

The F-M-L Theory aka Freire-Maslow-Life Theory

By Brock Bachelder

Introduction

Throughout our time on this planet, humans have come a long way. We've evolved beyond mere survival and existence, leaving behind the days of life lived in caves. We've become more than our ancestors could have ever envisioned, driven by our dreams and their promises. Perhaps out of necessity, we've brought to life the inventions of our minds and fervently shared them with the world. Indeed, every significant technological advancement underscores the remarkable distance we've traveled. Driven by our love for humanity, we persist in creating, inventing, and finding meaning in the company of those who inspire us.

As we build upon the work of great minds before us, we are witnessing in real-time what the age of continued Automation and Artificial Intelligence (AI) could mean for life on this planet. Because of these technologies, we will witness the revolution of our economies,

education systems, businesses, and way of life. Some may fear the displacement of hundreds of millions of jobs over the coming decade. Still, I question whether anyone's dream was to have a career confined to an office cubicle. What is the point of considering a career where machines could soon replace us before we retire?

This technology makes me wonder what it meant to seek employment in a horse stable over a century ago. As cars rolled off the assembly line, should one pursue work with horses or become a mechanic? Indeed, horses are still around today, but unless it's the Kentucky Derby, how many of us think about horses from one day to the next? So, what's at stake with AI and Automation in our lifetime?

Let's estimate that AI and Automation could displace hundreds of millions of jobs worldwide. But let's also assume that these technologies will free us to engage in more crucial work, creating new jobs that could offset much of this displacement. For this to happen, businesses, governments, and educational institutions must collaborate for a near-seamless transition in this ever-changing world.

Ultimately, any organization that dismisses Automation and AI is akin to not escaping a building that's on fire because, unlike a single company that catches fire and becomes an industry disrupter, robots and their software represent a game-changing disruptor for the global order. But they're not alone in disrupting the international order of what comes next in our future. Have you observed the state of our planet lately?

Scientists have observed a substantial increase in the rate of species extinction, leading to a widespread consensus among experts that we are currently in the midst of the planet's sixth mass extinction event, also known as the Holocene Extinction, primarily caused by human activities. Unlike previous mass extinction events, mainly triggered by natural phenomena such as volcanic eruptions, asteroid impacts, or extreme climate changes, what we're currently experiencing is predominantly driven by human-induced factors. These factors encompass habitat destruction, overexploitation of resources, pollution, the introduction of invasive species, and ultimately the climate crisis. Global, national, and local actions are

required to mitigate these impacts. All of this and the year-over-year widespread adoption of Automation and AI will be unlike anything we've ever seen before. While this may appear daunting to some, we should embrace the fact that new opportunities are ahead of us and that our actions must precede our motivations to do so. Ultimately, what can we accomplish together if our jobs and the planet undergo such monumental changes?

Harnessing AI's potential can free us from simple, repetitive, and tedious office and factory tasks. It offers opportunities to redirect our focus towards more pressing concerns that we've been putting off, such as averting the looming threat of a sixth mass extinction event and addressing the climate crisis head-on. This way, we can leave something unique for Earth's future inhabitants with a renewed sense of love, belonging, and purpose.

With all of the years we've been exposed to practicing in and out of the classroom, reading, learning, and dreaming, our thoughts no longer exist merely in passing conversations with others who share similar interests in the

environment, futurology, or life. Instead, they serve as an example of what is possible when we tap into the vastness of our imagination with the assistance of machines. After all, the convergence of **Automation**, **Artificial Intelligence**, and the **Climate Crisis (A-2-C-2)** will become a critical intersection in this decade and emerge as some of society's foremost priorities. We will face challenges, but what we can achieve by working together will be remarkable.

As we journey this book together, contemplate the trifecta that we will encounter within our lifetime. To enter into the new world, we'll explore the insights of some brilliant individuals who have left us with their visionary thinking.

Chapter 1 - F

He was more than just a Brazilian educator and philosopher; he was best known as a global visionary thinker for his work in pedagogy. His name was Paulo Freire, and his work that critically reexamines education has inspired millions.

Pedagogy studies teaching and learning, particularly the methods and practices used to educate and instruct students. It encompasses a range of educational theories, approaches, and techniques.

Freire argued that traditional education systems were oppressive, as they upheld the status quo and perpetuated social inequality. Freire believed education was not merely a process of transmitting knowledge from teachers to students but a means of developing critical consciousness and empowering people to become agents of change in their lives and communities beyond the classroom. Students can achieve this through dialogue in education, where teachers and students engage in mutual learning and critical reflection. This approach emphasizes the importance of communication and collaboration.

Freire's most renowned book, "Pedagogy of the Oppressed," elucidates his views on education and contends that the traditional banking model of education, in which teachers deposit knowledge into passive students, is dehumanizing and oppressive. In this model,

teachers deposit information into a student's mind like a bank and withdraw it under high-stakes testing.

Instead, he advocates for a problem-posing education model, where students and teachers collaborate to identify and address real-world problems, starting with dialogue. But what course should this dialogue follow?

Awareness + Reflection = Praxis

Awareness refers to being conscious or mindful of something. It involves understanding one's surroundings, thoughts, feelings, and actions. Awareness can be directed internally toward one's thoughts and emotions or externally toward the environment and the actions of others.

Becoming more aware can be a transformative experience, helping individuals make more informed decisions, develop deeper relationships with others, and lead more meaningful and fulfilling lives. It can also catalyze personal and social change. Becoming aware of something is a significant step, but what about **Reflection**?

When we reflect, we contemplate and think deeply about our experiences, thoughts, emotions, or beliefs. It entails a process of introspection and self-examination, often to gain a deeper understanding. When we become aware of something new, we strive to make sense of it. It enables individuals or groups to critically examine their circumstances, seeking opportunities for change or improvement as they progress from awareness to reflection. Finally, we answer a call to action when we build a praxis. But what is **praxis**?

After all, “praxis” isn’t a word most of us use in everyday conversations.

