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UNPLUGGING FROM CONSUMERISM

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WHEREAS THE CONSUMERISM ORIENTED LIFESTYLE IS WIDESPREAD AND CAN BE VERY CONVENIENT, THE CULTURE OF CONSUMERISM IS HARMFUL AND HAS TO STOP IF WE WANT TO PROTECT THE PLANET AND OURSELVES

CONTENTS

While I was writing this mini-book, I had to browse through a ton of different materials to support the statements I am making. A lot of such content I found on YouTube: documentaries, news, channels of various non-profit organizations, and individuals.

When you are watching people talking for hours on end about consumerism, climate change, mass extinction, poverty, and pollution, you get terrified.

Not only it hurts a lot knowing how much damage and suffering is going on daily on our planet, but the fact that a lot of it is going unnoticed by a lot of us living in the bubbles of comfort.

I sometimes wish that our nervous system was directly connected to Earth. Just because we would no longer have disagreements about whether we believe in the climatic and ecological problems, we would feel them instantly. Pain that we sense through our nerves is a protective mechanism. It tells us that if something hurts, then it is dangerous and then automatically makes us stay away from that. But unfortunately, we can't feel the pain of the world, and our attention often slides away from these crucial problems to the problems that affect us more directly.

The take away from the material that I was browsing through is that the mechanisms set in motion that are hurting our planet are so powerful that they seem unstoppable.

I mean such mechanisms as excessive resource mining, abuse of farm lands, deforestation, abuse of people and animals in various industries, toxic waste emissions and their mass character and many more. It is the mass character that makes them especially unstoppable and dangerous. The term "locust effect" seems to fit here very well because when locusts get into massive swarms, they become a new kind of creature--a hungry and destructive giant that is capable of destroying crops and leave people starving to death.

Consumerism lies at the origin of these mechanisms. Our lives are revolving around it. We are so dependent on big stores (as well as online stores and renewable services) where we can get all we need 24/7. These stores are importing cheap things from various countries and often defining their entire economies. So if we were to decide, all of a sudden, to stop all this, these economies would collapse, which is extremely unlikely to happen, since we are strongly dependent on consumerism. So strongly, in fact, that it seems that we won't be able to turn the effect around no matter what we do.

However, as I was writing this book, a lot of exciting events related to the subject matter have happened. In a sense, they felt like a flash of light in the darkness. There were massive strikes around the world to address the looming climate catastrophe. A Swedish girl gave a speech at the UN addressing the world leaders with the powerful message, saying that if they

decided to fail the new and the previous generations and the planet, the future generations will never forgive them. Various public figures were also taking a stand for the planet. These were very inspiring events.

I was afraid that with the message I wanted to share in this book, I might come across as a dreamer. But now I see clearly that I, just as John Lennon sang, am not the only one. I hope that one day the world will be safe from the climate catastrophes and the terrible events of the sort threatening with the total annihilation of the human kind, and life will take its course for many generations to come, just as it has been with its ups and downs.So let me share my vision with you. I hope that it will make sense to you and will inspire you to take action.

Thank you for reading!

PART I: PROBLEMS AT HAND

CHAPTER 1: DAMAGED ENVIRONMENT

THERE IS MUCH DAMAGE THAT MODERN CIVILIZATION IS CAUSING TO NATURE

There is much damage that modern civilization is causing to nature. We all have heard of the dangerous effects of carbon emissions and other greenhouse gases on the climate. This is especially the case with the global scale fossil fuel utilization and commercial cattle ranching. The latter causes massive deforestation of the Amazon, which is our front-line of the battle with global warming, and it is also home to many unique species of animals and plants. Non-degradable plastic waste is another big problem that is wreaking havoc on ecosystems, especially marine ones.

And yet not everyone is aware that nature is really suffering such damage. Probably, those who think that everything is just fine, and the environment will be able to sustain any damage we are causing to it, simply can’t see the effects directly, especially if they live far from the sites of deforestation, large cattle ranches, manufactures and dump sites.

However, the problem exists, and the reason why we shouldn’t turn a blind eye to it is because it affects each and every one of us. The Earth, its climate and its ecosystems are our home, and our lives, as well as the lives of those we love, depend directly on them. If these systems begin to collapse, we all are going to feel serious consequences very soon.

One example of a collapsing part of our big home is in the spotlight--the Amazon rainforest, which is also the world's largest intact forest.

It's home to more than 24 million people in Brazil alone, including 180 different indigenous tribes. There's a reason Amazon was the place that inspired scientists to coin the term "biodiversity." The region is home to 10 percent of all plant and animal species known on Earth. This figure includes approximately 40,000 species of plants and more than 400 mammals. Birds add almost 1,300, and the insects reach millions. In the last 40 years, the Brazilian Amazon lost more than 18 percent of its rain forest — an area about the size of California — to cattle ranching, soy plantations, and illegal logging.

This is probably the most vivid example of how our civilization is hurting the environment. There are many other similar examples. Enough to get nervous and ask yourself a question whether this process is reversible. And of course it’d be great to hear a definite yes, but it seems that if yes was an answer, then it would be quite uncertain and, possibly, with a question mark in front of it.

It is easier to break than to build. We can repair the climate keeping making it worse. We can't easily restore the extinct species and introduce them into ecosystems, which also need reparations, and which were forming for a long time via natural processes. Such systems are extremely complex. But even if there was such a possibility at some point, the task would be extremely complex and most likely not economically feasible.

