ride, and it's up to you if you want to wear a helmet, or ride on the side of a mountain.



This method of creating abundance out of open-source models (hardware, software) and collaboration can be applied to almost anything. Want your own toys? You'll find an abundance of open-source online models that you can pick from and print with a nearby printer. You can also modify any of them using a variety of free software. Food recipes? There are already millions of them shared online, so improve on them, share your improvements, then turn your recipe into an actual meal using your automated robot chef, or made via a nearby automated restaurant, and have it delivered to you by a delivery drone. Delicious, right!?

Clothes? No problem. Just make your own designs and send them to an automated factory, and have your clothes delivered to you. Or just print them yourself. And the great thing about a saner society is that the more people understand about science, technology, abundance, the benefits of sharing, etc., the more nutritious foods will become, the more comfortable and useful clothes will be, and everything else will improve overall.





So again, if you want to scuba dive, learn maths, make a new pair of shoes, code, improve the infrastructure of a city, conduct science experiments, archeology, geology, travel, make a new device, even print a new functional mechanical limb if you need one ;), whatever you imagine, you should be able to do it without having to give something in return (create trade), and this can readily be accomplished via abundance and education.

Open-source and makers movements, alongside today's 'sharing' economy, are a proof of how this can be achieved. Look more into how they work today, and maybe even join them to get a strong feeling for how well it works. But don't forget that they are currently functioning within the money game, so whatever they do now, it will become far better without monetary limitations.

VARIETY IS AN EXTREMELY IMPORTANT WORD, Technocracy and other such 'ideals' failed to define or take into account just how important variety is. Perhaps because of that, a good number of people seems to be projecting that there would be little in the way of choices within a society based on no trade, too: only one type of car, few types of clothes, the same kinds of buildings everywhere, etc., but the reality could not be more different. You will be able to customize pretty much everything: the structure and look of your home, clothes, foods, gadgets, and so on. It is crucial to understand this variety, because no global system can work without it. You cannot superimpose a top-down model of society onto people and define for them what some groups of scientists, architects, or engineers 'think' will be useful. Instead, let the many scientific minds of all ages (meaning: everyone) partake in this creation of abundance.

Couple that to the fact that, in such a society, there is a huge focus on continually making things better, more resilient, more useful, more customizable, and much safer, since there won't be any price/trade system to negatively influence this. People will grow up understanding sustainability, how to build stuff to allow incremental updates and improvements, maximize recyclability, test for safety to absurd levels ;), and so on. They will grow up as intelligent 'generalists', because they will have access to so many opportunities and experiences that will provide for this kind of education.

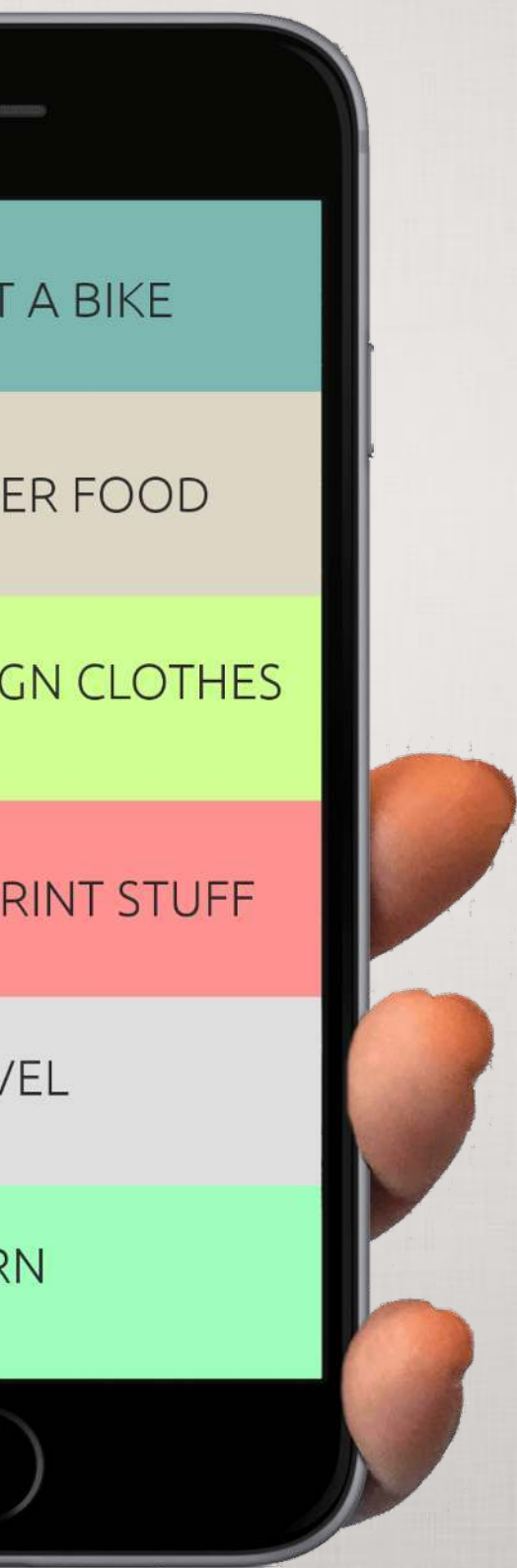
Ah, and before I forget, I don't want to mislead you to thinking that global production and distribution will be accomplished in the same way that these open-source/makers groups do today (organized chaos, modular, non-expertize driven, decentralized, etc.). That was intended as a very basic 'introduction' example, as there are plenty of other approaches that can be centralized and/or based on experts. For instance, there could be some sort of centers where you can freely access a bike, professional video camera, telescope, and so on, all made by experts. These centers could be based on what people in a particular area want and request. So to make this simple, you should have the option to design your own bike and produce it without any trade involved, and also to just freely access a mass-produced bike from access centers, also without any trade.



In the Spanish city I live in, they provide 4-5 different bins for sorting garbage, but to be honest, sorting my garbage is very uncomfortable for me and I don't understand Spanish well enough to know which bin is meant for what kind of garbage. If they did not also provide a 6th option that allows for all kinds of garbage, it would represent a dictator-like approach, and an inefficient one at that, since it would have imposed a system on people that some may have felt uncomfortable accepting, resulting in some throwing their garbage on the street. Having a variety of options tends to work best, as many will recycle and, in time, I might join them (when they translate the damn bins into English :)). The easier they make these recycling systems, the more people will recycle.

Similarly, if it's easier for me to pick up a phone and order a meal that arrives in 5 minutes or so, then I will lean towards that method and may not need a fridge, pantry, utensils, microwave, etc.. So making things easy to use makes them much more efficient. In this way, it may be far more easy and efficient for me to just access a bike in such a trade-free society than building one, but both options have to be available. If access bikes are made to consume less energy and resources and prove useful enough, while bikes created with a maker-style approach (personalized and custom made, not mass produced) consume more energy and are harder to make, then the efficient ones will be used more, promoting efficiency while having both options available, and without imposing a centralized production of efficient bikes, or relying entirely on the 'creativity' of people to each build their own bikes.

If you make it easier for people to dispose of stuff (recycle), then more will. If you create products that are truly built to last (optimum materials, easily upgradable, etc.), waste is enormously reduced. If you make it easy for people to move from place to place, then people aren't likely to hoard stuff, as they will find the stuff they need wherever they go. Even today, if you go on a holiday, you don't take your microwave and toaster with you :). In the future, you won't take your car either (inefficient) or scuba diving gear (since you will find whatever you need to use already there), or think of making your own bike because you can find bikes there, and so on.



So if people are afraid that they can only access/have a type of a thing in such a trade free society, I challenge them to look at the maker and open-source movements to see how they are already creating a wide variety of things today, and then multiply that by a million for a society where there are no monetary restrictions. If people then wonder about the potential wasting of resources if everybody starts to make their own stuff within this 'maker movement' approach, or that they won't be able to scale them up enough to have all people's wants met, then again consider a free access system based on mass production of the most popular goods and its advantages. Then imagine combining both and you should have a better idea of how production, distribution, and variety will exist within such a society.



Ok, so who is going to design and build the global transportation system, power plants, or entire cities? For big projects like these, the answer is the same: generalist humans with the help of A.I. and other technologies, all in an open and collaborative manner. From the International Space Station to the Large Hadron Collider, Red Cross interventions, to all kinds of other huge projects, there are plenty of examples today of how such huge and important projects can be accomplished, and where decisions are indeed arrived at based on science, not opinions. In a trade-free society, again, the huge difference is that such groups and projects won't be crippled by financial concerns influencing people to take improper decisions.

To summarize: in order to make trade obsolete, you need to replace it with an abundance of opportunities, and variety within that abundance. When that happens, no currency is relevant, no one can take advantage of others, and less people will compete while most will collaborate. Sharing, volunteering, and open-source approaches will become so 'normal' that they will not require definition; they will just be. While education will transform into life-long learning via a plethora of methods ([more examples here](#)).

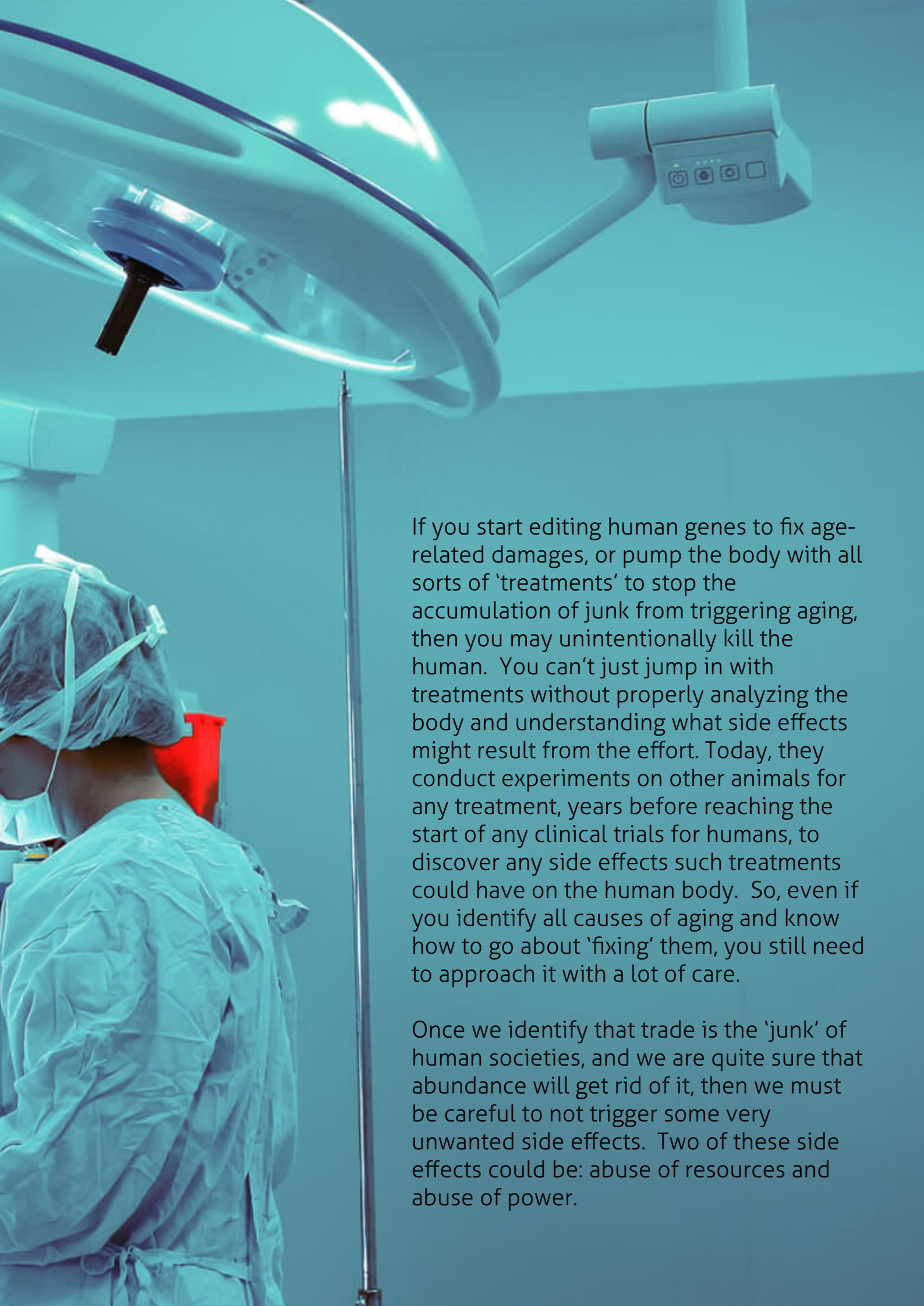
And of course, if it's not already self-evident and obvious, such an abundance is only possible at a planetary scale, or else tribes will hoard what other tribes need, which... creates trade.