Praxis refers to putting theory into action or practically applying knowledge and skills. It encourages us to move beyond merely holding onto content knowledge for the sake of knowing and instead focus on how we can use it in the world around us—challenging us to assess the practicality of our intellect.

In comparison, much of what we’ve learned in a classroom is primarily content-driven. We acquire concepts, and then we reproduce these concepts through standardized tests, answering

multiple-choice, fill-in-the-blank questions, etc. Praxis, on the other hand, takes what we have become aware of, encourages us to reflect on it, and then guides us in constructing practical applications to move forward, not just in the classroom but in life itself.

So, if you have read this far, you're probably ready for things to become uncontrollably better, too!

Despite living on Earth during Freire's time, I never had the opportunity to ask him if he was familiar with Plato's Allegory of The Cave. I'm confident he was, but here's a brief version for those who may not be familiar:

The Allegory of the Cave is a philosophical tale written by Plato. It depicts a group of people who have spent their entire lives chained inside a cave, facing a wall, with a fire burning behind them. These individuals can only see the shadows of objects passing by the fire and believe these shadows represent the only reality. When one of the prisoners becomes liberated and witnesses the world beyond the cave, he realizes that his previous understanding of reality is limited and incomplete. Upon

returning to the cave to share his newfound knowledge with the others, they cannot grasp his words and mock him. The allegory illustrates that, at times, the human condition resembles that of the prisoners, and people often possess a restricted and distorted perception of reality. It underscores the significance of our education and the continual pursuit of knowledge in enhancing our understanding of the world despite the reluctance of others to do the same.

So, what can we begin to glean from **The F-M-L Theory**?

In **“The F-M-L Theory,”** you may have noticed that the **“F”** stands for **Freire**! We will employ his philosophy as a looking glass for the rest of the book and maybe even as a better response to **A-2-C-2**. After all, the aspiration to reclaim our humanity, lead with humility, live more freely, and discover life beyond oppressive and limiting situations is only a part of what I believe we can achieve through our collective efforts. May you go forward with love, compassion, and a renewed sense of

belonging in the classroom and beyond; leading as Paulo would have led.

Chapter 2 - M

There are over 8 billion of us on this planet. If you gave one second of your time to every single human being, it would take you over 250 years to meet everyone. Because of this impossible mathematical challenge to go around the planet and individually give away one second of your time to every human being, I'm proposing to focus on goals that we would all benefit from, even if we never have the opportunity to meet one another. It is essential to highlight this because even if we don't have the chance to meet one another, I know you also need the same things everyone else does. The conversations we have together should reflect high-priority issues and thinking. Ultimately, suppose there is anything worth discussing for our species globally. In that case, we should bring it to the front of the classroom.

He was more than just an American psychologist. Best known for his theory of human motivation, Abraham **Maslow's**

Hierarchy of Needs will help us see the letter **“M”** in a slightly different light!

Maslow proposed that human needs should be organized in a hierarchy, beginning with lower-level requirements (such as physiological and safety) and gradually prioritizing higher-level needs (such as esteem and self-actualization).

Now, imagine yourself at the base of a pyramid. As you look upward, each level builds upon the last. Our Physiological Needs, or Basic Needs, form the base of the pyramid, encompassing fundamental requirements like air, water, food, and warmth. Meeting these needs is crucial as they lay the foundation for our survival. To gain a better understanding, let's envision moving up the pyramid.

The next level is our Safety Needs, which encompasses security, stability, and order. Beyond that rests Love and Belonging Needs, involving social connections. Ascending further, we reach the fourth pyramid level, which comprises Esteem Needs, including recognition and respect. Finally, at the top of the pyramid (the pyramidion), we find Self-Actualization Needs, which enable us to

experience personal fulfillment and creativity—associated with excellent psychological health and overall well-being. Not as a one-time accomplishment but an ongoing process of growth and development, similar to our continuous education or the practice of a craft.

Individuals should generally seek to satisfy their lower-level needs before genuinely focusing on the higher-level ones. The human desire to quickly scale the hierarchy and experience the pyramid's apex is understandable; even still, the importance of learning from subjective experiences and personal growth is also to give back while pursuing self-actualization. We're in this together, and believing people possess an innate drive to reach their full potential is a central aspect of believing in the good of the people. So, let's work together, without cruelty, and as we recall the 250-year mark.

We aim not to count the seconds but to make them count. Doing so means we will emphasize critical areas within the first level of Maslow's Hierarchy of Needs and explore them more deeply. I hope you enjoy this journey and relish

the opportunity to coexist, working towards a shared understanding of life.

My friends, even though we may never meet, you require the same things I do.

Chapter 3 - L

The length of time a human can expect to live varies from one individual to the next. Average Life Expectancy is a commonly used measure of population health, often employed to compare the health outcomes of different countries or regions. Unfortunately, life expectancy can vary widely across diverse populations. But what if that weren't as much of the case going forward? No matter how complex the relationship between life expectancy and being born into a specific part of the world is, what if there were a way for people to increase their average life expectancy in their country or region and live with greater abundance?

Abundance refers to sufficiency where resources or opportunities are widely available to individuals or societies. It is often associated with satisfaction, contentment, and prosperity.

Abundance can manifest in various forms, including financial abundance, where individuals have sufficient resources to meet their needs and pursue their goals; material abundance, where goods and services are widely available to people; and an abundance of opportunities, where individuals have access to a wide range of educational, employment, and social freedoms. This perception of abundance or scarcity can profoundly impact an individual's attitudes, behaviors, well-being, and social and economic situations. So, what if we use Freire's and Maslow's ideas as variables and approach it like a math problem that leads to a better life filled with abundance?

The **Freire-Maslow-Life Theory**, or “**The F-M-L Theory**,” could achieve just that. Integrating Paulo Freire's and Abraham Maslow's philosophies into a unified framework to increase the average life expectancy as **A-2-C-2** quickly approaches could bring an era of abundance we've never seen before. What we can accomplish by working together is something many will come to know and live a life filled with abundance!