We also can't restore the lives of those who fell victim to causes directly or indirectly related to the mechanisms that cause damage to the planet.

The solution that I propose in this book is not the magic bullet, yet it allows to move the problem from the field of responsibility of abstract scientists, abstract business people, abstract politicians back in our hands, allowing each of us, at the very least, to say “Well I tried, didn’t I”, and, at the very most, live on a healthy planet that we saved together.

THE UNSUSTAINABLE INDUSTRIES CAUSE A LOT OF SUCH DAMAGE

Unsustainable industries cause a lot of such damage to the environment. To examine the harmful effects of industry, we can look at the commercial cattle ranching and its side effects, such as generation of large amounts of waste and unsustainable use of resources.

You can find a relatively detailed analysis of how harmful to the environment the animal agriculture is in the movie project “Cowspiracy”.

According to the infographic that the "Cowspiracy" project provides, animal agriculture is responsible for 51% percent of the global greenhouse gas emissions. To further illustrate, it is 13% that is associated with the emissions of all of the transportation combined. It also states that animal agriculture is responsible for 91% of Amazon destruction.

Another striking fact about the unsustainable resource use associated with animal agriculture is that the production of a hamburger has a 660 gallons water footprint. Such a water footprint is equivalent to showering for two months for one person. And that's just one hamburger.

According to estimates, waste from a farm of 2500 dairy cows is equivalent of waste from a city with a population of more than 400,000 people.

These are only a few facts provided in the movie, but it seems enough to become aware of the magnitude of the harm caused by this particular industry.

As well as to ask yourself why this knowledge is not well advertised and why nothing seems to be done about it.

It is not a secret that many businesses influence politics. The animal agriculture business is a multi-billion (if not trillion) dollar market segment that has much leverage when it comes to lobbying for policies and rules in favor of its interests.

Even though fighting huge industries directly is a waste of time and energy, I agree with the conclusions that the authors arrive at in the movie. The conclusion of that the most obvious and effective way of fighting with the excesses of this industry would be abstinence from dairy and meat products around the world, which, of course, is highly unlikely, yet is theoretically possible.

THE REASON FOR THE INDUSTRIAL OVERUSE AND WASTE ARISES FROM EXCESSIVE PRODUCTION OF CONSUMER GOODS

The reason for the industrial overuse and waste arises from excessive production of consumer goods. A great example of excessive production is electronics.

It is hard to imagine life today without smartphones. It is also pretty crazy that such powerful technology is so affordable. The core processing unit of an average smartphone, given the amount of transistors, would have cost trillions of dollars, if it was made with technologies available in the 1950s. It would even not be possible to make in the form we have it today. I am not even talking about other fancy hardware and software that modern phones come with. We are used to such luxury.

But we would not be able to afford smartphones, if they weren't mass-produced. Simply because the infrastructure that you need to build around smartphone manufacturing is super expensive. We are talking factories, with expensive machinery, the cost of skilled labor, research and development expenses, as well as production of materials and all kinds of operational costs associated. If such setup was only to produce a small batch of phones, the unit price needed to cover the costs would have been millions of dollars. A bit pricey for a tech that is mostly used for taking selfies.

Even though mass production gave us a lot of awesome things, like powerful computers, cars and other machines, the question arises: what's the catch? Is having such a mode of production sustainable? Can we afford such a methodology?

Mass production is unsustainable. Mainly because it doesn't just stop and is associated with a lot of overhead. In theory, you can manufacture enough smartphones for everybody and then say, OK, the job is done. That would make sense because the people's need for advanced technology is satisfied. But the process is run by businesses, and their main goal is to profit as much as possible.

However, to continually manufacture something, you have to ensure that there is demand. It is straightforward to do with electronics because technology evolves pretty fast, and the older tech becomes unfashionable even faster. The phenomenon of tech getting outdated quickly is called "perceived obsolescence." People generally want to keep up with the trends and be cool; there is always demand for tech.

Because of that, tons of outdated technology gets thrown away to be replaced with the new ones. A proper recycling isn't built into this model, therefore creating big problems with waste management.

The smartphone industry is just an excellent example of how unsustainable mass-production is. However, there are many similar examples: soft-drinks, fast-food, plastics, "cheap" merch in general, the list can go on.

MASS-PRODUCTION WOULDN'T BE POSSIBLE WITHOUT TECHNOLOGY

Mass-production wouldn't be possible without technology. Tech is excellent at automating discrete and repetitive tasks. Mass production is based on repetition and, therefore, requires such tireless workers. Technology is also getting better very quickly and allows us to produce stuff better and faster. Of course, it doesn't mean that it makes sense to produce more and more exponentially because that way supply will quickly outgrow the demand. But it generally makes mass-production more and more unstoppable, and as I already mentioned, mass-production is not sustainable.

The most iconic example of how technological advancements created mass-production can be seen from the history of the automobile industry, namely, from the introduction of the assembly line by Henry Ford.

Before the introduction of the assembly line, cars were manufactured by smaller craft-shops targeting the ultra-rich clientele. Production of a single automobile was taking months to be built and cost a fortune. With his innovative approach, Henry Ford's first mass-produced car, "Model T" was produced in quantities of 2.5 million units per year by 1923. “Model T” was also very affordable, no pun intended. Such rates and costs were unprecedented. The world hadn't seen such a scale of production of something as complex as a car before.