2

side effects:
humans





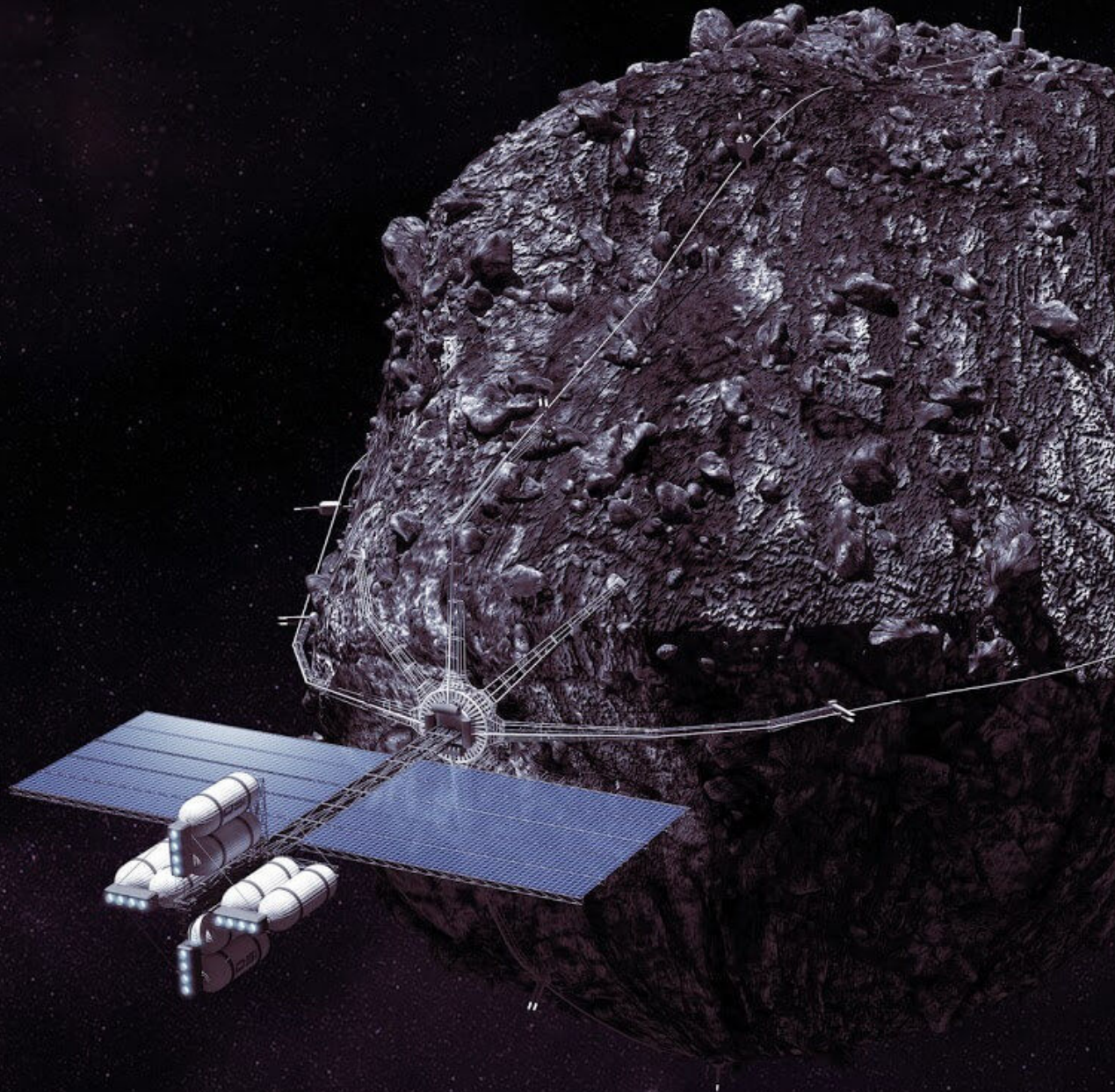
If you start editing human genes to fix age-related damages, or pump the body with all sorts of 'treatments' to stop the accumulation of junk from triggering aging, then you may unintentionally kill the human. You can't just jump in with treatments without properly analyzing the body and understanding what side effects might result from the effort. Today, they conduct experiments on other animals for any treatment, years before reaching the start of any clinical trials for humans, to discover any side effects such treatments could have on the human body. So, even if you identify all causes of aging and know how to go about 'fixing' them, you still need to approach it with a lot of care.

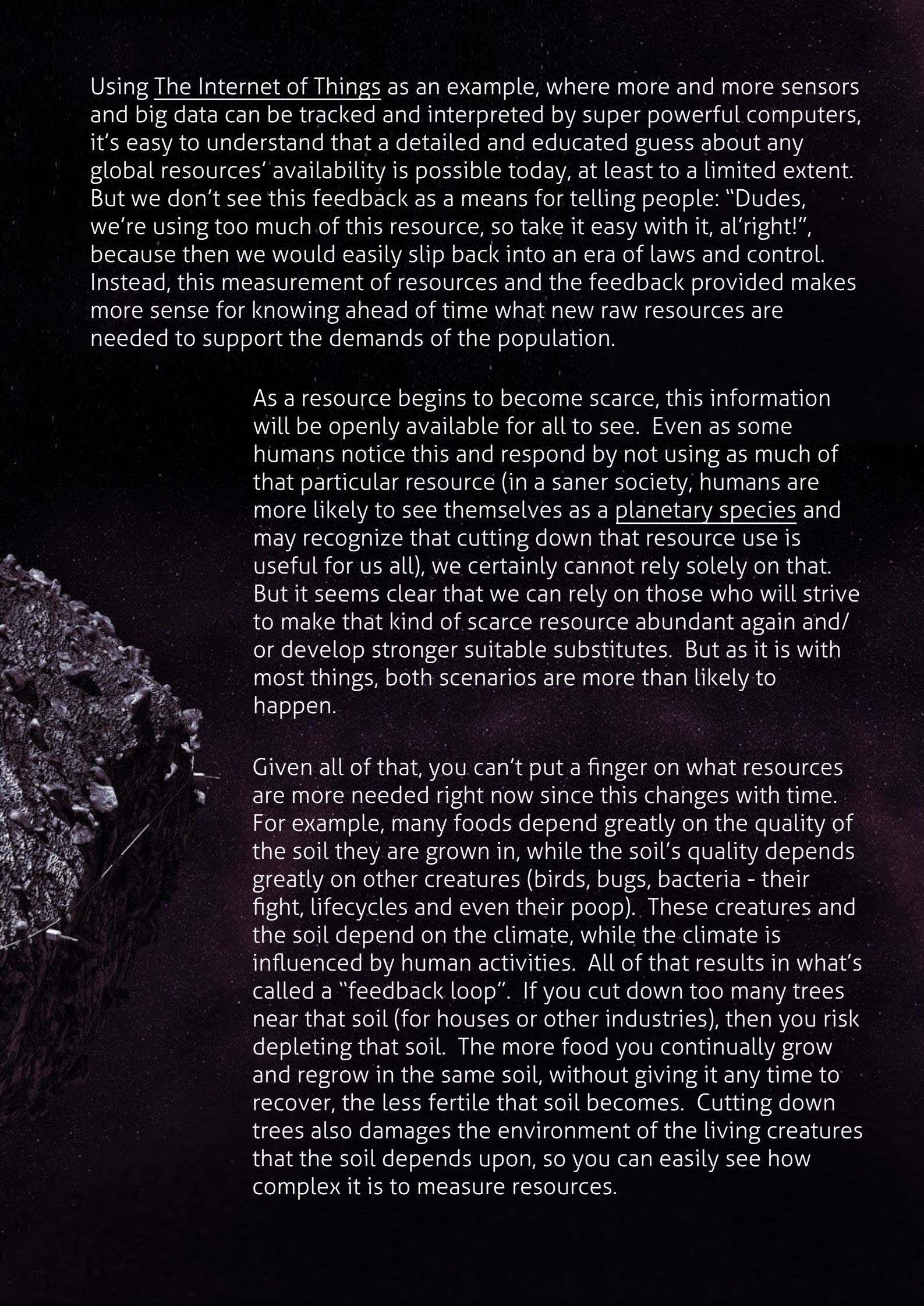
Once we identify that trade is the 'junk' of human societies, and we are quite sure that abundance will get rid of it, then we must be careful to not trigger some very unwanted side effects. Two of these side effects could be: abuse of resources and abuse of power.

THE ABUSE OF RESOURCES

Resource abuse will always be strongly connected with how 'educated' the population is, once you remove any profit motive. Technocracy tried to come up with some formulas for measuring resources in 'energy units' to keep this abuse under control, but this is an almost impossible approach because the world is far too dynamic.

The inventory of resources is always dependent on a number of variables, including the needs and wants of the world's people, technological means of extraction and manipulation of resources (we will be able to mine asteroids in the near future, for example, and that is likely to lead to a huge surplus of much needed resources), and also the scientific means to utilize resources and, when necessary, develop replacements ('artificial' diamonds, conductors, and so forth).





Using The Internet of Things as an example, where more and more sensors and big data can be tracked and interpreted by super powerful computers, it's easy to understand that a detailed and educated guess about any global resources' availability is possible today, at least to a limited extent. But we don't see this feedback as a means for telling people: "Dudes, we're using too much of this resource, so take it easy with it, al'right!", because then we would easily slip back into an era of laws and control. Instead, this measurement of resources and the feedback provided makes more sense for knowing ahead of time what new raw resources are needed to support the demands of the population.

As a resource begins to become scarce, this information will be openly available for all to see. Even as some humans notice this and respond by not using as much of that particular resource (in a saner society, humans are more likely to see themselves as a planetary species and may recognize that cutting down that resource use is useful for us all), we certainly cannot rely solely on that. But it seems clear that we can rely on those who will strive to make that kind of scarce resource abundant again and/or develop stronger suitable substitutes. But as it is with most things, both scenarios are more than likely to happen.

Given all of that, you can't put a finger on what resources are more needed right now since this changes with time. For example, many foods depend greatly on the quality of the soil they are grown in, while the soil's quality depends greatly on other creatures (birds, bugs, bacteria - their fight, lifecycles and even their poop). These creatures and the soil depend on the climate, while the climate is influenced by human activities. All of that results in what's called a "feedback loop". If you cut down too many trees near that soil (for houses or other industries), then you risk depleting that soil. The more food you continually grow and regrow in the same soil, without giving it any time to recover, the less fertile that soil becomes. Cutting down trees also damages the environment of the living creatures that the soil depends upon, so you can easily see how complex it is to measure resources.