Step 1: Freire's Theory (F)

- Apply the lessons from Paulo Freire's "Pedagogy of the Oppressed."
- Through dialogue, we can become more aware, reflect deeply, and develop a dynamic praxis that empowers individuals and communities.
- To reclaim our humanity, we should encourage critical thinking, problem-solving, and active participation in learning rather than passively receiving information. This will allow us to begin our ascent to a higher level of consciousness.

Step 2: Maslow's Theory (M)

- Apply the lessons from Abraham Maslow's Hierarchy of Needs, particularly emphasizing the Physiological/Basic Needs.
- Similar to the pyramidion of a pyramid, we must establish a strong foundation upon which everything else will rest.

Step 3: Live “The F-M-L Theory”

- *Continually build an integrated theory founded on the principles of Critical Pedagogy and The Hierarchy of Needs to cultivate a Life of Abundance during A-2-C-2.*

As any theory of work is unfinished until tested, I want to hear from different communities and experts as we go along rather than assuming it is complete or absolute; after all, I’m no all-knowing-guru. Those who have tried, failed, and tried again until they got it right to share what they have learned and discovered could add to this theory and build upon what life could mean in a more peaceful world, adding to this extraordinary collective experience. This unfinished work represents what individuals, communities, entire nations, and beautiful, sexy creatures can do for others even though they may never meet. If my theory is correct, it could position us exceptionally well during these times of relative uncertainty. Here’s to **The F-M-L Theory** and to building our abundance.

Chapter 4 - Air

Recall the foundation of the Hierarchy of Needs: air is a fundamental necessity, so much so that Abraham Maslow placed **“AIR”** as the first basic need. Recognizing its universal importance, we need to address air quality as Automation and AI begin to free our time from the workplace and the Climate Crisis unfolds before us; how can we improve our air quality under **A-2-C-2**?

Improving air quality means enhancing the state of the air in the environment. Determining the concentration of pollutants and other harmful substances in the atmosphere can create a baseline for where we're at and what action is required. Ultimately, poor air quality can endanger human health.

Through various measures, such as reducing emissions from transportation and industry, promoting energy efficiency and renewable energy sources, reforestation, and implementing policies and regulations to limit pollution, we can enhance our most fundamental human requirement: air. Life itself at the global and

local level can be improved through the same added awareness—we need more than just fossil fuels to run the machine of modern society.

Fossil fuels have ushered in an unprecedented era of economic growth, benefiting countries with access to fossil fuel reserves and providing them with significant advantages. However, the uneven distribution of fossil fuel reserves has sparked political instability, conflicts, and human rights abuses in various parts of the world, and this is on top of the considerable environmental cost. As we continue to extract and burn these resources, the ecological impacts become more severe. Given these limitations and drawbacks, a growing appeal exists to integrate cleaner energy sources, such as solar or wind, into the systems we've already established. So, let's clear the air.

Solar energy is a renewable energy source that produces no pollutants, greenhouse gases, or other harmful substances, and the Sun's energy output is remarkably abundant. Harnessing even a fraction of this energy output through Photovoltaic Systems (PV Systems or solar

panels) presents a clean, renewable, and readily available energy source. In recent decades, technological advancements have increased the efficiency and cost-effectiveness of solar energy to meet local energy demand and help power the energy grid.

Enter into the mix: wind. Wind energy emerges as another promising renewable energy source to help improve air quality by reducing the total amount of fossil fuels needed to power the lights. With the potential to meet a portion of global energy requirements without generating harmful greenhouse gases, wind energy captured through wind turbines holds plenty of appeal.

The future of solar and wind energy looks promising. They are domestic energy sources that can further reduce reliance on foreign fossil fuels. As more nation-states set ambitious goals to curb greenhouse gas emissions and diversify with renewable energy sources, solar and wind energy are poised to become increasingly vital in the global energy landscape. Their potential to help combat climate change while providing

clean and abundant energy should be applauded further.

The fossil fuel era has profoundly shaped human societies and the environment. While it has delivered significant economic and technological benefits, it has also contributed to environmental degradation. It is a leading cause of climate change and global warming. The potential to reduce our dependence on fossil fuels as the primary energy source globally could significantly improve air quality and ensure a cleaner future. As we confront the challenges of the 21st century, it becomes increasingly evident that shifting to cleaner energy sources is essential for the sustainability of our planet, not only for our energy demand but also for our fundamental requirement: cleaner air to breathe. While we may never eliminate the use of fossil fuels in our lifetime, we invest a significant amount of effort in hunting and gathering fossil fuels for our energy needs. It's time to shift our focus towards farming more of the sun and wind for our energy needs as if our air quality depends on it because it quite literally does.

Chapter 5 - Water

Water is essential to life itself. However, clean and safe drinking water is only sometimes readily available. Aside from the air we breathe, access to clean, fresh water is the second most crucial element for our survival. It is so vital that Maslow ranked **“Water”** as the second most basic Physiological Need for human beings.

Fresh water is necessary for every human's drinking, cooking, and sanitation requirements. However, when water becomes contaminated, it can harm communities, ecosystems, and wildlife instead of sustaining them. In the face of adverse environmental impacts and lifelong health issues, we should ask ourselves, “What is the water quality?” and “What is its availability?”

Improving water quality and availability remains a challenge that humans have attempted to grapple with for many millennia. Even before birth and long after our lifetimes, water security is a pressing issue and worth investing our time in fresh water.

One of the main challenges we face to ensure water quality is pollution. One key strategy is to focus on reducing pollution at its source, from implementing regulations to limit industrial waste from the manufacturing sector, promoting sustainable agricultural practices to mitigate petrochemical runoff from farming, and investing in upgrades to critical infrastructure. These measures are pivotal for improving water quality and preventing contaminants from entering the water supply. Whether natural or induced by human beings, cooperation among governments, communities, and individuals is required to tackle pollution.

Preventing pollution in the first place helps maintain water quality, but implementing effective water treatment methods will also be needed hand-in-hand. These strategies can help prevent contaminants from entering the water supply and remove impurities, making the water safe for human consumption. But as we strive for improvements, exploring additional possibilities for ramping up production and ensuring water availability for a sustainable future is where the real opportunity lies.