Such a phenomenon was made possible by the machinery and parts being highly specific as well as the easily-replaceable workforce. Each part of the process was precise but simple such that anybody could do it, which allowed producing lots of cars in record times at one factory.

Despite the fantastic productivity and effectiveness of the assembly line, it has shown its unsustainable dark side. Automotive factories in Detroit created many job openings. The workers started buying houses near the factory. Life was very comfortable and pretty affluent in this town because cars were selling really well. However, at some point, the demand for cars dropped significantly, and just as the automotive companies viewed their machines as disposable, they viewed their employees as disposable, dropping them as soon as demand dwindled. The workers were paid well at the time, but it didn’t mean much the moment the demand had dropped because they had no transferable skills to obtain another employment with a decent salary. Unable to find jobs, they had to move to other cities rendering Detroit a ghost town.

Despite the fact that technology sometimes amplifies side-effects of big industries, it doesn’t mean that it is bad. Technology is power, and from history, we know that power can cause much suffering and, therefore, should be regulated by some system of checks and balances.

EXCESSIVE CONSUMPTION, IN TURN, CREATES ADDITIONAL WASTE THAT HARMS THE ENVIRONMENT

EXCESSIVE PRODUCTION AND CONSUMPTION RESULT FROM THE CULTURE OF CONSUMERISM

The excessive production and consumption result from consumerism. And by consumerism here, I mean a way of life oriented toward spending money on goods and services way beyond the need for them. Consumerism is a culture more than anything else. It is a “culture” in a sense as the mullets in the ’80s were a “culture,” meaning that “everybody” had them back then, but they went out of fashion. Consumerism can also get out of fashion, yet, maybe not as quickly, since it is something that we are so used to and find convenient. Or maybe we are just not aware of other options, or not motivated to choose them.

The excessive production and consumption result from the fact that people are spending money on goods and services that they don’t need. And they are doing it on a massive scale. It is both encouraged, and is just something we are used to. This artificial demand sustains the excessive production.

This culture is extremely powerful because it is convenient. It is convenient for customers since they can easily get almost anything they want, and it is also very convenient for businesses that are generating huge profits from that. However, such convenience leads to a serious addiction.

The history of consumerism dates back to the so-called first-consumer revolution in the early seventeenth century. However, consumerism, as we know it today, began after World War II in the United States with the generation that is known as baby-boomers.

The United States provided its allies with all kinds of supplies during World War II, significantly enriching its economy and creating powerful industries. This, in turn, created many well-paying jobs, not only at the time but also for the growing generation to hold later. The fruits of the flourishing post-war economy supported many people allowing them to buy things like houses, cars, even yachts, and many other commodities. Later, the advent of computers and the Internet has contributed to the economic growth helping people to further sustain their costly habits. However, the main side effect of such flourishing economy is that people get used to high-maintenance lifestyles on a scale that is not sustainable in the long run.

Even though the majority would agree with the statement that consumerism is not a sustainable way of life, not everybody is aware of the alternatives. The opposite of consumerism is minimalism, and, in my opinion, self-sufficiency is its coolest form.

Some of you might think that by consumerism I mean capitalism. It’s not so, even though these terms are related. Capitalism is an economic and political system, whereas consumerism is a mass culture. If people buy goods and services that they truly need, businesses will still get their profit. The problem is that today we are hooked to buying way more than we need or can afford. The true problem is that somewhere down the pipeline somebody is taking advantage of the consumer addiction and that is not OK.

CHAPTER 2: WORKING JUST TO FULFILL OUR BASIC NEEDS

IN MODERN SOCIETY, WITH ALL ITS TECHNOLOGICAL ADVANCEMENTS, WE STILL HAVE TO WORK A LOT TO FULFILL OUR BASIC NEEDS

Have you ever wondered why in the XXI century some people need to literally survive, even though modern society has all the means to allow people to work far less to provide for themselves? And is it even reasonable to expect that people should not work much to provide themselves with food and shelter in the XXI century? For many people the abuse of welfare programs may come to mind at these questions. However, this is not what I mean. All I really mean is—if I can produce my own food and build myself a simple house, why do I need to work more than that, especially in the XXI century? Well, I need to work extra if I want to have such luxuries as a car, a computer, or a cell-phone and other things. But can't I expect that with all the technological progress, I should be able to fulfill my basic needs more easily? I believe that I can expect all these things.

But if it is normal to expect these things, then why don't we really see this happening? Why are people working at dead-end jobs that would make anyone miserable and bored out of their minds only to make whatever little money that some wouldn't even be able to afford housing for and be literally one (or even less...) paycheck away from being homeless? It is hard to believe. And yet it is a reality. It is the future that even the science fiction writers probably couldn't see coming.

Why do we see all this even though we have powerful technology? We all know that technology's main purpose is to make things easier for people, whether it is movement in space, reduction of time for tasks, or augmentation of senses.

Yet throughout history, we often see the opposite. People were often enslaved by machines. People working at factories during the industrial revolution era were pushed to their limits, were paid very little, and weren't given any guarantees whatsoever.

Today, technology is also often making our lives harder, since it is in constant flux, with which we have to keep up often afraid of being left behind and not having any market value.