Trying to look at the availability and use of today's resources can be hugely misleading, mostly because we live in a world of crazy consumption with very little recyclability. As an example, drinkable water is seen today as a scarce resource, but that's not because we don't have the technology and means to make it abundant. It's just that the money game is in the way. As we explained in one AA World book example, smartphones can be made far more powerful, varied and resilient using streaming operating systems and plug and play components. The materials needed to make such smartphones (and perhaps any kind of device where their main components can reside 'in the cloud', without needing their own processor, powerful graphic cards, and so on) will use far less resources than today. We currently have almost two billion inefficient smartphones in use, with similar designs and limited capabilities, and with more being added daily. Their designs are dictated purely by today's need to maximize their profit, with little to no consideration for conserving resources or recyclability.

As another example, some studies show that autonomous cars could reduce the needs for cars by a staggering 90% (try to imagine 90% less cars in the world), and this will mean less roads and fewer parking spaces needed, while reducing injuries and deaths by some 94%, and massively decreasing all the related resources needed, energy expended, and suffering caused by accidents ([source](#)).

HERE ARE 200 PEOPLE:

IN 177 CARS



WITHOUT CARS



In the same AA World book, we looked at producing food and other goods in this low resource consumption manner. We also showcased how the entire world can power itself with renewable energies, cutting down the use of oil for power generation by a HUGE degree.

So as you can see above, I think it's impossible to say much more about resource use other than how it's completely dependent on the system and culture that's using it. The saner the culture becomes (further removed from trade-induced crazy-consumption world), the less and saner the world's resources will be consumed. Again, we recommend reading the AA World book for a lot more details on resources and their usage.

MAYBE WE SHOULD ADAPT
RESOURCES TO SANER PEOPLE,
INSTEAD OF TRYING TO ADAPT
PEOPLE TO SCARCE RESOURCES.

ON 3 BUSES



ON BIKES



THE ABUSE OF POWER



The shortening of telomeres is thought to be one cause of aging, but repairing them (not allowing them to become shorter), indirectly increases the risk for cancerous cells. Simply put, each time a cell divides, its telomeres shorten. The shorter the telomeres become, the closer each divided cell comes to the end of its life. So after a predetermined number of divisions, the resulting cells can no longer divide and, instead, die. Telomeres function like a clock in that sense. DNA mutations sometimes occur during cell division, making the resulting cells different from normal cells. Most mutated cells are not harmful, but cancer can result if their mutation causes them to divide very quickly and taking over the 'normal' ones. If you then make a person's telomeres longer (more resilient), then you also indirectly provide these mutated cells (cancerous) with more resistant telomeres and, therefore, a longer lifespan, on top of them already dividing so quickly ([source](#)). So as you can see, a good intervention to repair the human body can bring about very bad outcomes (side effects). It's not as simple as detecting that short telomeres lead to aging, so just make them longer. All significant change must be approached with serious care.



In the same way, if you create this society of abundance, no police or laws, and make it global, you may inadvertently risk allowing 'dictators' to emerge (the cancer). Wherever there is an opportunity for gaining power over something (production, distribution, etc.), there is a risk of someone trying to take advantage of that. Sure, we may say that when people have access to whatever they need, are much better educated than today and are no longer encouraged to judge differences between people and so on, they won't be motivated to take control over parts of society. But it would be foolish to rely on that entirely.

The solution? Openness and decentralization everywhere possible. As explained earlier, the reason The Pirate Bay, Popcorn Time and other open and decentralized systems cannot be controlled, and the reason that TOR is such an excellent tool to communicate anonymously, is because they are nowhere yet everywhere. No matter if you are ISIL, anonymous or the USA, you cannot take these systems down.

Imagine having millions of computers, all around the world, all using free and open-source software, all powered by (let's say) solar power, and all connected via powerful wireless signals (some from satellites, some from the ground). When connected, these computers form a massive network that we'll call The Internet. This theoretical network (internet) that we just created cannot be shut down, unless you shut down nearly all of the connections between computers (satellites, ground wireless towers), or seize most of the computers, or somehow arrest all the people involved so no one can maintain them, or destroy all renewable power sources for the system around the world (it might be easier to destroy the Sun :)). None of those are feasible, as there would be far too many wireless towers and satellites, too many computers, too many people, and too many power connections. But even if you manage to succeed with one or more of those actions, others can rebuild it again, since all of this is based on open-source software and hardware and the information to rebuild it is readily available.

So in order for no one to be able to take control of anything in such a world, you'll need to have all of the 'things' (production, power plants, etc.) based on open-source hardware and software and as decentralized as possible.





Let's imagine some more scenarios (as usual, based on present-day technologies and examples): In our new society, a new treatment for a rare disease is discovered. Since the entire society is based on open-source, all of the research and discovery of this new treatment is naturally in plain sight. No doctor can hide the new knowledge for personal gain because they are using these open-source tools to discover it and all of their progress and research is recorded for all to see and access and use. So even if these doctors would typically want to keep a new treatment to themselves to gain some kind of differential advantage over other doctors, that choice is no longer an option, as it is shared automatically. This is not to say that anyone can see your design or research if you are designing something, as that would be an invasion of your privacy. This automatic openness applies specifically to scientific research and is already required today (at least in theory). Simply put, any 'scientific' finding and research that is not peer-reviewed and in plain sight for further testing and confirmation can not be categorized as scientific. This is something that both parties need: those who conduct the research to test their hypotheses, and the rest of us to ensure that research was accurate and complete.

On the other hand, you can certainly design a new kind of hoverboard (or whatever) and choose to not share it with the rest of the world, even if you use FOSS tools. In such cases, no one can force anyone to share the things they make, and there is no need to even consider doing anything to change that. Besides education, there is also that thing called social pressure, where their friends are likely to encourage them to 'open it up' so they can have one, too. Plus there are so many other people around the world from whom similar inventions can emerge that it's very likely that these kinds of situations may be of no significance at all.



Some fanatical religious group decides to take over the world: In this case, you cannot ignore the education that people will receive in this society. Education will be varied, but will consist of teaching children about science, other cultures, how to communicate with others, how to solve differences, and so on. Today, groups like ISIL, that seem to kill everyone who does not share their religious views, look like a real threat to attaining such a trade-free world. But even such 'brutal' and primitive groups are merely a symptom of the money world, as detailed in this [documentary](#). They seem more focused on attacking those who attack them, and are further driven by financial motives. Most religious people are not at all like that. They are peaceful and many of them share their immediate environment with people from other religions and cultures. No one should ever try to ban religion, or any such clusters of beliefs, because:

1. no one should be in charge, so it's not even possible to do anything like that. This society must 'emerge', not be imposed.
2. this society is not about people's beliefs; it's about solving problems, creating a much more stable society, widening opportunities and significantly raising the quality of life/living for all people.



So, in order for this human cancer (dictators, etc.) to not grow, we need to rely on education, open-source software and hardware, and decentralization. While cities could have central computers at their core to manage local production, distribution, and the like, such centralized computers will easily share their data and control with other supercomputers around the world to ensure security (we discuss this also in the AA World). And for other facilities that may be centralized, as we exemplified with accessing bikes (or whatever), they may be centralized in terms of their means of production and initial distribution, but their access abundance will be diverse and FOSS. As we described before, even if ISIL (or whatever) takes control over all bike access facilities :), people will always be able to design and build their own bikes, and build new facilities in other parts of the world.

In regards to education, we need to carefully present this new kind of society and solutions to today's people. You cannot just start moving all people into self-sustainable cities tomorrow, even if you had the power and means to do that. You need to approach people with great care, caution, get feedback, work with them, grow with them and help them grow alongside these ideas. Let me exemplify:



A guy named Elon Musk produced an electric car under the name "Tesla"; fast, slick, but expensive. He didn't rely on existing showrooms to sell this car, he made his own showrooms. He didn't rely on the US government to install electric charging stations around the country, changing the infrastructure of the tribe to allow electric cars to more easily integrate, he built them himself. He produced a product that is appealing to people: from the way the car looks, to the fact that it is very fast (something people like today), and the overall service he provided (slick, simple, free charging for all owners, etc.). Due to the money he was able to invest and his ability to build an infrastructure for this car, his electric car has become very popular and appreciated by many, despite the fact that he was not the first to make a viable electric car ([source](#)). So he succeeded mainly through marketing and serious support efforts. He recently announced to all owners: "Hey, we just sent a software update to the car so now it can drive itself. Use it if you like it." (many winks) And guess what? It turns out that most people love that feature and find it very useful.

However, if you were to ask people to vote whether or not they want cars to become self-driving and have the same features as every Tesla, not to mention saving over 1 million worldwide deaths a year due to human errors, you might not have succeeded in implementing that feature. The same thing could have happened if a group like Technocracy had decided to manage their social approach themselves; not asking for a vote to implement such useful features, as people would probably revolt. You have to understand that the world is not a strategy game on one of your phone's apps. You can't just suddenly 'enact' such all-encompassing technological solutions. You must take into account the human animal.

**So let's dig into
the details a bit
more.**



One thing that completely surprised me while reading up on so many ideas for restructuring society over the past 200 years is that little to no attention was given to the human animal. After all, this idea of 'society' is meant for humans to use in organizing the species and managing our impact on the planet.

Temple Grandin had issues adapting to today's society, and was diagnosed with 'autism' at a very young age. She also grew up on a farm and paid close attention to the behavior of various animals: what they are afraid of, how they move, how they 'communicate' with each other, etc.. She later deduced that farm animals, like cows being raised as livestock, are managed by the farmers in a very inefficient way because they don't take the animal's behavior into account. They looked at cows as 'things', rather than as dynamic and reactive living animals. Temple shared some theories of how cows are generally afraid of shadows, or that they would remain more calm if they walked in narrow and circular enclosures.



She proposed a complete redesign of slaughter facilities, where many cows were dying before the 'slaughter', contracted diseases, grew physically weaker, and were otherwise not very productive. She said that by changing the way the enclosures and exercise equipment are structured, they would be far more efficient at raising healthy and stress-free cows (even changing the way cows move, from linear to circular, has a huge effect). By experimenting with her ideas, the farmers quickly realized that she was right. Her system worked so well that you can see it in practice in many such facilities around the world today. This happened because she took the 'animal' itself into account. She started with living/dynamic animals, and restructured these enclosures according to their needs.



When you want to build a zoo, you don't put polar bears in a desertic environment, build stairs for the crocodiles, enclose giraffes with the lions, and so on. Because they differ from each other, you must pay attention to the specific individual needs of the animals: from what they eat, how long they sleep, the climate they are used to, viruses and bacterium they are vulnerable to, whether they fly, crawl, hibernate; and so on. You must start with the animal itself; that's the point. In many zoos, they isolate male alligators that are in their mating period because they become aggressive and can kill other alligators. Ponds, shadows, trees, caves, rocks, and other structural elements are there for a reason; to provide for the needs of the animal. If the climate is a bit too cool or too warm, or if too little or too much food is provided, some animals may get aggressive, or lethargic.

I do not endorse slaughter facilities or zoos, as they are unnecessary, brutal, and primitive today. The point of these examples is that if you want to organize a society for the human animal, then we must first study the animal!

Consider the widely-used approach by anthropologists who want to connect with remote tribes.