Desalination, in particular, holds promise for the future. It converts seawater or brackish water into potable water by removing salt and other minerals. Desalination offers a potential solution for providing a reliable and sustainable source of drinking water, especially in arid regions where freshwater is scarce, or to supplement total freshwater demand globally. Continued investment in research and development of desalination technologies is essential to ensure abundant access to clean water. Similar to how we should farm the sun and the wind more to source our energy and improve air quality, we should also farm freshwater from the ocean to increase total water quantity!

As mentioned in the last chapter, the growing shift towards renewable energy sources such as solar and wind power has been significant and is expected to continue. However, concerns have arisen about the intermittent nature of these energy sources, raising questions about their reliability and stability as primary energy sources when we want energy on demand. After all, if the sun isn't shining or the wind isn't blowing, how can we expect to reduce the

use of fossil fuels? So, this is where energy storage comes into question, and further investment is needed, but could salt be connected to all of this?

Desalination promises to source more clean water, but it requires considering what we do with the leftover salt. Moreover, discharging brine water back into the ocean can adversely affect marine ecosystems by increasing salinity and depleting oxygen levels. Let's do something with all the leftover salt.

One promising technology for energy storage is the use of salt in batteries. Salt-based batteries would be ideal when we consider what to do with all the leftover salt from desalinating ocean water. Repurposing the leftover salt into batteries to store excess energy from solar and wind power is that it reduces further dependency on fossil fuels as well. When the sun isn't shining, or the wind isn't powering the wind turbines, we have more readily available energy on demand because we store the excess electricity like grain in a silo.

Ensuring cleaner air and water also means approaching the conversation about how we

decide to source our energy and energy storage. Through ongoing research and development, batteries have the potential to revolutionize how we store and utilize energy, offering a cleaner, more dependable, and cost-effective alternative to fossil fuels. The interconnectedness of how we improve our air, water, and energy sourcing and storing will require an interdisciplinary approach from many fields to build a better working model. But there's another sector to consider. Do you recall learning about the Agricultural Revolution?

Chapter 6 - The Agricultural Revolution

Thousands of years ago, humans relied on hunting and gathering for sustenance. Just a moment ago, we emphasized the need to shift the focus from hunting fossil fuels and gathering them to alternatively “farming” for additional energy and water. Evolving from this hunter-gatherer mindset existed thousands of years ago, but we should look for it to happen again.

Our ancestors were simple, nomadic people, continually moving from one location to

another in search of food and resources. Remaining small in scale, characterized by minimal social hierarchy and division of labor. Fast forward to today, and we are still utilizing some of these same practices. Similar to farming our food, we should also improve our ability to farm the sun, the wind, and the oceans. With this same premise, we should look to how we farm our food today and bring forward an even greater abundance with the time that will be freed up once more and more of us are laid off and searching for answers during **A-2-C-2**.

Knowing that our story took a plot twist several thousand years ago when humans moved from hunting and gathering to more settled agricultural practices, this era marked a pivotal turning point in human history. Humans began cultivating crops and domesticating animals rather than depending on wild food sources. This shift brought about a more dependable and stable food supply, allowing humans to establish permanent settlements instead of leading nomadic lifestyles.

The advent of agriculture had far-reaching consequences for human societies. It led to the growth of cities and civilizations and the development of intricate social structures and hierarchies. Additionally, it facilitated wealth accumulation and the growth of trade and commerce.

However, alongside the benefits, the expansion of cities and civilizations also resulted in environmental degradation. This manifested through deforestation and inadequate land management practices, contrary to nature's intended balance.

Despite these changes, agriculture remains the dominant mode of food production worldwide. In recent years, there has been a growing recognition of how imperative sustainable, environmentally friendly agricultural practices are and the preservation of traditional food systems that support small-scale farmers.

As we confront issues related to food security, sustainability, and environmental stewardship, it is difficult not to acknowledge the long and intricate history of food production for human consumption. From our early days as hunter-

gatherers to the rise of agriculture and beyond, how we nourish ourselves is deeply intertwined with our social, cultural, and environmental evolution.

The question arises: What practical steps or actions can we take based on our newfound awareness and reflection?

Chapter 7 - The NAR

- **Step 1: Evolve from Hunting & Gathering Fossil Fuels**
- **Step 2: Farm the Sun for Solar Energy**
- **Step 3: Farm the Wind for Wind Energy**
- **Step 4: Farm Freshwater through Desalination**
- **Step 5: Farm Salt through Desalination**

By democratically discussing this praxis, we can farm our way into a future with cleaner air, more abundant water, and more readily available sourced sustainable energy.

As we shift away from hunting and gathering for fossil fuels, we should prioritize harnessing the power of the sun, wind, water, and salt to

meet various essential human needs (recalling Maslow's Hierarchy of Needs). This shift could mark the onset of The **N**ext **A**gricultural **R**evolution or **The NAR**.

Chapter 8 - Golf Ball Planet

Food is a fundamental need and probably one of your favorite things about life. After all, besides the air we breathe and the water we drink, access to clean, fresh “food” is the third most basic Physiological Need for human beings. However, clean and fresh food isn't always available everywhere. Especially with the current projections of our species' population reaching approximately 10 billion people by 2050, the demand for food will nearly double over the next several decades, putting food scarcity and quality into question for billions of us. To answer these looming questions, humans must proactively engage in sobering conversations about food quality, quantity, and the expected growing demand over these coming decades to employ practical solutions and strategies. While we've made strides in addressing air/water quality and availability through our earlier practices, how can we

improve our food supply and quality practically?

Although we've experienced economic growth through industrialization and globalization, there are concerns about continually ramping up food production on a global industrial scale. After all, how we farm food on an industrial level has far-reaching impacts on our health, society, and the environment. Historically, the food supply at this level means food quality will ultimately suffer with the distance traveled, the number of times our food will trade hands, the inputs involved, and the challenges with processing food to go as far as it can and still be considered food with all the additives. But before it's food on the shelf, it's being grown in the ground to be fed to livestock or set to be harvested and consumed. Addressing food demand globally without sacrificing quality means addressing and improving the health of the soil. You simply cannot have one without the other in the long term.