THE NEED TO WORK TO FULFILL OUR BASIC NEEDS STEMS FROM OUR DEPENDENCE ON THE SYSTEM

It is clear we are dependent on the system. We need to consume so that others make money, and we need others to consume so that we make money so we can consume. It is a closed loop, and we are trapped in it. We work from 9 to 5, or even more, if we have our own business, in pursuit of money.

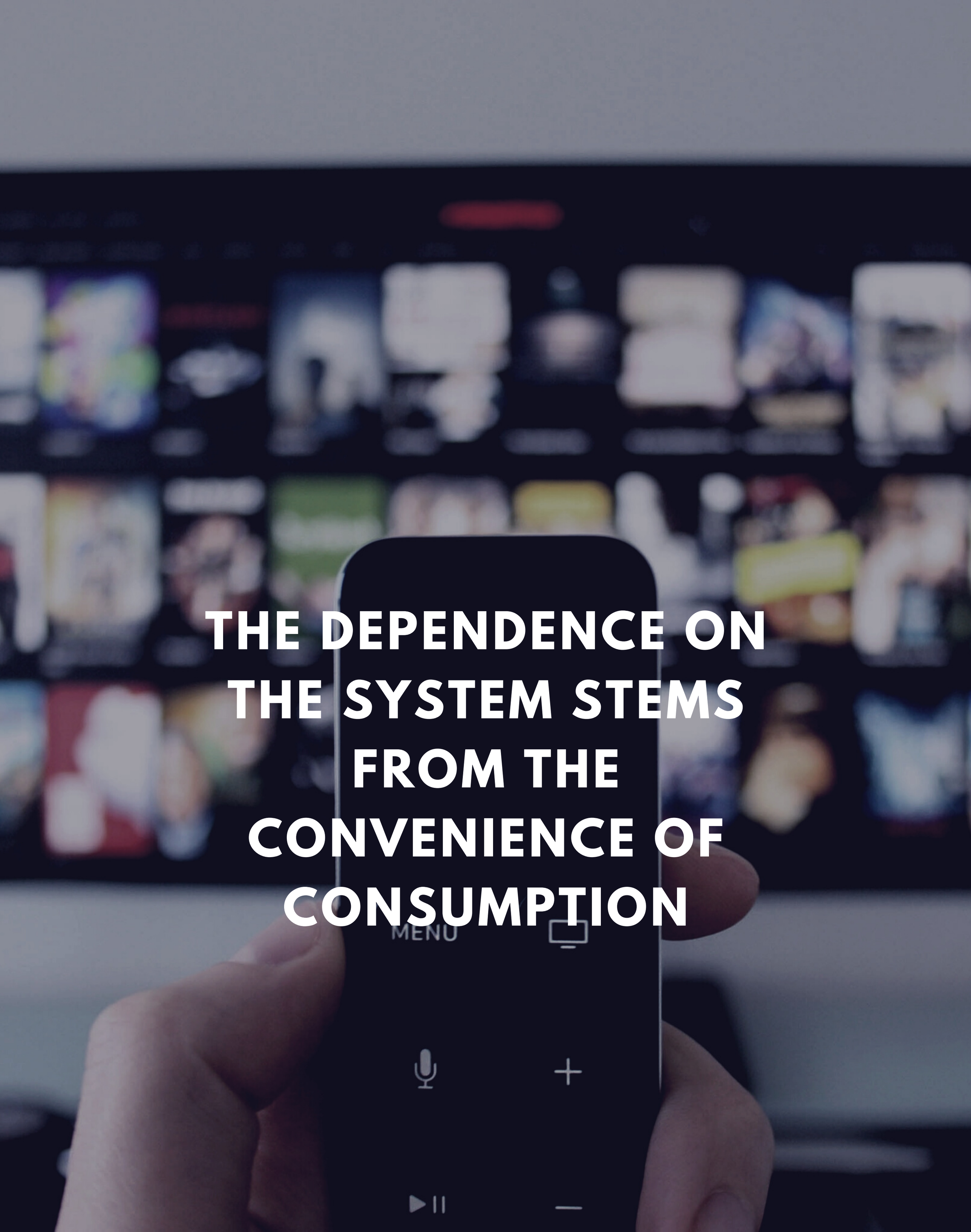
In this equation money is a symbol. It is a symbol of our dependence on the system. It is a symbol of our lack of self-sufficiency. Some people may think of money as air, something they can't imagine possible living without. But it is totally possible. If we were self-sufficient, we wouldn't need money. We wouldn't need to buy something if we already had it. And therefore we wouldn't need to work for money. Therefore, a simple conclusion follows from here: the less money you need, the more self-sufficient you are and vice versa. We will get back to the concept of self-sufficiency later in the book, where we will examine it in more detail.

But how can somebody voluntarily want to become dependent on such a system? Isn't it obvious that this is essentially slavery that we are signing up for? Yes, unfortunately, many people don't know that this is not the only option that they have.

How did this dependence originate? Throughout history, the majority of people didn't really need money because they were living in villages where they were able to sustain themselves with their own food and natural resources. Money is something that used to be more urban, something you would see more in cities and ports. And this makes sense since people in the cities didn't really have the means to produce their food and other necessities, and they were more dependent on the universal form of exchange, which is money.