You can't just go to a tribe and say: "Hey dudes, we have plans you can use to farm animals, make clothes, reduce violence in your tribe, use tools that won't harm you. We'll give you machetes, pots, matches; vaccinate you so you won't catch diseases, build proper houses so you don't get wet when it rains, or too cold, and so on.". If you take that approach, then you should also plan for an arrow passing through your left ear and out through the right. To connect with such tribes, you must first study them for a while, and from a very safe distance so they don't notice and become frightened of you. You then figure out what they would find useful, like a machete, and leave some machetes near where their tribe is situated so that they find them, take them, and figure out how to use them. Then after a while, leave some cooking pots near their tribe. And so on.

You gradually make their life a bit easier by providing them with such tools, as they gradually come to understand their utility. If you want to gain closer contact with them to implement bigger changes, you need to find people that are from outside their tribe, yet closer to them than you are, and use those people as an intermediary (learn their language, customs, how they react, etc.). See this [documentary](#) for an example of this approach. The underlying scientific understanding here is that all people are like that, no matter what tribe they are from, and that includes you and me.



Intentionally or not, Elon Musk managed to do that with Tesla's self-driving cars. Instead of a forced implementation or voting approach, he made the car, put it out there to the world, and people are welcome to use it or not, just like the tribes people who can take those machetes or not. What people will realize is that if any given tool is useful and accessible enough, they will be able to experience its advantages directly and get used to it. Many people who complained about the pointlessness of self-driving cars, or how unsafe they 'might' be, may already have one by now, or will use one for sure in the future. The idea is that you need to help people understand the use of a tool/idea, whatever that is: a self-sustainable city, over-hoarding stuff, utility over 'beauty', etc..

You will experience that experiment on a global scale with self-driving cars in the coming years, as they are already starting to become a norm, and will very likely witness people going from: "Nah, that's so pointless and I want to drive my own 'xmwz' horsepower baby!" to just accepting them and eventually even praising them for how useful they are. The same thing goes for the idea of moving from owning to using a car, as it will be far more efficient for everyone. My parents complained about how pointless computers were when I was little, and were telling me that I was wasting my time in front of the computer all day long. Now they sometimes spend more time on their computers than I do, but it took them years to get comfortable and used to them. More and more people today already recognize the advantages of accessing (using) compared to owning (apartments, cars, etc.), and even in the monetary system, owning is becoming more and more irrelevant (from using a car through a Uber like system, to eating at a restaurant or just going to the gym), but it seems that people will need some time to get accustomed with that.



You should not expect people to discover new tools and use them on their own. First, these tools must be made highly accessible to them. Then you still need to show how useful the tools are. Although there are many better alternatives available for people right now (as we highlighted with FOSS software, for instance), and they may already know about some of them, people still need to be 'convinced' to adopt them. I live in Catalonia, which may have the largest free open-source wifi network ([Guifi](#)) in the world, but I still pay for my internet connection because I wasn't able to connect to that network. I am certainly motivated and skilled enough to give it many tries, but until it's made as easy as 'two clicks to connect', and learning about a good number of people trusting this Guifi (hear about it, see others using it, etc.), most people won't switch to it, even if it is everywhere. Even more to the point, if Guifi was indeed made easy to set up and access, leading to many people thinking about switching over to it, there are many reasons why it would not likely stand much of a chance against the big telephone companies that are currently offering internet in that area, such as: big companies have advantages as to what areas they are permitted to cover, where they are allowed to put their receiver towers, what frequencies they can use;

they are given priority from local and state governments, they have much more money to invest in updating their infrastructure to make networks like Guifi obsolete, and they could even attempt to buy Guifi just to silence or switch it over to a paid service.



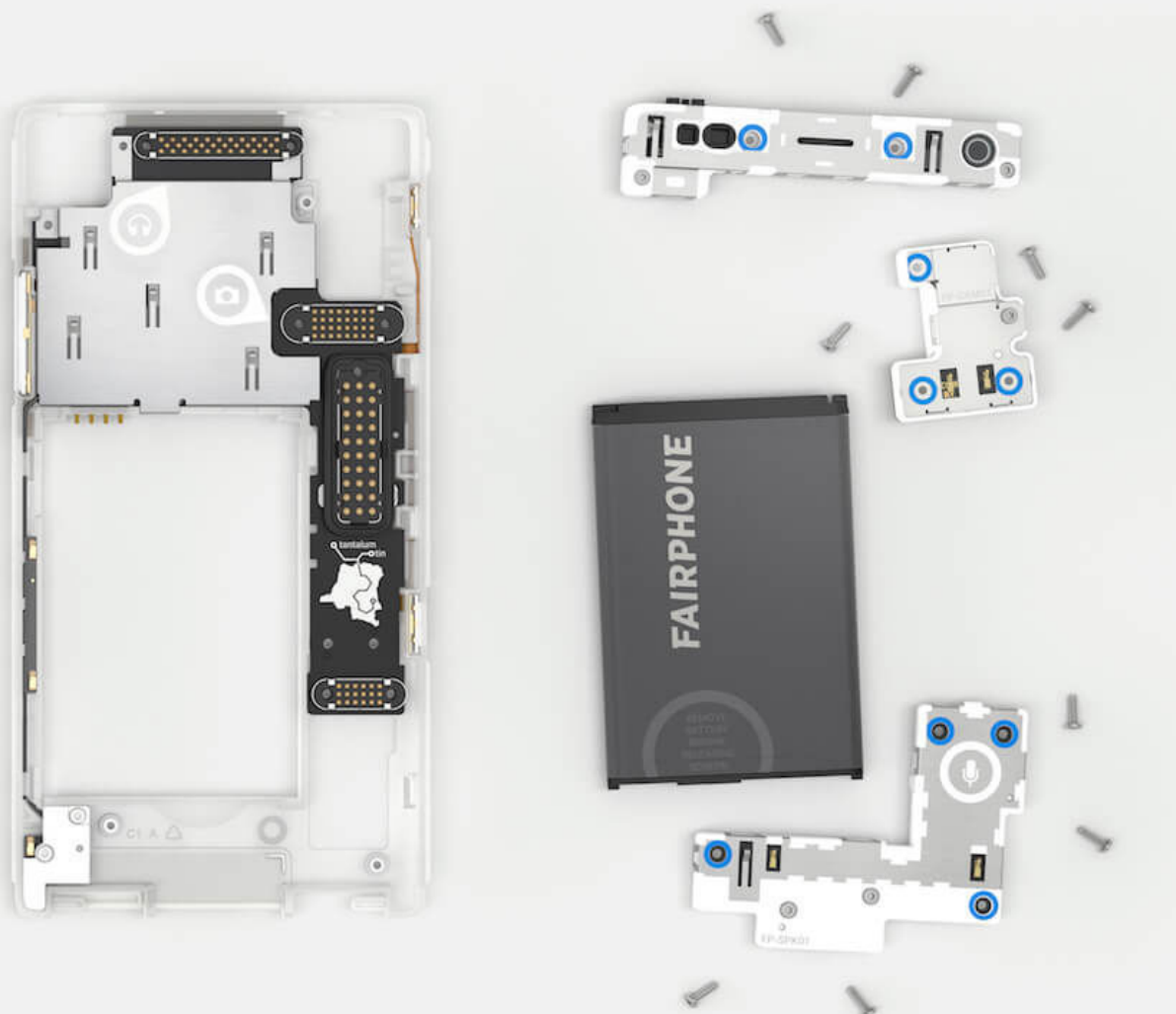
Fairphone is an easy to use and repair modular phone. It's based on open-source software and hardware, using materials not from mines we presented earlier where people get exploited, but from 'fair-practice' mines and production facilities. That's why it's called Fairphone :). They have sold 60,000 phones from 2013 to the present. Does that seem huge? Iphone sold over 13 million "6S" models in the first week of its release (source). Fairphone is cheaper than an Iphone, is very well-made, repairable, and able to satisfy most of today's users' needs, but people aren't flocking to buy it and it's not likely to make much of a dent in the smartphone industry.

Would you choose the ads free, user friendly, and open-source Minds social network over Facebook? Maybe use my website MusikWave to listen to free (and fully legal) music on desktop/laptops, as it includes more songs than Spotify and Apple Music combined? Or Youzeek to listen to the same huge music catalogue on mobiles? How about clothes that are not made on the backs of exploited people? Do you think these well-intended and well-made products have a chance to take over the big industries? I cannot find any examples of such a displacement. Even if there are some examples, where better, open, free, and more fair products are made, there is a very high chance of it becoming polluted by the money world once they become big enough.



What I am trying to show you here is, on one hand, how people need to adapt to a new kind of lifestyle (tools), and on the other hand, how almost impossible it is within the Money Game to build such tools to have a big impact and help change perspectives toward a direction like this.

Elon Musk had to invest many millions of dollars, and even went bankrupt a few times, to make Tesla a 'desirable' electric car, and it's still just a bug in a jungle compared to the other car companies. But thinking that there will be an Elon Musk for all parts of society is nonsensical, and still wouldn't solve much in the end. It would be awesome if all cars somehow become Tesla cars tomorrow, but that won't change the fact that so many are still dying of starvation, wars will still occur, climate change will still be a growing issue from other human 'activities', corruption will still exist, and pretty much all of the other issues will still remain in place.



So to make people switch to new things (technology, systems, approaches) is not as easy as just putting these kinds of tools out there and presenting them to people. You need to make them simple for people to understand, access, and trust. But more than likely, this won't happen from within today's world. Expecting that 'entrepreneurs' will come up with technological solutions to today's problems to 'fix' the world, seems to be based on very little facts, if any. They may improve a thing here and there, but that's pretty much it, as more and more issues will continue to emerge out of the for-profit world. It's very similar to Geriatrics practitioners, who battle the effects of aging. They will help many as they prolong the life of some people, but there is nothing in sight that suggests that they have any chance of getting rid of those issues, because they are merely battling symptoms, rather than root causes.