So, how do we protect our soil to ensure enough quality food? What steps can individuals or society take that are simple

enough for almost anyone to participate in an air, water, and food/soil revolution? Indeed, sustainable food production should ensure that future generations can access safe and nutritious food while practicing better water management and improving air quality. So, I will now present to you the golf ball! That's right, the golf ball!

Envision our planet momentarily—picture areas on the world map with regular and consistent precipitation. If we start digging holes across the earth that receive regular rainfall and expand outward, the earth will soon look more and more like a golf ball! It would be quite the view to any visitors from outer space or even those aboard the International Space Station.

When it rains, or the snowpack melts, water runs down the river basins; however, it doesn't always naturally percolate into the ground and enter the water table as effectively. By digging numerous holes around or near temperate and tropical rainforests, we could capture significant amounts of water to raise the water table before

it flows through the river basins and eventually empties into the oceans.

Taking measures to retain this water on land could lead to a notable improvement in soil quality and quantity because we're improving the biology of the soil itself. Every microscopic organism inside the soil needs water, too. When they have enough water, the health of the soil improves. As a result, agriculture would benefit because the soil is better. We will build better soil over time by focusing on this simple yet impactful soil enhancement technique. However, we must also consider implementing emerging farming practices known as **Regenerative Agriculture** and **Permaculture (RAP)** near all the holes we're digging to build this Golf Ball Planet.

RAP is the pairing of two basic farming systems. Together, they offer themselves beyond traditional agriculture for individuals or nations in their sustainability efforts to restore soil health and feed society further. Standalone, regenerative agriculture operates on a larger scale than permaculture, but their methodologies overlap. **Regenerative**

Agriculture employs natural methods, such as no-till farming, not spraying the land with petrochemicals, and rotating livestock around to mimic nature. In comparison, **P**ermaculture is a smaller-in-scale, permanent agriculture system. Unlike traditional agriculture, which works the land with tractors, planting seeds and harvesting at the end of the growing season, permaculture mindfully improves an ecosystem to become a resilient agriculture ecosystem that mimics nature to produce multiple sources of stable food year after year. You may have even come across something that looks like a mini forest with fruit and nut-bearing bushes and trees that serve as a food source for us or a plant nursery for future seedlings to become deployed into the field like plant soldiers.

Both offer a degree of alleviation from being so dependent on our current food system: the supply chains and large-scale agriculture. That said, permaculture gives greater control to those just getting into farming, especially when land is scarce. But what else can we do to improve soil health beyond digging holes to retain water in the land and **RAP** about it? Composting!

Often referred to as “**black gold**” because of its dark appearance, composting is the natural breakdown of organic matter into a nutrient-rich soil amendment. Composting provides a valuable input for the soil and improves the soil quality. This simple process allows us to incorporate refined material into less fertile soil, enhancing the soil’s health and providing a better plant environment. Like adding chocolate chips to cookies, adding compost to soil enriches everything before you.

Additional benefits of composting include:

- **Reducing Waste:** Composting diverts organic waste from landfills and extends landfills' lifespans.
- **Improving Soil Health:** As previously mentioned, compost adds organic matter to dirt as an amendment, making it more fertile. More specifically, it enhances soil structure, water-holding capacity, and nutrient availability for the organisms living within the dirt.
- **Supporting Plant Growth:** Compost contains beneficial fungi and microorganisms, including bacteria, that

aid plant growth. All the nutrients contained in the compost are taken up through the plant's root systems because of a symbiotic relationship taking place underground.

As our understanding of composting deepens, we can visualize the process more clearly: the decomposition of organic matter facilitated by microorganisms like bacteria, fungi, or invertebrate animals turns this material into a valuable agricultural product.

While nature naturally manages decomposition, speeding up the process and ensuring the proper breakdown of collected materials falls on us, the beautiful and conscious stewards of the Earth. To achieve this, we must turn the compost pile regularly, using tools like shovels, pitchforks, etc. The turning frequency depends on factors like the amount of material and the time of year. After several weeks to a few months, the compost should transform into a dark, crumbly substance with an earthy smell – precisely what we aim for! **Black gold!**

Practicing composting on a small scale in backyard gardens or on a larger scale in farms and communities can be conducted in a variety of ways:

- Vermicomposting: This method involves using earthworms to break down organic matter into compost. Invertebrate animals, like earthworms, eat the material, and their waste, called worm castings, can be used as fertilizer in your garden or farm.
- On-farm Composting: Farmers can create substantial compost piles by incorporating animal manure, crop residues, and other organic materials like fallen trees into a compost pile.
- Community Composting: Many communities run composting programs that collect residents' food scraps and yard waste and transform them into compost. This compost is then used in community gardens or sold to local farmers.

Composting is pivotal in **RAP**, contributing to waste reduction, enhanced soil health, improved plant growth, and increased carbon

sequestration. Whether a backyard gardener or a large-scale farmer, composting offers a straightforward and efficient means to enhance soil health and promote environmental well-being. So, besides higher-quality food, what do a golf ball, composting, and **RAP** have in common?

Fungi! Pronounced like “fun-guy,” it extends beyond mushrooms. The fungi kingdom remains one of the least explored biological kingdoms. Consider American Football, where you have offense, defense, and the special teams unit to draw an analogy. In this analogy, if consuming food from the animal kingdom (meat, dairy, or eggs) aligns with the offense and the plant kingdom (fruit, vegetables, or grains) corresponds to the defense, the fungi kingdom can be likened to the special teams. Admittedly, the special teams often go unnoticed until it’s time for the punting unit to take the field. Can you imagine the game if neither team punted the ball on fourth down or attempted to kick a field goal when they were within striking distance? How does our special team unit, the fungi, fit into the realm of **RAP**, and how do they contribute to soil health?