Therefore, it is apparent that the dependence on our today's system originates from the fact that our society is becoming progressively more urban trading off self-sufficiency for joys of consumerism.

However, money has some side-effects associated with it. First, its value can change a lot over time. There are no reliable guarantees that the money you save today will have any meaningful value ten or twenty years from now. Second, an ability to borrow money, to which an exponentially growing percentage interest is being added continually. Third, money is addictive. It represents power, and it is known that there is never enough of it.


THE DEPENDENCE ON THE SYSTEM STEMS FROM THE CONVENIENCE OF CONSUMPTION
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PART II: SOLUTION

CHAPTER 3: SELF-SUFFICIENCY

IN ORDER TO STOP CONSUMERISM, WE HAVE TO STOP PARTICIPATING IN IT

The solution, however, is pretty straightforward: in order to stop the mechanism of consumerism, we have to stop participating in it. This may sound simple, but, since we are so hooked to this culture, it is like telling a person suffering from alcoholism that they need to stop drinking or a person who is suffering from drug addiction to stop using.

I think it is worth mentioning the reason why it is so difficult to quit an addiction. There is a curious animation “Addiction” by Kurzgesagt on YouTube that refers to the book by Johann Hari titled “Chasing the Scream: The Opposite of Addiction is Connection.” In this video the key takeaway is that isolation is the real reason for addiction, and that we need to form strong and healthy bonds with other people that will protect us from isolation and vulnerability.

It is super easy to become isolated living in the modern world. Many people work 9 to 5 to then come home and watch TV shows, play video games or surf the internet. We pay for these services, whether it's the internet, cellphone, or various subscriptions. In fact, we spent a big part of our lives at work to make money so that we could sit at our rented apartments and watch Netflix while enjoying some ordered-in pizza in the meantime. This is a modern lifestyle.

Even when we go out and actively looking for making new connections, there are no guarantees that we are going to be able to create healthy bonds with other people.

It is easy to believe that money buys happiness in the modern transaction based world. And that is what we are often trying to do. We're hooked to buying new flashy and trendy things. We get excited about them, which doesn't last very long, yet it certainly contributes to our addiction and dependence on the consumerism oriented lifestyle.

Every one of us is already dealing with a lot in their lives. Our daily lives are full of all kinds of fears. We all are afraid of losing our jobs, becoming homeless, getting very sick and many other things, especially when we have children to take care of. It also can feel that we are all by ourselves in this world.

In the United States, we have crisis centers, a type of mental health organization, where you can get help to deal with a crisis. I know people who stayed at such places trying to get help. They say that during their stay, they felt connected with other patients, as well as the crew working there. They felt some relief and hope. But as soon as they crossed the threshold of the center after the discharge, they were back to square one, facing the same problems and still feeling disconnected and isolated. They didn’t feel that someone can really help them, because the help they were receiving often boiled down to getting prescription drugs that were replacing one form of addiction with a more controlled one.

Isolation and vulnerability are big problems in our daily lives.

IN ORDER TO STOP PARTICIPATING IN THE CULTURE OF CONSUMERISM, WE HAVE TO BECOME SELF-SUFFICIENT

I believe that in order to quit this addiction, we need to seek self-sufficiency in as many aspects of our lives as possible.

Speaking of isolation, we have to become self-sufficient in terms of connections as well, which means that we can't make it as individuals, only as a group. We need others because we are never self-sufficient as individuals.

Take a look at the following excerpt and try to guess who is the author behind the words:

"A State, I said, arises, as I conceive, out of the needs of mankind; no one is self-sufficing, but all of us have many wants. Can any other origin of a State be imagined? Then, as we have many wants, and many persons are needed to supply them, one takes a helper for one purpose and another for another; and when these partners and helpers are gathered together in one habitation the body of inhabitants is termed a State. And they exchange with one another, and one gives, and another receives, under the idea that the exchange will be for their good. Then, I said, let us begin and create in idea a State; and yet the true creator is a necessity, who is the mother of our invention. Now the first and greatest of necessities is food, which is the condition of life and existence. The second is a dwelling, and the third clothing and the like."

Plato wrote this in his second book of his magnum opus "Republic." It is phenomenal, that the thoughts of an ancient Greek philosopher, who lived more than two thousand years ago, still seem reasonable to this day!

Since we are not self-sufficient on our own as individuals we form societies. But do we really need the whole society in order for us as individuals to be self-sufficient? Is the massive scale of modern societies really required for us to survive and thrive? Of course not!

Unlike during Plato's time, we have advanced technology and science to allow us, instead of creating huge “States,” to be able to become self-sufficient on a much smaller scale.

В отличие от одноатомных спиртов полиолы могут проявлять ряд особых свойств, связанных с одновременным присутствием в молекуле двух и более гидроксидных групп и их взаимным влиянием. Полиолы проявляют более сильные кислотные свойства, чем алканолы и могут образовывать металлические производные при взаимодействии с гидроксидами щелочных и тяжелых металлов.

UNIT OF SELF-SUFFICIENCY

A good starting point of examining self-sufficiency would be to go on a slight tangent and talk about space research. More precisely, life-support systems that are capable of providing a closed ecosystem capable of supporting people with food, air, and water, as well as to help managing waste.