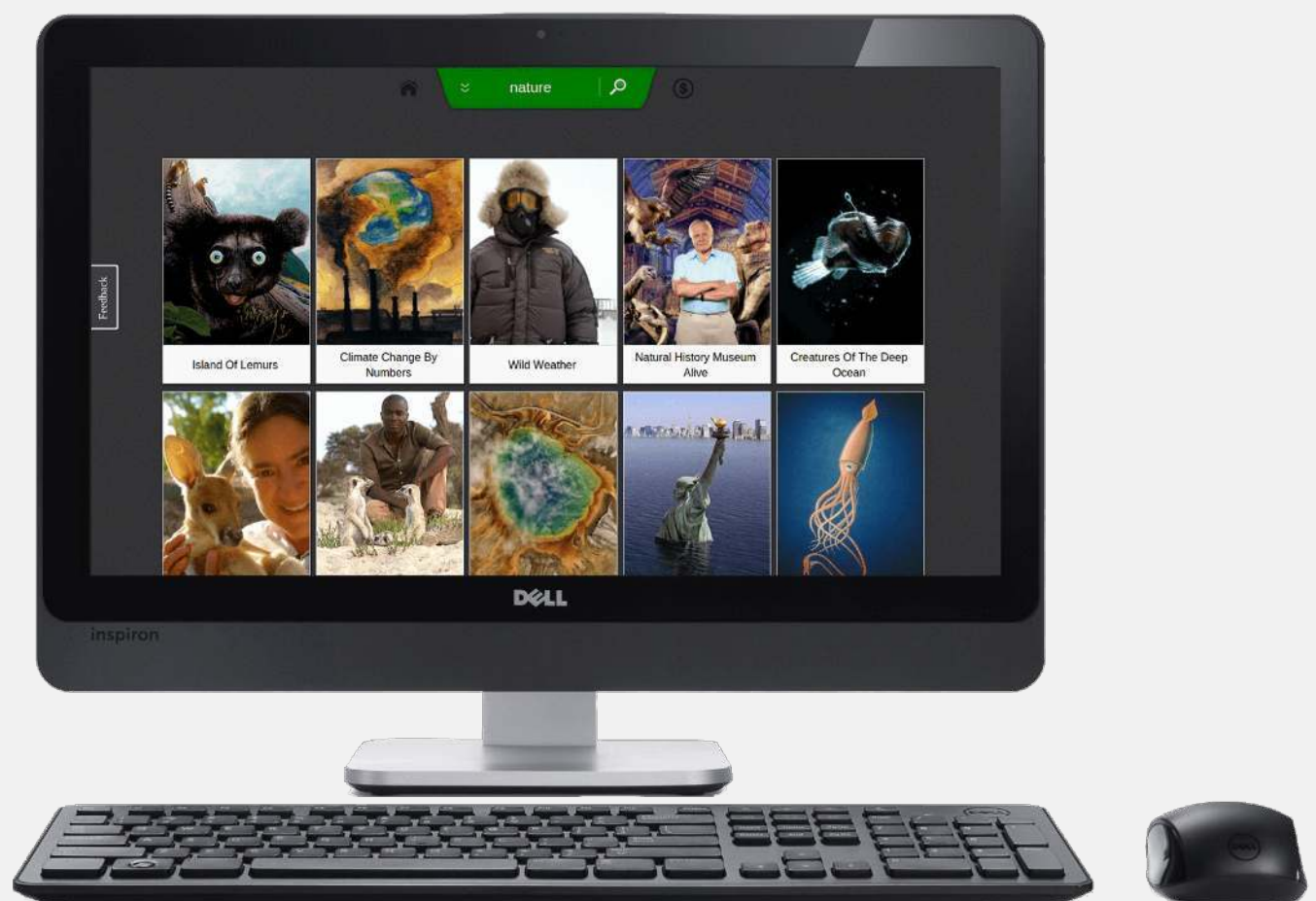
This is why you need significant 'education' in order to approach people. You need to help them become used to this idea of a world where trade is obsolete. You can't just highlight to them that this world is scientifically feasible, nor can you just build such a world or a test city to "showcase" 'it' and expect that to change the world. You eventually need both, of course, but right now what you need most is to help them grow comfortable with this new kind of global society.

Similar to treating the human body, you must be careful and approach it with caution. TROM Projects, for example, are a strong set of tools that we use to help people get comfortable with new kinds of values. This is why we struggle so hard to make it simple to read and understand, yet also 'cool' and modern, and available in all formats.



For instance, you could say to someone: "Go watch such and such documentary to better understand X and Z". But if that documentary is hard to find, you will experience poor results. I made VideoNeat especially for this reason; so that people can gain very easy access to that kind of deeper information. If you write a 300-page book and feel happy that you explained something perfectly in your own view, it's a mistake to think that this is enough to 'reach' people. Make videos from parts of that book, create image memes, share bits of the text for those who do not like to read a lot, and so on, so that you can reach more and more people. This is what we do: we make tons of memes for those with short attention spans and share them on social networks daily, we design all issues with accompanying pictures, videos, and other elements so it's more interesting to read, we use simple language so these concepts are easy for anyone to understand, we made a search engine to allow anyone to easily search for anything they might want to learn about, and we're continuously working on a Quiz for people to 'double check' their growing knowledge.

You should try to make videos, or write new songs, or whatever else you feel inspired to create. Teach about such a world in schools, give presentations at libraries, colleges, universities, and so on. Make sure people have easy access to these tools, and be careful to not scare them away (usually happens by going faster than they can keep up). ;).



LET ME GIVE YOU SOME EXAMPLES OF APPROACHES THAT HAVE WORKED WELL FOR ME WHILE TRYING TO TALK ABOUT SUCH A SOCIETY WITH 'NORMAL' PEOPLE:

If anyone asks me what I do, or what is my job, I say that I manage and write for an online magazine about a project that aims to build self-sustainable cities (really cool tech, I say). I try to get them interested about the 'cool' technological project, but not scare them away by saying it aims to remove politicians, wars, poverty, etc.. Since most people have very little information on those heavier topics, they would quickly conclude that I'm crazy and ignore the rest, erroneously associating what I say with some concept of 'utopia' (I've seen this happening so many times). Instead, I just explain to them that these cities work autonomously, and give them a present-day example: "Like how the Tesla car drives itself". I tell them that the same idea applies to all kinds of stuff in this kind of society: food production, management of resources, recycling, whatever is needed. When they further ask how could that system work for all of these things, I will always give them more present-day examples: "Like vending machines", I say. "You can make entire restaurants and supermarkets automated in that way and it's so much more efficient. Remember the last time you wanted to buy something at 11 p.m. and couldn't find an open store? Well, such automated food-machines don't care if it's late, sunday, or a holiday. They are ready to fill your order all the time."

I try to make them comfortable about this vision and give them real life, present-day examples, never saying: "We need to eliminate politicians and money from this society!", but instead describe this society in a way that money and politics can easily be recognized as irrelevant and out of the equation. I want them to realize the 'no need for money or politics or trade' thing for themselves, and once they are interested in the technological part (something that looks quite neutral today), then I can talk about other subjects related to it. Subjects revolving around politics, money, personal values (like family, marriage, ownership), education, and so on, can be very touchy for people, so I always try to avoid mentioning them directly. I talk about them in more subtle ways, such as telling them that in some countries or tribes, people don't get married, or guys are only attracted to girls who have very short hair, or are very fat, or even covered in 'poop :) (because jokes often work well for me) and so on, hoping that they will realize something deeper about beauty or family.

But for this approach to work, you need to know a lot about the world and this direction to come up with good examples, analogies, and to further explain if/when they come back with questions. If they are skeptical that we can automate pretty much everything, I put the weight on them by saying: "Well, we have a 260-page magazine explaining that in detail, with lots of today's interesting tech, videos, sources to documentaries, and so on. If you want, I can pass you the link to read it. It's up to you." And I then act like I don't care anymore until she/he takes the time to research that. I already told them there is an answer, but in a way I also make them look 'lazy' for not reading more about it. Instead of saying that today's educational system sucks, introduce them to some 'cool' and efficient ways for children to learn, like the maker movement. I always try to present the new, instead of bashing the old. These are just a few of the methods that I've used over the years that seem to work well in helping people become comfortable with this subject, but your approaches can be widely different depending with whom you are talking with.

Still, there is something more important to understand about all of this: if these people are unable to engage in more than a discussion or two, you will lose them. Even if they accept such ideas, they also have their own lives, jobs, tv shows they watch, a Facebook profile to 'maintain', and so on, so they are likely to slip back fairly quickly. I am not sure what solutions might exist for this exactly, but we always try to encourage people to write for the TROMsite, so we can create a supported environment for them to express themselves. We help them with their articles, talk to them about relevance and 'opinions vs. verifiable facts', teach them how to do research if necessary, and so on. We also invite people to get involved with other TROM related things like helping with the website if they can, making relevant videos for us to promote on this direction through social networks, etc.. I recognize that I changed my own life environment first through my online environment by making videos and getting feedback from people, writing articles on my personal blog and engaging with others, now managing TROM and able to get some financial support to change my physical environment here and there to not slip back into 'normality'. It has been a gradual and intentional process of changing my total environment.

The big thing to keep in mind here: if you do not intentionally help yourself to reinforce these updated values, they will revert back to 'normal'.

The entire point is to ensure that you are not being too 'brutal' when presenting such a direction to other people. To provide accurate information to others, you should first learn a lot about it yourself, and then take the time to learn about the people with whom you are talking to, or they may suffer side effects from your good-intentioned intervention. :)

The idea is to help people get comfortable with such a worldview, and this worldview is about many things. Fantasizing that we just have to build a city or a community (let them see it in action) will, in the best case scenario, cause such a community or test city to end up like Metabolism, Buckminster Fuller, those people in Chile, or like any other self-sustainable community today. This should not be about such endeavours. What we should do instead is to make people realize that the core issue with today's world is the trade itself. Be it a gift-like exchange of goods, monetary based, bitcoin, resource trade, or any kind. If we do not create a world of abundance where trade is made obsolete, we will not solve any big problem that we are faced with today.

BEFORE IMPLEMENTING ANY 'TREATMENT', YOU HAVE TO VERY CLOSELY ANALYZE THE SUBJECT, AND WHEN THE TREATMENT STARTS, APPLY IT GENTLY AT FIRST TO MAKE SURE THAT YOU ELIMINATE THE RISK OF HARMFUL SIDE EFFECTS. AS THE 'PATIENT' RESPONDS, CONTINUE APPLYING THE TREATMENT FOR AS LONG AS NECESSARY (REINFORCEMENT)!



3

clinical trials: the city







So far, a lot of literature has been published on how to tackle the prevention of aging: what treatments can we opt for, what the overall approach should look like, etc.. But science can only produce scientific results following the thorough testing of ideas. Interestingly, the first such clinical trial in the world was approved in November of 2015 ([source](#)). This is already affecting the way that people think about aging, since clinical trials are reserved for things that are important enough to be tested.

In summary, scientists found that a drug used to treat type-2 diabetes, Metformin, may have an effect on human aging process. Metformin increases the number of oxygen molecules released into a cell, which appears to boost robustness and longevity. Tests on worms showed that they not only aged slower, but stayed healthier for longer, and it extended the life of mice up to 40%, which would be the equivalent of a 'normal' human lifespan being extended to 120 years. Another interesting aspect is that, since Metformin was first approved for diabetic use in 1957, they can already see some long-term response effects in humans. On average, diabetics under this treatment lived longer than healthy humans, even though people with diabetes typically die 8 years ahead of non-diabetics.

So maybe now you're thinking: "Hold on, that's not delaying aging. I thought you were going to show that stopping it is possible, not just delaying it!". The aging process is extremely complex, so any discovery that can delay it provides us with the opportunity to discover better approaches to delay it even more. The extremely important idea here is the need for accepting aging as the cause, and all other issues as symptoms, which is unique with this clinical trial. Instead of trying to fix your heart, eliminate a cancer, deal with muscle loss, or treat other organ malfunctions, you could make people live healthier and longer lives. Imagine being 100 and feeling/functioning like you were in your 60s. That's a huge thing! It is vastly different from extending human lifespan by patching symptoms.