Mycology is the study of fungi. It plays a vital role in soil regeneration, enhances food quality, and contributes to the overall health of the Golf Ball Planet. Fungi are ubiquitous throughout nature, and identifying specific mushrooms can be challenging. Fortunately, we can cultivate fungi in controlled environments using substrates such as wood or straw. However, many might need to realize fungi's journey from spores to the final harvestable mushroom. Enter the world of Mycelium!

Mycelium is similar to a tree's root system. You may not see what's happening underneath a tree. Still, the final product is impressive when the tree stands before you, bearing fruit, and the leaves flourish from these mighty structures. While mushrooms are where we observe the end product, mycelium spreads extensively in conducive environments, whether it's nature or controlled mediums. Under the right conditions, mushrooms may surface briefly to release their spores (like the seeds of a tree) before decomposing into the mycelium matrix, where a significant portion of organic material decomposition occurs. If you're ever in nature and come across a small log and decide to pull

it back, you may see mycelium where the log was in contact with the earth. Mycelium has a white, fiber-like appearance similar to the roots of a plant!

Mycelium forms a symbiotic relationship with plants. When organic matter begins to decompose on the forest floor, mycelium infiltrates it and aids in the breakdown process. Mycelium releases stored nutrients from the material, distributing them through their network to nourish plants through their root system and even yield mushrooms in this symbiotic process!

Millions of fungal species exist, but only a few, like Reishi, Lion's Mane, Chaga, Cordyceps, Shiitake, Oyster, or Portobello, are farmed for their medicinal benefits or gourmet appeal. Imagine if we harvested natural organic materials like wood or other plant matter to cultivate mushrooms on a large scale. After several cycles of mushroom harvests for food or medicine, what if we returned the spent mushroom material to the earth as another soil amendment? Like inoculating the wood or plant material for the mushrooms to grow on, we

innoculate areas of our recently dug holes (recall the golf ball) with the spent fungi material to enhance the soil health!

So, as we dig trillions of holes and improve soil health, what about the literal food? Enter the honey bees! Honey bee farming, or *apiculture*, is essential in pollinating crops that constitute a significant portion of the world's food supply. Bees are responsible for pollinating approximately one-third of all food crops, including apples, blueberries, and peaches, to name just a few. Without honey bees, we would witness increased food shortages, higher prices, and lower-quality produce, significantly impacting our food system.

Recently, honey bee and non-honey bee populations have been declining, causing concern among scientists, farmers, and environmentalists. Honey bees and other pollinators face numerous threats, such as habitat loss, pesticide exposure, the effects of climate change, and disease. By raising awareness about the importance of pollinators and the threats they face, we can encourage

individuals and communities to take action to protect them, whether it's advocating for policies that support bee health, reducing pesticides, supporting local beekeepers and honey producers, and promoting sustainable agricultural practices that protect pollinators and the environment primarily impacted by climate change.

Providing a habitat for pollinators can include planting wildflowers, fruit, and nut-bearing bushes and trees, create pollinator-friendly gardens, or building outright pollinator habitats only for the pollinators. Offering a diverse range of pollinator-friendly plants ensures that honey bees can access the nectar they need to survive and thrive, and the pollen can be spread from one plant to the next so they can also survive and thrive. Growing wildflowers, fruit, and nut-bearing bushes and trees has environmental benefits beyond sustenance and pollinator habitat. These plants would further absorb carbon dioxide from the atmosphere and, in turn, improve air quality.

Excellent news for us and the bees, but did you know bees love golf?

Remember the analogy of the world as a giant golf ball? Imagine life beyond the forest's edge: holes for capturing water and spaces to add soil amendments. Add the wildflowers, fruit, nut-bearing bushes, and trees between the holes. Over time, this would lead to a green ripple effect that would expand the rainforests. In addition to providing a habitat for pollinators, the wildflowers, bushes, and trees can also attract and support a wide range of wildlife, including birds, insects, and mammals. But what would several years of this practice begin to look like around the planet? Not just a green ripple effect around forests, but also planting more greenery in suburbs and cities that extend from cities that meet this green ripple effect from the forests and back again? **The F-M-L Theory** and our abundance are starting to take form!

Chapter 9 - Rainforests

Forests and jungles are crucial for the survival of many species, including humans. They help regulate the Earth's climate, sequester carbon, purify the air, and provide us with resources. However, deforestation and forest degradation

have caused a significant decline in forest cover worldwide. Deforestation permanently removes plants for agriculture, livestock, mining, urbanization, etc. Forest degradation refers to the deterioration in the quality of a forest due to activities like logging, climate change, forest fires, etc. We must find solutions to combat deforestation and forest degradation, but what are the basics?

First and foremost, a forest or jungle is a “rainforest” characterized by high rainfall, dense vegetation, and abundant biodiversity. Rainforests are classified into two main types: tropical and temperate.

Typically, tropical rainforests are between the tropic lines near the equator in regions like Central and South America, Africa, Southeast Asia, or the Caribbean. These rainforests experience higher temperatures, heavier rainfall, and consistent sunlight throughout the year. Tropical rainforests are known for their incredible biodiversity, with many plant and animal species endemic to these regions.

Temperate rainforests are found in, relatively speaking, cooler climate areas outside of the

tropics, such as North America, New Zealand, Russia, and parts of Europe. While not as biodiverse as tropical rainforests, temperate rainforests are home to numerous plants and animal life. Although they vary slightly, they are far more similar to one another than at first glance.

Air Purification: Trees absorb carbon from the air, releasing oxygen and making it cleaner and healthier for us to breathe.

Biodiversity: Rainforests are home to millions of plants, fungi, and animal species, many of which add to the uniqueness of forest ecosystems and contribute to planetary homeostasis.

Climate Regulation: Rainforests absorb and store carbon from the atmosphere, one of the primary drivers behind climate change. Storing the carbon into the soil through the plant's root system and the makeup of the trees, leaves, flowers, fruit, or nuts are vital.

Dirt Protection: Rainforests help prevent soil erosion by anchoring the dirt with all the plants' root systems. It rains all over the forests, and

the water is better absorbed into the earth and retained in the ground.