There were several extensive projects in the history of the closed ecosystems research whose results are still being used and referenced to this day. These experiments serve as excellent examples showing that self-sustainable systems are feasible, as well as demonstrating the significance of our connection to the Earth's ecosystems.

One such research project during the early seventies was BIOS-3, which was an experimental complex in Siberia capable of sustaining up to six people for a year. It hosted three long-term experiments with crews consisting of two to three people. Experiments conducted in this complex demonstrated a complete closure on oxygen and carbon dioxide and around 95% on water. The longest duration of an experiment conducted on its premises was 180 days. The crew was producing all of the plant portion of their diet.

A large-scale closed ecosystem research experiment, with seven closed modules spanning almost four acres, was conducted during the early nineties in Arizona. It was titled "Biosphere-2" and it still exists to this day.

Researchers tried to mimic the Earth's ecosystem both in terms of climate control and biodiversity, introducing over 3800 species of animals and plants. Unfortunately, the system was not closed on oxygen and carbon dioxide. The project demonstrated, among other things, that the introduction of a large number of species is not necessarily sufficient for the spontaneous organization of a balanced mater turn-over.

These experiments, especially BIOS, suggest that it is possible to sustain human life inside of a small closed ecosystem. While we still have a long way to go to enable people to sustain themselves during long space travels, one thing is for sure: it is science and technology that will make it possible.

It is an extremely challenging task to build a closed life-support systems for survival in space, yet here on Earth we can abstract out such vital conditions as presence of air, water, soil, and in some sense, temperature management, taking them as a given, and focus on self-sufficiency in the remaining areas.

The research complexes described above were focusing on the basic survivability. But the true self-sufficiency requires the fulfillment of all of the needs of its members, beyond just the basic needs, like, for example, with Maslow's Hierarchy of Needs that includes social and psychological well-being.

And since it is much easier to achieve self-sufficiency in terms of the most

basic needs in the context of terrestrial ecosystems, the remaining efforts must be directed to meet the higher needs of the members of the self-sufficient system.

It is also necessary to determine the minimum set of conditions necessary to achieve self-sufficiency. From the BIOS experiment, we can see that basic survivability is possible in a closed system of two to three people. And although there may not be such restrictions in the open system for basic survival, it is still obvious that the set of such conditions will include the presence of more people to satisfy higher needs.

I want to propose a definition of a self-sufficient system that is capable of satisfying the basic as well as the higher needs of its members on a minimal scale. I call such a system a "Unit of Self-Sufficiency."

Unit of Self-Sufficiency is a model of human existence in which the basic, psychological, and self-realization needs of its least possible number of members are fulfilled with the minimal sufficient amount of sustainable resources owned by the unit.


TO BECOME SELF-SUFFICIENT, WE NEED TO START FORMING UNITS OF SELF-SUFFICIENCY

In order for us to become self-sufficient, we need to start building upon the concept of unit of self-sufficiency. We need to start building small communities.

Small-scale communities, as we already discussed, are required to fulfill the conditions for self-sufficiency according to our definition. People are the most important constituent when it comes to creating an environment that is capable of fulfilling our higher-needs, such as psychological well-being, which includes love, belonging, and self-esteem, as well as personal growth.

The main challenges that we face when we talk about living as a team, and every business knows this, is the human resources: people, their qualities, their dynamics, and their compatibility.

It requires much work to make a healthy, safe, and robust community. But work is not everything. There should be a lot of understanding, knowledge, and experience at play to make this possible, and these are relatively scarce resources.

This means that, in order to facilitate the community establishment, these resources should be become readily available, providing guidance for the newly established communities, helping them to plan, manage, mitigate conflicts, and so on.

A similar challenge, which in turn might shed light on why living in a community, like eco-villages, is still not as popular as it could be, is that there is not enough information in general about such mode of living. There are still lots of domains to be covered when it comes to explaining what it is and how to get there.

I believe that these challenges can be overcome with the improvements of the informational infrastructure in general. There should be much more high-quality, entertaining, and informative content on the web. And, of course, there should be more people with the domain-specific knowledge, who could provide assistance along the way.

But is the communal living for everyone? I think it is. The fact that we live in apartments, neighborhoods and cities makes us part of a community, albeit not always healthy. However, living in a small intention-based communities we have many more opportunities to change things as we see fit.

Another important advantage of this way of life is flexibility. The world knows communities that exist as collective households, co-housing communities, co-living, ecovillages, monasteries, communes, survivalist retreats, kibbutzim, ashrams, and housing cooperatives.

This lifestyle is also beyond politics. The idea is actually to reduce the surface area of interaction with the outside world and its political and economic climate to a minimum and stick to causes that unite us, whether it is philosophy, lifestyle, political views, or any other "glue" that we find suitable.

THE USE OF TECHNOLOGY REDUCES TIME AND LABOR INTENSIVENESS AS WELL AS THE SIZE OF A SELF-SUFFICIENT UNIT

SMALLER SIZE REQUIREMENTS FACILITATES FORMATION OF SUCH UNITS

It is much easier to achieve self-sufficiency on a smaller scale primarily because it is easier to be on the same page with a smaller group. There are always fewer friends than acquaintances, and even less best friends. It is generally a smaller group of people who we really click with, and it is essential to click with other people when it comes to creating an environment and culture of growth and self-sufficiency.