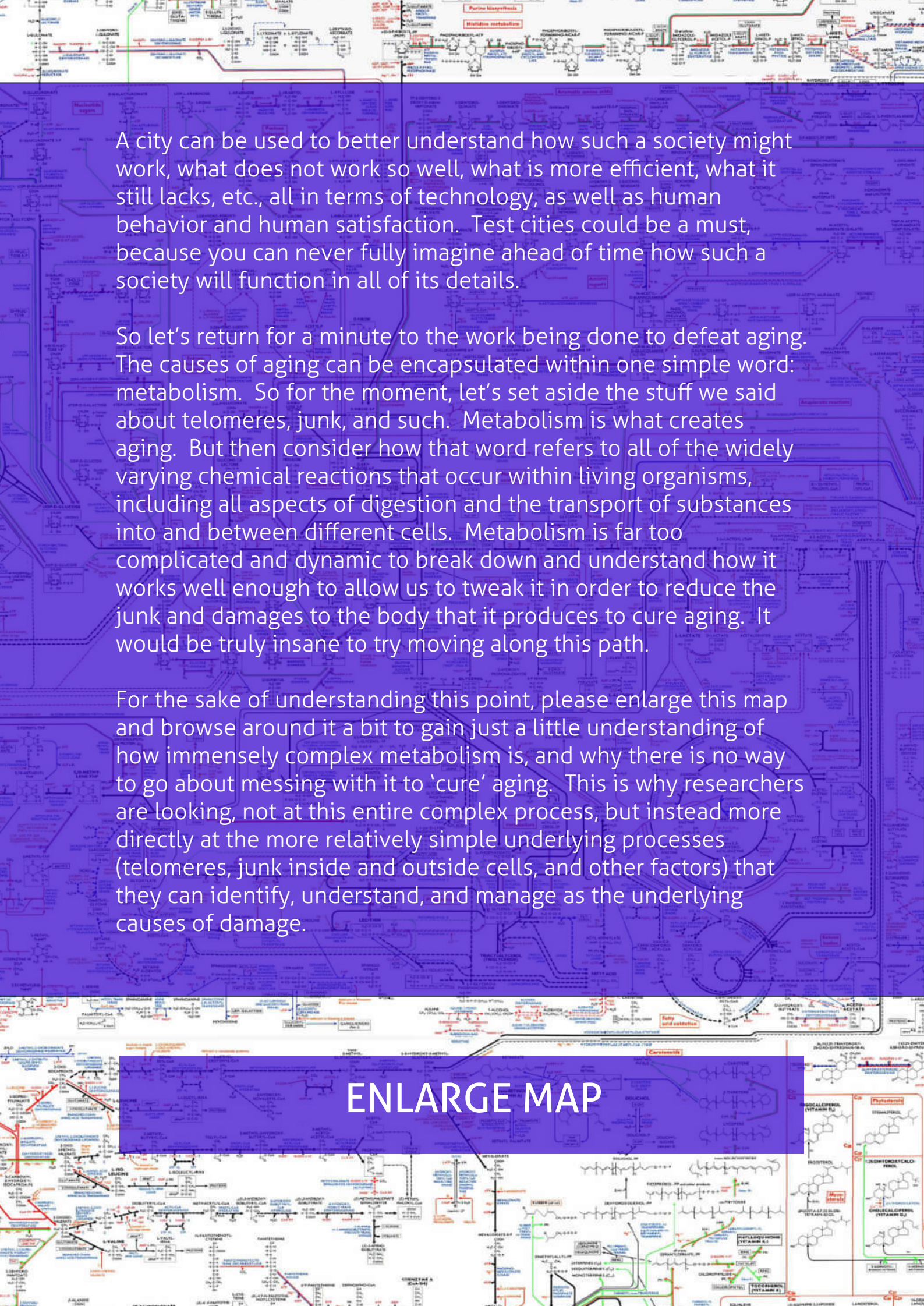
This may seem like a small step to overall defeat aging at first, but what may blind people within today's super-hyped culture is that slowing down, stopping, or even reversing aging does not mean immortality. I said at the beginning of this section that we should look at immortality to help us better understand the kind of world that we are proposing, and many people might take that path when it comes to aging or when thinking about such a world, but most people are likely to misunderstand the connection I'm making here. You see, even if we succeed in solving aging, there are still plenty of other things that can kill us, such as many harmful viruses and bacteria, accidents and asteroids, etc.. Even if we somehow make ourselves 'digital', as some are proposing to get rid of our weak biological bodies, there are still supernovas and the expansion of the Sun, or the unavoidable eventual death of the Universe. While most of those are manageable to a certain extent (except the expanding of the universe or the death of our Sun), and not at all as big of an issue as those created by aging, there is no doubt that you, me, and everyone we have ever known, along with everything we've ever known, is going to disappear forever and ever at some point, and with some of them sooner than others. No matter what we do, we simply cannot become 'immortal'. We need to drop the notion of immortality as an obtainable possibility, in the same way that we need to drop the notion of utopia as an obtainable possibility. There are no such things!

It's very important to understand that this trade-free world is much more like tackling aging than chasing immortality. It is not going to create a perfect society, as there is no such thing. It's concerned with the biggest issues of today and a new kind of approach to eliminate these issues in order to create a far better world than we have now. There will still be problems to solve, and people will still find themselves unhappy at times.

The people who are working to solve aging face many of the same issues that we will face, as their work is far too often associated with the sensationalistic notion of 'immortality'. Although they are quite serious about what they are doing and they often take great strides to explain in detail what they are trying to accomplish, nonsensical ideas about 'immortality' make it very difficult for people to understand the very important advantages of their research. At the same time, nonsensical ideas of 'utopia' make it difficult for such an idea to be explained.

Building a test city to see how such a world of abundance (automated, decentralized, and so forth), where trade is not necessary, will not be enough, like in the case of Metformin, but it can be a crucial step if built alongside educating people about such a new society, serving as the 'clinical trial' when taken as a package (again: education + infrastructure) to prove how such a society could function. The clinical trials for Metformin may provide a definitive proof for that drug, but not for stopping aging definitely. The same holds true for a such a city/community, since for such a society to fully function, we need it to become global. This is why the most important part of moving toward an emergent trade-free world is what we are doing right now: from articles to documentaries, from interviews to images, from lectures to all kinds of tools for helping people get used to it.



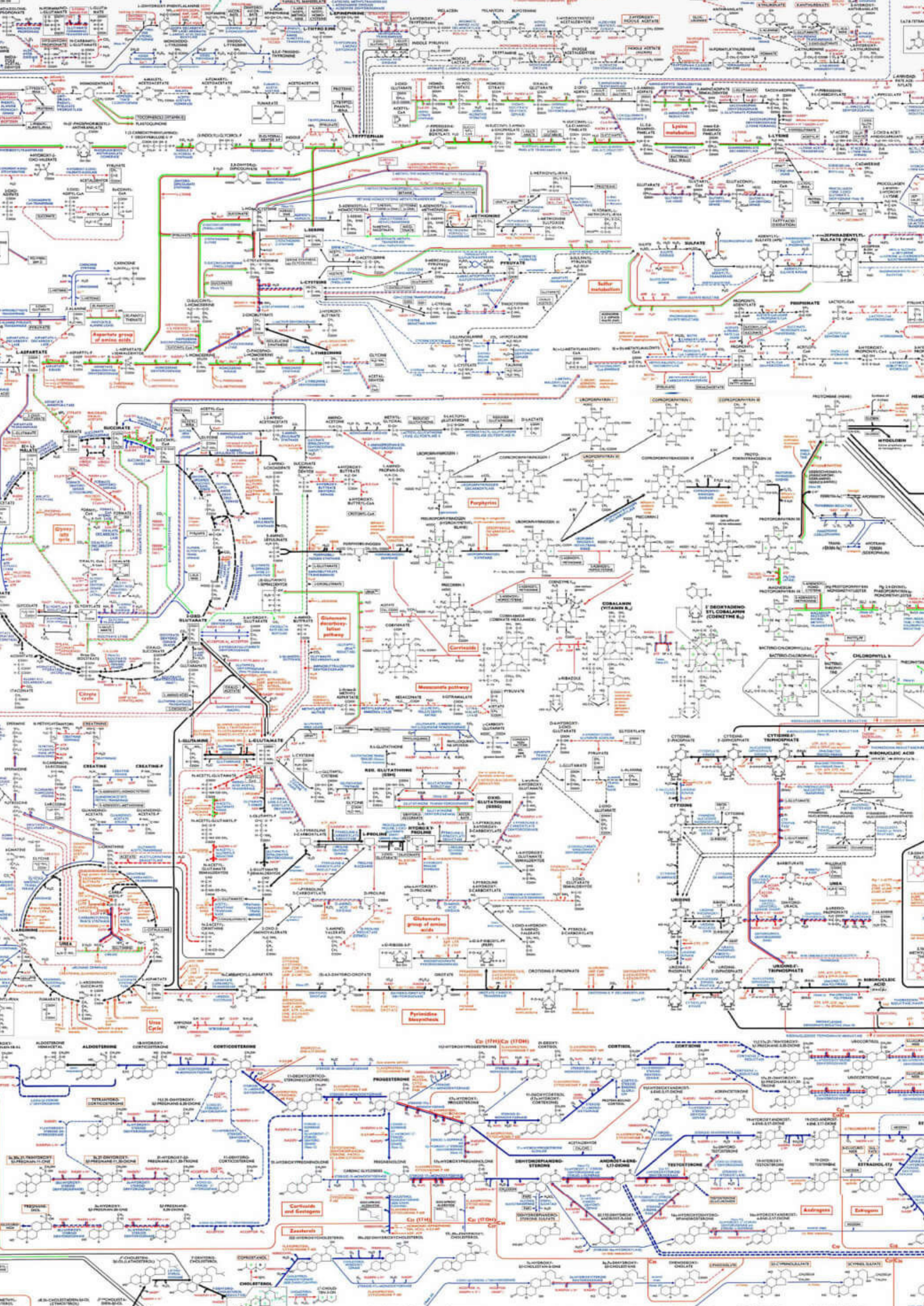


A city can be used to better understand how such a society might work, what does not work so well, what is more efficient, what it still lacks, etc., all in terms of technology, as well as human behavior and human satisfaction. Test cities could be a must, because you can never fully imagine ahead of time how such a society will function in all of its details.

So let's return for a minute to the work being done to defeat aging. The causes of aging can be encapsulated within one simple word: metabolism. So for the moment, let's set aside the stuff we said about telomeres, junk, and such. Metabolism is what creates aging. But then consider how that word refers to all of the widely varying chemical reactions that occur within living organisms, including all aspects of digestion and the transport of substances into and between different cells. Metabolism is far too complicated and dynamic to break down and understand how it works well enough to allow us to tweak it in order to reduce the junk and damages to the body that it produces to cure aging. It would be truly insane to try moving along this path.

For the sake of understanding this point, please enlarge this map and browse around it a bit to gain just a little understanding of how immensely complex metabolism is, and why there is no way to go about messing with it to 'cure' aging. This is why researchers are looking, not at this entire complex process, but instead more directly at the more relatively simple underlying processes (telomeres, junk inside and outside cells, and other factors) that they can identify, understand, and manage as the underlying causes of damage.