So, what basics do we now understand about rainforests? Both rainforests play considerable roles in maintaining the global ecological balance, acting as carbon sinks, regulating the water cycle, and providing habitat for countless species. Unfortunately, deforestation and forest degradation are ongoing threats to the remaining rainforests. But with **A-2-C-2** also coming, could improving rainforest expansion serve our time well? Do you recall turning the world into a giant golf ball?

When examining world maps, we should start digging and planting in areas that experience heavier precipitation annually. Wetter locations serve as ideal starting points to reduce inputs like irrigation. They would provide us with the maximum return we're looking for. If we dig a tremendous number of holes around the rainforests, we could retain more water in the land and attempt to expand the rainforests. Consequently, the water table rises! In that case, we can harvest the water and pump it to the immediately adjacent areas where we're

attempting to regreen next and continue the green ripple effect! We're going to farm water from the land!

Be careful to pull only what nature can naturally replenish. We're attempting to create a green ripple effect by dedicating natural habitats for additional flora, not taking one step forward and two steps back by taking more than we should from nature. Ultimately, where the forest meets the grasslands and beyond, this green ripple effect would look very similar to rings on a tree year after year. Consequently, digging holes to harvest water and build forest/jungle spaces together will retain even more water in the ground and add to the growth of rainforests. Moreover, we will continually expand forest cover every season by planting more trees, bushes, and wildflowers in the more open areas adjacent to rainforests to prevent deforestation and forest degradation. It would be ideal to plant native species here and avoid invasive non-local plants. Still, if the trees, bushes, and flowers provided us with fruit, nuts, and edible flowers, I could take it or leave it.

The future of rainforests looks promising, whether it involves improved land management around existing rainforests or creating more green spaces within cities and suburban areas. There is much to look forward to from everything we've collected, including all the various elements, such as forests, trees, bushes, wildflowers, bees, fungi, compost, digging holes, salt, solar, water, and air. But what else can we incorporate into our praxis? How can we branch out even further?

Chapter 10 - Warmth

As we consciously consider the first few basic needs, like air, water, and food, we can start to see how our most basic needs overlap with one another and what work could serve us well during the era of **A-2-C-2**. But what comes next in Maslow's Hierarchy of Needs?

Warmth. Loosely defined, if it gets too cold or hot, our survival comes into question. In the most basic terms, are we living indoors, or are we living outdoors? Even if we can continue to breathe and have a reliable source of water and food, how long could we survive without

adequate shelter or clothing against the elements or extreme weather? We've come a long way since the cave, but is there an appropriate avenue when discussing the current Homelessness Crisis in America or housing in general?

The United States has experienced a significant increase in homelessness over the years, with over half a million American citizens experiencing homelessness on any given night. The issue is not limited to those who are visibly homeless but also includes those who are couch surfing or living in overcrowded and unstable conditions. In addition to our citizens, once any number of unauthorized immigrants illegally cross the southern border, they are immediately homeless as well, which further adds to the housing uncertainty in America. Homelessness, housing insecurity, and the challenges of addressing this issue are not just domestic challenges unique to the United States but matters of global importance to meet the basic human need for warmth. So, what are the root causes of inadequate warmth?

Homelessness and housing insecurity often result from economic, social, and personal factors. Common factors include job loss, unaffordable housing, mental health and addiction issues, domestic violence, childhood trauma, or poverty. For many individuals and families, a single unexpected event, such as a medical emergency or job loss, can lead to homelessness or housing insecurity. Additionally, systemic issues like income inequality and discrimination can create barriers to stable housing and perpetuate homelessness. The complexity of homelessness and housing insecurity makes it challenging to address, but providing warmth is well worth the effort.

Despite all the challenges, there are successful strategies for preventing homelessness and providing stable housing for the unhoused. One such strategy is the Housing First Approach, which prioritizes stable housing as the initial step in addressing homelessness. This approach is grounded in the belief that stable housing is a fundamental human right. Without a regular place to live, it becomes nearly impossible for individuals to address other issues, such as mental health, substance abuse, or other factors

that have contributed to becoming displaced. However, providing a stable place to live for the unhoused is a significant first step in helping humans find warmth.

So, is it back to the cave again, or is there a product that could better serve billions of humans for adequate warmth than a bunch of holes in the sides of the hills?

Hemp! Due to its remarkable versatility in clothing and housing humans, hemp will become one of the most significant contributors to improving life on planet Earth within our lifetimes. Without the integration of hemp into our agricultural landscape, the remainder of this century may be exceedingly challenging for billions of people.

Hemp farming boasts numerous environmental benefits. Hemp requires less water than traditional crops for the same applications, can be grown without pesticides or herbicides, serves as an effective cover crop, has a deep root system that holds the earth in place to prevent soil erosion and aids in enriching the soil through a process known as phytoremediation (phytoremediation is the

natural ability of plants to extract contaminants or toxins from the soil, effectively cleansing the soil).

Hemp is also an exceptional carbon sequesterer. On a per-acre basis, this plant possesses significant carbon draw-down capabilities. Hemp absorbs carbon dioxide (CO₂) during photosynthesis and releases oxygen (O₂), reducing greenhouse gas concentrations in the atmosphere. Hemp is estimated to absorb more CO₂ per hectare (10,000 square meters) than most other crops and trees. Also, hemp can thrive in various climates and soil types, making it a versatile option for our global carbon sequestration efforts. These numerous benefits occur before it's time to harvest the crop for its edible components, such as hemp hearts, or the byproducts used in textiles or construction, like shiv. But what is hemp shiv, and how does it contribute to warmth?

Hemp shiv, or shiv, is the stalk of the hemp plant machined into smaller pieces that serve as crucial components of construction material known as *hempcrete*. Hempcrete consists of

hemp shiv, water, and lime. Once processed, the resulting mixed material is lightweight, robust, and exhibits excellent insulation properties. As hempcrete sets in place, it will remain a carbon-sequestering material throughout its lifespan because, after installation in a building, it absorbs carbon dioxide (CO₂) from the air as it cures and hardens. Despite its hardening, hempcrete is still very breathable, which aids in regulating building moisture levels, reducing the risk of mold growth. Hempcrete is an ideal alternative to traditional building materials.