Relationship of good friends are capable of surviving through conflicts. There is enjoyment of hanging out together and there is a lot more trust. These are essential qualities that are needed to start building something mutually meaningful.

It is more difficult to coordinate a larger group. We know that large organizations and society, in general, all suffer from bureaucracy, which naturally stems from our inability to directly communicate at a given time with certain people in the system when it grows too large.

We can learn a lot from the software industry about working with and managing smaller teams. The nature of web applications led to the development of an excellent practice of abstracting away the logic behind cloud environments. This, in turn, gave us a way to break down the cloud infrastructure into microservices, which are responsible for separate pieces of functionality, thus allowing smaller teams of developers to work on each of them.

Because these teams are smaller, communication within the group becomes much easier. Such teams are more reactive and flexible. There is usually a pretty good level of bonding between the members. The problem occurs when you start to shuffle people between the teams and the dynamics begin to suffer.

Such teams are also much easier to manage. Agile and scrum are project management methodologies that focus on flexibility and faster release cycles called sprints. Smaller teams can have smaller sprints and faster react to the changes in requirements.

Generally, having faster feedback cycles is a very desirable practice. It allows to see a reaction to every action clearer and make decisions based on this information allowing to adapt quicker.

SOILLESS FARMING IS A SET OF TECHNOLOGIES THAT MAKE THE PROCESS OF GROWING FOOD EASIER AND MORE EFFICIENT

Hydro-, aero- and aquaponics are modern methods of agriculture that use nutrient-rich water instead of soil. These methods require substratum only for fixating the plant in space. The nutrients are going directly to the roots in a dissolved form. This approach takes away a need to introduce fertilizers, requires less water and surface-area, at the same time allowing for spatial flexibility, i.e., allowing for the "vertical farming" configuration—a possibility of creation of multi-level vertically-oriented systems.

Let's take a look at each method separately.

Hydroponics is a method where the nutrients get to plants in the form of a nutrient-rich solution with a regulated concentration of certain compounds. Plants are fixed on a small amount of substrate (expanded clay or mineral wool). The roots are submerged into water that contains the nutrients.

Aeroponics is the most productive version of hydroponics. Analogous to hydroponics, the nutrient-rich solution is delivered to plants in the form of an aerosol. The plant roots, as opposed to hydroponics, are exposed to the air medium. The substratum can be completely avoided. Because of adequate aeration, the rates of production of aeroponics are extremely high in contrast to other methods, since the root respiration is an essential condition. It also helps to reduce the mass of the system and the consumption of water.

Aquaponics is the most eco-friendly version of hydroponics. Such a hydroponic system connects to the closed fish-farming system. The water cycling through the system becomes the nutrient-rich solution for hydroponics. In such a system the fish provides the nutrients for the plants, and the plants, in turn, taking up the nitrogen and phosphorus compounds from the recycled water, maintain its purity.

Historically, aeroponics and aquaponics are the next levels of hydroponics evolution. However, if we don't account for the fish production, aquaponics is significantly less productive when it comes to the plant production if compared to aeroponics and some other types of hydroponic. This is why we decided to combine the most advanced soil-less technologies, i.e., hydroponics and aquaponics. This allows us to significantly increase the production of the fish-plant system in terms of the plant-mass. We named this technology, "aero-aquaponics."

OUR MISSION IS TO HELP PEOPLE TO REACH THE GOAL OF UNPLUGGING

Our company is dedicated to helping everyone seeking to unplug from the culture of consumerism and begin to live self-sufficiently to do so. However, at the current stage of the company's development, we aim to lay the groundwork for exploration of self-sufficiency.

Established communities provide an excellent opportunity for us to make a proof of concept set-up for self-sufficiency. The established communities already have some aspect of self-sufficiency, which is a great starting point for our projects. Cooperating on the proof of concept project will provide us with valuable information about the process, dynamics, dos and don'ts required to then transform it into the high-quality educational content available to everyone.

Yet, the real purpose for us is to make the unplugging from consumerism a reality for those who are in the beginning of the journey. Once our projects are complete, each individual seeking to make this transition should be able to get all the necessary information and support they needed and access to all of the infrastructure that we are planning to establish for this cause. By the infrastructure, I primarily mean, educational content, human resources and social media that will simplify the process significantly

Today, there are already some resources available on the internet. Still, they are relatively scarce, and they are not always well organized if taken together. The most organized of them, to the best of my knowledge, are the resources provided by the Global Ecovillage Network. GEN is a web of organizations connecting and promoting sustainable communities and hands-on projects across six continents. We are seeking to collaborate with them and joining our forces to fulfill the vision of a self-sufficient life.

Although the resources available today are useful, they are not enough. In our company, we believe that finding information on how to start living self-sufficient should be the easiest thing in the world.

ADDITIONAL RESOURCES

This is by no means a complete list of interesting resources. Suggestions are welcome.