ENLARGE MAP





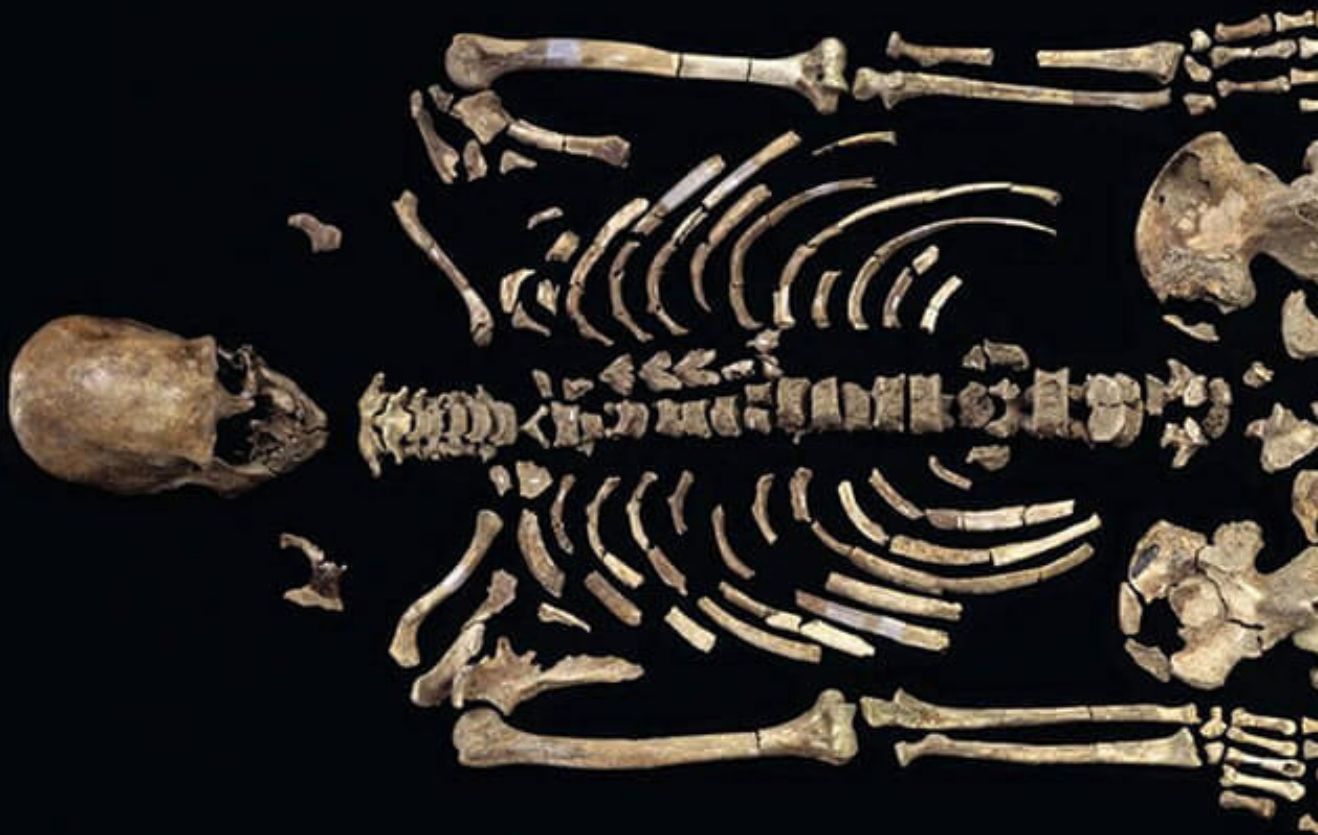
In the same way, you cannot possibly imagine all of the dynamic moving parts of an entire global society: rituals, people's personal lives, sexual behaviors, how technology impacts values, how values impact technology; people with pets, fetishes, dreams, and so on. It would be insane to even consider trying to orchestrate a world in such a way. As you may have already realized by now, what I am talking here is not at all about trying to orchestrate this immensely dynamic 'thing'. Just like those researchers who are dealing with aging, we must recognise the more simple core underlying causes of our biggest problems, and then focuses on solving those.





As just one of billions of examples out there, one of the most complete ancient skeletons was found somewhere in the USA in 1996. These remains are immensely valuable to study toward the understanding of how our species evolved and migrated from other parts of the world to The Americas. However, the place where it was found also happens to be where a group of people live who insisted that the remains are of one of their ancient relatives (whatever that means) and it must be buried again with no scientific study done to it, because 'the soul must return to earth to have a peaceful and eternal life'.

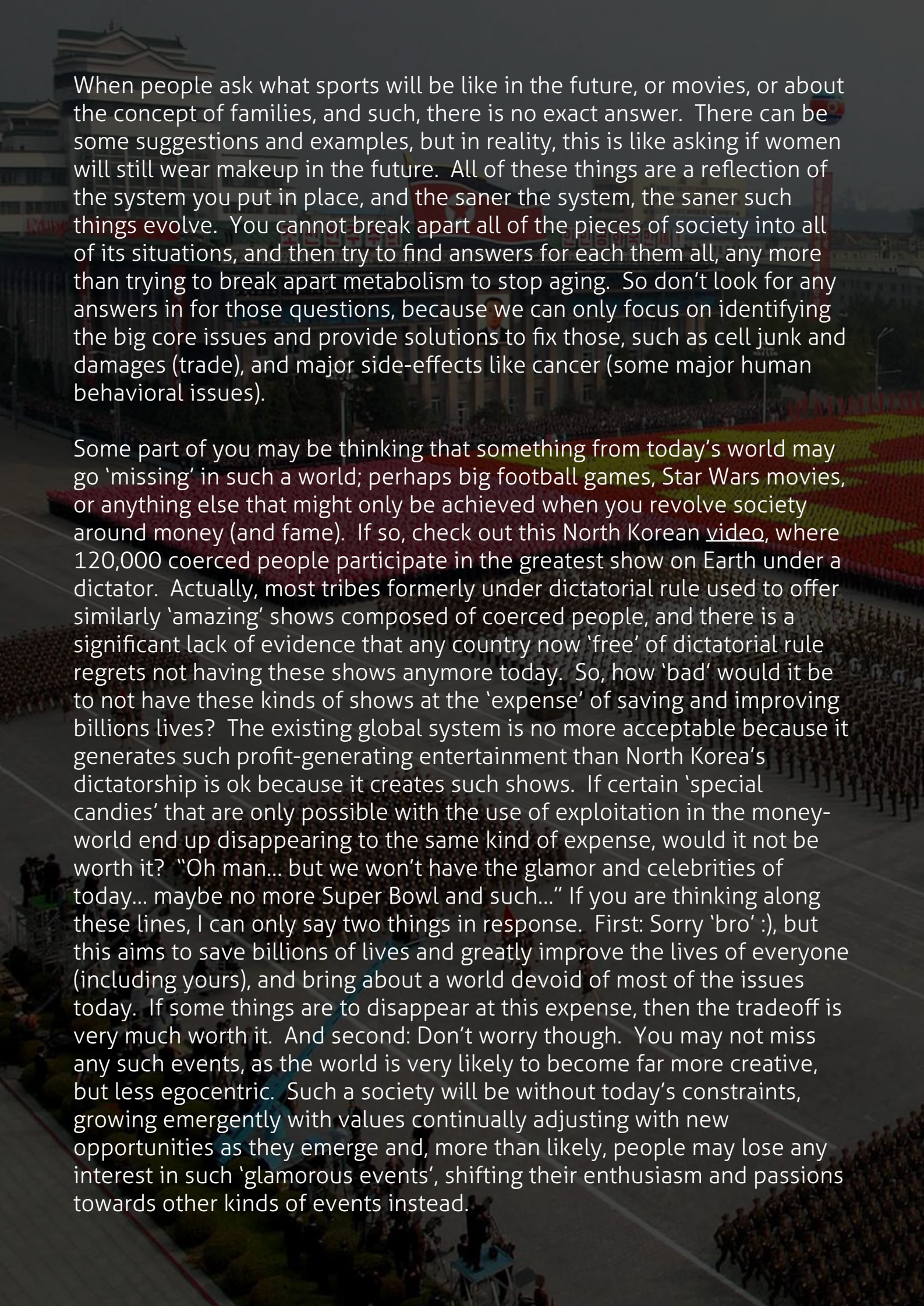
The case got so complicated that access to the skeleton was restricted against scientific investigation for years ([source](#)). So, what can you possibly do in such situations?



'Logically', you may be inclined to say that their argument is completely silly, and the beliefs of those people should be ignored because science is far more important, but you can't even consider taking that kind of attitude because it leads to pretty quickly transforming you into a dictator, and situations like this will always occur, no matter how 'educated' people are. There are far too many people in the world to fool yourself into thinking that such situations will not occur. The reality is that there is no 'right' answer for scenarios like this one. The way these people have dealt with it did not turn out to be a simple solution with everyone happy at the end. It took years-long discussions between the scientists and believers, and eventually they managed to analyze the remains and then give them back for re-burial. Science may have need of that skeleton for future studies, but that's how it played out.

You can only 'hope' that an abundant trade-free society with a truly relevant education is going to produce people who can deal with such situations in a more peaceful manner.



The background image is a dark, high-angle photograph of a large-scale mass parade in North Korea. Rows of soldiers in uniform are marching in formation on a wide street. In the background, a large, ornate building with traditional Korean architectural features is visible. A massive banner with red and yellow patterns stretches across the middle of the parade route. The overall atmosphere is one of a highly organized and grand public event.

When people ask what sports will be like in the future, or movies, or about the concept of families, and such, there is no exact answer. There can be some suggestions and examples, but in reality, this is like asking if women will still wear makeup in the future. All of these things are a reflection of the system you put in place, and the saner the system, the saner such things evolve. You cannot break apart all of the pieces of society into all of its situations, and then try to find answers for each them all, any more than trying to break apart metabolism to stop aging. So don't look for any answers in for those questions, because we can only focus on identifying the big core issues and provide solutions to fix those, such as cell junk and damages (trade), and major side-effects like cancer (some major human behavioral issues).

Some part of you may be thinking that something from today's world may go 'missing' in such a world; perhaps big football games, Star Wars movies, or anything else that might only be achieved when you revolve society around money (and fame). If so, check out this North Korean [video](#), where 120,000 coerced people participate in the greatest show on Earth under a dictator. Actually, most tribes formerly under dictatorial rule used to offer similarly 'amazing' shows composed of coerced people, and there is a significant lack of evidence that any country now 'free' of dictatorial rule regrets not having these shows anymore today. So, how 'bad' would it be to not have these kinds of shows at the 'expense' of saving and improving billions lives? The existing global system is no more acceptable because it generates such profit-generating entertainment than North Korea's dictatorship is ok because it creates such shows. If certain 'special candies' that are only possible with the use of exploitation in the money-world end up disappearing to the same kind of expense, would it not be worth it? "Oh man... but we won't have the glamor and celebrities of today... maybe no more Super Bowl and such..." If you are thinking along these lines, I can only say two things in response. First: Sorry 'bro' :,), but this aims to save billions of lives and greatly improve the lives of everyone (including yours), and bring about a world devoid of most of the issues today. If some things are to disappear at this expense, then the tradeoff is very much worth it. And second: Don't worry though. You may not miss any such events, as the world is very likely to become far more creative, but less egocentric. Such a society will be without today's constraints, growing emergently with values continually adjusting with new opportunities as they emerge and, more than likely, people may lose any interest in such 'glamorous events', shifting their enthusiasm and passions towards other kinds of events instead.



A test city or community might also be a must for testing such a world, because any attempt to transform old cities into trade-free automated places of abundance, could be a lost cause, even from a technological perspective only. The streets in the city I live in are old and narrow, with buildings squeezed together, basements and apartments transformed into shops, dentist offices, and so on. It's an old town made before cars were even a thing. Every time a car passes by, you need to almost hug your back to the wall of a building so the mighty mechanical carriage can pass. A self-driving car would completely panic on these streets :).

The apartments in this area are so poorly insulated that most of the energy is quickly lost. It's extremely inefficient and wasteful when you need to heat your home or cool it down. This is in a very known region in Europe, the Costa Brava, flocking with tourists from around the world every year, but they still don't have any infrastructure for fiber internet yet. The beach is transformed into a parking lot and everything is narrowed by parked cars and traffic.



Some months ago, I investigated why I am made to pay such high taxes on my electricity bill. Their response: the building that I live in has a theoretical consumption of X energy units. So if I want to consume that humongous amount of energy at once, the building is prepared for that. And even if I never choose to use that much energy at once, they still 'prepare' for my theoretical consumption of it by continually burning extra fossil fuel, and if I don't use it, they lose it, so I have to pay a tax for that. That was their explanation. This means they intentionally waste energy, all the time, and then charge me for it. Since this area is a summer tourist attraction, I only have one or two neighbors for about 8 months on a row, and then about 20 neighbors during the summer months. There are about 100 apartments in this building, all paying the same tax every month. This is just one small example of huge energy waste (besides the waste of so many apartments that are always empty). And my favorite? The speed bumps (many of them are more like hills) built into roads to slow drivers down, and Spain is full of them. They serve as a great example of this notion of patching old cities and towns. Most people still accelerate over the speed limit up to these 'hills', then slow down to 'pass' them, and then accelerate again. If anything, it makes drivers frustrated and more prone to accidents.

The same kinds of things happen in most cities today, if not all of them. To make updates, they have to tear up the streets to access water, energy and sewage pipes. They demolish green spaces in favor of car spaces, waste massive amounts of energy, create chaos and discomfort for everyone, and overall, they seem to spend more in resources and energy over just a decade on these repairs than would cost to build a more modern city of the same size,



If you rebuild a poor village from the ground up, you can make it far more technologically advanced, while consuming far less energy and resources than it would take to uplift an old city to the same level.

This is yet another reason why a test city might be necessary. How else can we help such a society to emerge from the outdated cities of today? To make it as efficient as it is today, the technologically advanced Masdar City had to be built from scratch. It was planned as an all encompassing 'entity', and everything they put into it (from transportation to the shape and orientation of the buildings) was designed toward achieving that efficiency. As we detailed in AA WORLD, Masdar City is highly efficient in terms of the energy and resources used to both build and operate it.



But please don't forget that without a strong relevant educational process to go along with this, which should be massive and intense, such a test city will be nearly useless by itself. What does the Masdar city bring in terms of addressing the human behavior or the core problem that is 'trade'? And is the goal of such a city to change the way the society is structured? Not at all. So, if there would be such a test city and/or community, we need not only to make it automated, self sustainable, able to create abundance and eliminate the need for trade, but we need constant education within such a city/community, and outside of it.



4

quackery and
shallow solutions





If you search online for anti-aging treatments/medicine, you will find so many that you might be tempted to think: "Damn! I am never going to get old!" But those are all quackeries; non-scientific and/or very poorly researched treatments that, simply put, do not work. It's like thinking that eating fruits and vegetables will stop you from getting old. In the same sense, there are lots of proposals around today as to how we can get rid of the biggest problems that we face in society, and many of them, if not all, are also quackeries. In the same way that you should always test anti-aging quacks by looking at the details or their research, etc., you should also be checking those who propose societal change, including this one.

Legitimate attempts to tackle aging in a 'scientific' way date back some 300 years ago to the guy who basically invented science, Francis Bacon. However, no one would take Francis Bacon's ideas into account when tackling the challenge of aging in 2016. We need proper 2016 science for this, with lots of details, research, and tests. In the same way, we cannot just take Socialism, Communism, Technocracy and other older ideas and try to apply them today, even if they included some of the same notions we discussed in this book toward bringing about a new kind of social structure. We must use 2016 science to detail such a world, with present day examples and technologies.

I THINK WE HAVE THE FOLLOWING COVERED:

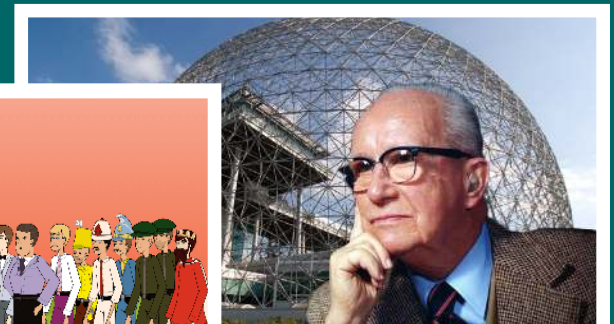
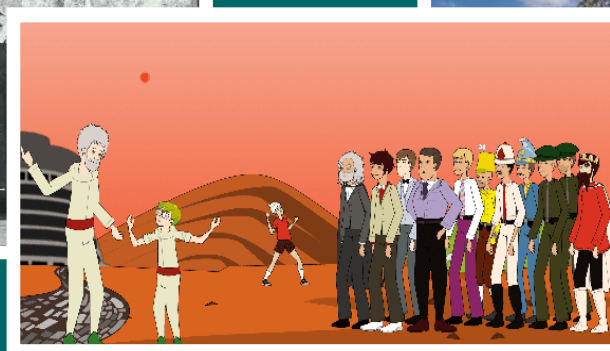
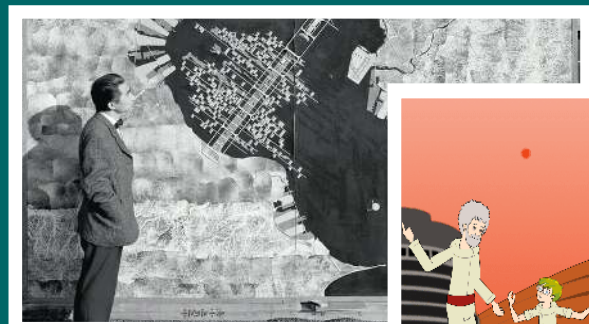
1.

Explain in great detail how the Money Game came into existence and how it works, plus what are its many symptoms. Showcase how patching these symptoms does not work.



2.

Identify the core problems that trigger these symptoms and present in detail solutions that were proposed over the past 200 years to try to cope with those symptoms. Identify what worked, and what didn't work.



3.

Based on all of that, explain in detail what solutions there are to rectify the core problems (the root causes of the above symptoms) and how we may go about implementing them.



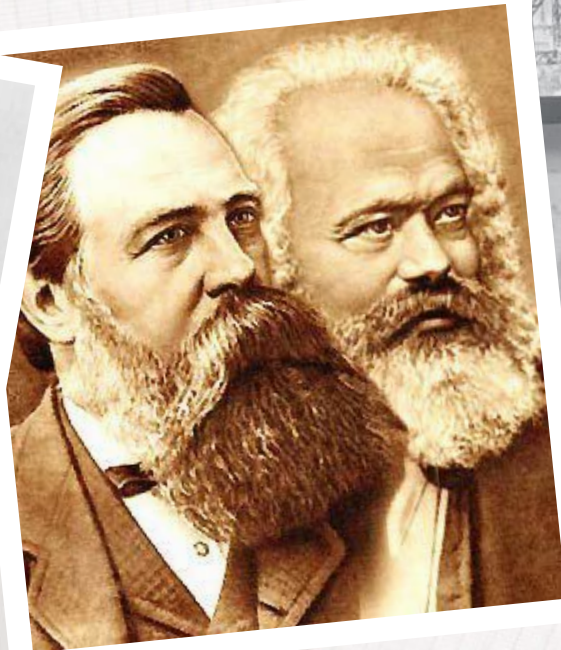
After covering so many examples/analysis of today's world and how we got here, our current technological and scientific possibilities, I think we have a much more solid understanding of what the problems are and what solutions exist. I dare say that we're now ready for the 'clinical trials'. But to arrive there, we need what we have been repeating for so long: education.

Be sure you use the various tools and materials that TROM offers, and please help us make these tools better to help them reach even more people.

SUMMARY OF THE ENTIRE BOOK:

Ideas from the past can influence the future, but you need the present to put them into practice. As a result, no matter what ideas Marx, Owen and others had, we must contemplate any future society with humanity's most up-to-date understanding and possibilities. Our world today is vastly different from that of even 20 years ago, and it's very important to recognize that no one back then could even imagine much of what we can do now.

If we are to have truly intelligent conversations, we can no longer rely on words/notions like morality or ethics, equality, abundance, human rights, free, and so forth, without very carefully defining what we mean by them at that specific moment. But many such notions have already been made far too shallow and subjective to be meaningful.



People full of hope, and some full of solutions, have always been crushed by the money game, even when they became extremely popular, showing us that if we want to succeed here, we need far more than good intentions and good technological plans.



From my perspective, the open source movement, the makers, universal basic income, bitcoin, all kinds of solutions like self-driving cars, today's renewable energies, and all of the efforts of people who fight things like drug cartels, human trafficking, the killing of animals for profit or prestige, pollution, crime, environmental devastation, corruption and power abuse, etc. are little more than well-intended efforts to only patch the current system here and there. They are formed on the backs of very dedicated humans that put a lot of effort into this, but they can never, ever, do anything more than slow down the problems. They will never stop the flow of issues because even if they happen to 'win' some of these fights, other problems arise to take their place, and those that they solved simply reignite in some other corner of the world, or worse, new approaches or rules (laws) that they helped get into place are quickly overturned the moment a different political party gets into power.

These well-intentioned people are merely fighting the 'symptoms' and we need to make them much better aware of that, in the 'hope' that they can change their perspective and undertake much better designed approaches, such as working towards a world where trade is an obsolete 'event'.

You may think that science is already delaying aging today, explaining why some live to be 90 or 100. But this is only an illusion, much like the illusion that well-intended people are using their intelligence and energies toward "solving" those societal issues. Seeing through the illusion, it becomes clear it's really 'modern medicine' that is keeping old people alive longer, but under severe ill conditions, almost like keeping dead bodies alive. In contrast, 'delaying aging' means being healthier for a longer period of time (being 100, but with the health of being 60).

So open source, universal basic income, those who fight against the symptoms' of the money world, or other such solutions that are bringing advantages in today's world, are only making people survive a bit longer under the same stressful/bad/harmful conditions, even if the intentions are noble. To stress this enormously important point one more time, this is about completely getting rid of all of the stressful situations and problems of the trade world by eliminating the trade itself, not by patching the world in the hope that we might push this forward a bit longer, but instead by fully eliminating the need for trade and educating people about such a future.

Of course, it would be ridiculous to say that such 'patchwork' movements and ideas should stop existing, or that they are inefficient or irrelevant. They are not! They provide the world with great examples, push the development of technologies, and do change some values here and there. And perhaps some of the people who try to patch this system may grow, on very personal levels, into the bedrock for the kind of society we've just described.

Imagine stopping the research for cancer, or stop patching people's organs today, or no longer filling prescriptions, just because we now have a clinical trial for aging. No one wants that, as it would be a massive disaster! In the same way, it's a terrible idea for the world to suddenly stop fighting corruption, to not join protests, collapse the money system, or to stop caring about poor people, just because we have an idea like this. Even we were to start building self sustainable, automated and trade-free cities all around the world tomorrow, stopping these things would be a complete disaster. It would immediately allow fanatics of all kinds to exploit others, or all kinds of people to quickly destroy the environment, and so on. We must evolve alongside these ideas and situations, learn from them, allow them to get inspired by this, and try to make people much better aware of why patching will never solve the problems they are focusing on, so that they may redirect their energies towards a trade-free approach.

Doctors will soon be shifting more and more of their focus towards the approach of preventing diseases (like aging), but this will not be a sudden shift, although it is a necessary one. Without shifting to this approach, we cannot advance our health care.

ONE THING IS VERY CLEAR THOUGH: DEFEATING AGING WILL NOT REMOVE WARS, POVERTY, CORRUPTION, AND THE LIKE, BUT RETIRING TRADE (THE MONEY GAME) WILL CERTAINLY ALLOW ENORMOUSLY MORE RESEARCH ON CURING AGING, ALONG WITH SOLVING MOST OF THE WORLD'S PROBLEMS. ;)

To make sure everyone understands the basic idea of this book: what I am saying is that the core problem in today's world is trade. IT gives rise to most of the issues we see today. But IT may be invisible to so many minds, thinking that IT is normal and we cannot do it without IT. In the same way that people think about aging as being part of life. But as many started to challenge the notion of aging, we are challenging the notion of trade and we propose a world where trade is obsolete (you don't need to trade anything to get something). We describe in detail how that world could work, using present day examples (so no wishful thinking).

But we emphasize that to create this world we need a constant movement of building the infrastructure and pushing the education forward. The infrastructure must be open source, decentralized, able to create abundance, and therefore make trade obsolete. Education must be scientific, diverse, open and free, so we make sure people's values are saner. Both are a constant movement with no end in reach. Both cannot be explained, and therefore understood, unless we provide a ton of examples. Something we are constantly doing at TROMsite.com.

Did this book explain how we can achieve the three 'mighty' challenges well enough?

A. SECURITY

B. CARE AND COMFORT

C. OPPORTUNITIES AND PROGRESS

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