Part I

Chapter 1: Damaged Environment

The story of stuff project
A project that provides information about the state of crisis of consumerism
https://storyofstuff.org/

Cowspiracy: The secret of sustainability
2014
Provides information about the detrimental effects of the animal agriculture industry on the environment
https://www.cowspiracy.com/

“Uncle” Bob Martin. The future of programming.
Bob Martin, a software engineer who has seen it all, gives an insight about how much different the computational technologies are today from what they are used to be
https://youtu.be/ecIWPzGEbFc?t=3199

Dark Waters
2019
A feature film examining a situation where an honest man decides to fight against a megacorporation that violates human rights
https://www.focusfeatures.com/dark-waters

Just eat it: A food waste movie
2018
A movie that examines wasteful food habits in Canada and the United States.
https://www.foodwastemovie.com/

NASA: Effects of climate change
Information about the consequences of the climate change
https://climate.nasa.gov/effects/

Greenpeace: Amazon rainforest
Information about the state of the rain forest of Amazon
https://www.greenpeace.org/usa/forests/amazon-rainforest/

Greenpeace: Key facts about plastic pollution
Information about the state of plastic pollution
https://greenpeace.org/usa/key-facts-about-plastic-pollution/

The Washington Post: Beef and deforestation
How beef demand is accelerating the Amazon deforestation
https://www.washingtonpost.com/business/2019/08/27/how-beef-demand-is-accelerating-amazons-deforestation-climate-peril/

The Washington Post
40 percent of adults on Earth have never heard of climate change
https://www.washingtonpost.com/news/energy-environment/wp/2015/07/27/these-are-the-factors-that-affect-how-people-feel-about-climate-change-and-whether-they-even-know-it-exists/

National Geographic: Bring them back to life
An article talking about the possibility of reviving extinct species
https://www.nationalgeographic.com/magazine/2013/04/species-revival-bringing-back-extinct-animals/

Real Engineering: How the Ford model T took over the world
A video explaining history of mass-production
https://youtu.be/2hVEmBKdm1s

Chapter 2: Working Just to Fulfill Our Basic Needs

Steve Cutts
A British illustrator and animator exploring the theme of consumerism
http://www.stevecutts.com/

Rat Race Explained
An animation attempting to explain rat race
https://youtu.be/jcFN-lQPIb4

Affluenza
A couple of documentaries about the consumption oriented behavior
https://youtu.be/A7EOzDugoN0
https://youtu.be/G2m32ZUeAIA

Part II

Chapter 1: Damaged Environment

Kurzgesagt: Addiction
An animation exploring the nature of addiction
https://youtu.be/C8AHODc6phg

A simpler way: crisis as opportunity
A movie exploring the off-the-grid lifestyle
https://happenfilms.com/a-simpler-way/

Maslow's hierarchy of needs
A hierarchical model describing human needs
https://en.wikipedia.org/wiki/Maslow%27s_hierarchy_of_needs

Plato: Republic
Plato's magnum opus exploring the nature of justice
http://classics.mit.edu/Plato/republic.html

Global Ecovillage Network
A group of organizations that provides information about ecovillages
https://ecovillage.org/

Wikipedia: Vertical Farming
An article about vertical farming
https://en.wikipedia.org/wiki/Vertical_farming

Bloomberg: High-tech vertical farmer
A video describing soilless farming
https://youtu.be/AGcYApKfHuY

TEDx: The future of living: Self-sustaining villages
A talk exploring a village that is capable of sustaining itself
https://youtu.be/QdNAEbAkThA

Homesteading One Small Step towards Freedom
A film describing self-sufficient living on a small plot of land
https://youtu.be/u9xYPkSjpco

TEDx: Sustainable apartments - a new model for the future
A talk describing a sustainable model of living in an apartment complex
https://youtu.be/AFJj1v3jmYU

Fully Charged Show: Sustainable City
An example of an expensive but a sustainable (in some ways) way of living
https://youtu.be/WCKz8ykyI2E

OUR Ecovillage: A day in the lift of an ecovillage
An example of living in an ecovillage
https://youtu.be/Bu4m2VPu9Ho

Dancing Rabbit Ecovillage: Visitor Program
A good example of how ecovillages need to invite members
https://youtu.be/bVL1d9Zni5k

TEDx: Saving the Environment from Consumerism
A talk about consumerism, its effects on the environment, and a solution
https://youtu.be/ZtmOAZoyRa0

TEDx: My no spend year
A talk about minimalism
https://youtu.be/vRudjy0cub0

TEDx: My year of living without money
A talk about minimalism
https://youtu.be/nhC0T8ScOu0

TEDx: The power of consumerism - with great power comes great responsibility
A talk about consumerism
https://youtu.be/hxMiB9A3iJY

TEDx: Why we can't shop our way to a better economy
A talk about the dangers of the economy based on big corporations
https://youtu.be/b6rAgHcuYtE

ABOUT THE AUTHOR

When I am thinking of how to properly answer the question about who I am, I realize that it is not as easy as it seems.

First of all, the question suggests that I have to reduce the uncertainty and categorize myself based on profession, location, political views and the rest. However, I don't think that this will really answer the question. I believe that the true description of somebody has to transcend their temporary manifestations and instead provide a glimpse into something more fundamental. This is why I believe that a true description of a person is a description of their values.

I value life, love, and friendship. I value health. I value peace. I value heart and intellect. I value art, science and engineering. I value a right amount of work, and a good amount of play. I value order, but also a healthy level of rebellion. You get the idea.

As you can tell from the book, I am dedicated to the cause of solving the big problems we face today, and I really hope that you will share my point of view and together we contribute to the healthy future of the planet.

Feel free to reach out to me at aero aqua ponic at gmail point com, and add me as a friend on social media, I will be happy to have a discussion.

THANK YOU

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