Furthermore, hempcrete is non-toxic, fire-resistant, and boasts a low carbon footprint because of its non-petrochemical makeup. This family-friendly feature provides peace of mind for individuals and their families as an alternative to petrochemical insulations and treated lumber that will experience off-gassing in a modern home.

Regrettably, hemp still faces limitations due to unnecessary legal complications and the lingering stigma associated with hemp production in many parts of the world. Despite

its insignificant levels of T-H-C, the sought-after psychoactive component of cannabis, hemp remains an excessively regulated crop in the United States. These unnecessary barriers are gradually dissipating as the potential of hemp is increasingly recognized and appreciated as a valuable asset in addressing a wide range of challenges beyond food security. Still, limited incentives exist to cultivate this crop beyond the plant's primary compound, C-B-D, for medicinal applications.

Unfortunately, other crops receive subsidies and support despite their negative environmental impacts and limited range of applications. Promoting monoculture crops like corn, soybeans, and cotton has led to over farming, which pulls many of the nutrients from the earth without giving the ground enough time to repair itself naturally. Over farming also leads to diminishing crop yields over time. It increases the financial cost to farmers because more inputs, including chemical fertilizers, additional irrigation, and more intensive land management with cover cropping, are needed.

While hemp offers us numerous environmental benefits and products that are safer and more sustainable, the challenges related to policies and the stigma that persists ultimately limit hemp production. Although hemp is a safer textile and building material, further investment into this crop is needed. We can work toward a more sustainable and environmentally friendly future by fully deregulating hemp cultivation and promoting its use. Policymakers should acknowledge the advantages of hemp farming and the potential of hempcrete in sustainable construction. Hempcrete and other hemp-based building materials could revolutionize the construction industry and provide a safer environment for families.

Rooted in the premise that we can start farming more hemp to offer better warmth with the end products, like housing materials or textiles for literal clothing, what goes into large-scale farming that incentivizes the cultivation of one crop over the next? Farming subsidies!

Farming subsidies are financial incentives governments provide to assist farmers in

managing agriculture's unpredictable nature. They serve as a safety net for farmers, help maintain a consistent food supply, and contribute to the prosperity of rural economies. These financial aids have significantly influenced modern farming practices. While some countries allocate billions of dollars annually to sustain their agricultural sector, these subsidies also face criticism for their potential to distort the free market and contribute to environmental degradation. There are four types of farming subsidies to consider.

Direct Payment Subsidies - Farmers receive a predetermined sum of money from the government, which is determined by the amount of land they cultivate. This payment is independent of the crops they grow or whether they encounter success or failure in their crops. The primary purpose of these subsidies is to offer farmers financial support and guarantee them a consistent income, regardless of market fluctuations.

Direct payment subsidies have faced criticism for creating a financial safety net for farmers without encouraging the adoption of

sustainable agricultural practices. Farmers can persist with environmentally harmful practices without specific environmental or conservation requirements while benefiting from these subsidies.

Price Support Subsidies - Price support subsidies constitute a farming subsidy approach wherein the government establishes a minimum price for a specific agricultural product. Suppose the market price falls below this minimum threshold. In that case, the government intervenes by purchasing the surplus supply at the minimum price, stabilizing the market, and shielding farmers from price fluctuations. This intervention aims to secure a fair income for farmers and ensure they can sustain their farming operations without enduring substantial losses. The continuity of farming is crucial, regardless of market conditions.

While price support subsidies offer stability to farmers, they come with certain drawbacks. They can incentivize overproduction, leading to excessive supply and a surplus of crops that pose challenges in selling and storing the

surplus. Subsidies like these can burden the government and taxpayers financially because the government is required to buy surplus crops at a minimum price. Doing so disrupts the free market by artificially maintaining prices, potentially resulting in market inefficiencies and reduced competition.

This subsidy model is frequently employed to bolster commodity crops such as wheat, corn, and soybeans, which are susceptible to volatile market prices influenced by weather conditions, international trade dynamics, and supply and demand fluctuations.

Input Subsidies - The primary objective is to lower production costs and enhance overall profitability. Input subsidies offer farmers financial aid for purchasing inputs such as fertilizers, seeds, and other essential materials required for agricultural production.

When farmers face challenges accessing credit and cannot afford inputs through regular market channels, input subsidies come into play. The provision of input subsidies facilitates the adoption of new agricultural technologies and practices, leading to increased crop yields

and improved crop quality. However, there are valid concerns regarding the potential downsides of input subsidies.

Notably, input subsidies can result in the excessive use of fertilizers and other chemicals, adversely affecting the environment and human health. Some experts also contend that input subsidies can be financially burdensome for governments and that the benefits may not consistently reach the small-scale farmers most in need of support.

Furthermore, input subsidies have the potential to create dependency on government assistance, possibly discouraging farmers from exploring alternative, more sustainable, and cost-effective farming methods in the long term.

Insurance Subsidies - Insurance subsidies fall within the agricultural subsidies, offering financial assistance to farmers to cover the costs of insurance policies that safeguard their crops or livestock from unexpected losses caused by natural disasters or diseases. These subsidies serve as a valuable resource for farmers to manage risks and protect their

investments, a critical consideration for small and medium-sized farmers who often have limited resources to cope with such unforeseen losses.

As demonstrated, each type of subsidy offers unique support to farmers and presents several advantages. These benefits include providing a safety net for farmers facing economic hardships, ensuring a stable food supply, leading to more sustainable agricultural practices, and contributing to the growth of rural economies.

Nonetheless, it is essential to acknowledge that farming subsidies come with their share of disadvantages. These drawbacks encompass the potential for overproduction and surplus supply, the preference for giant agribusinesses over smaller family farms, environmentally harmful practices, and the distortion of global trade dynamics, which can have unforeseen repercussions.

As an illustrative example of subsidies working against us, the United States is the largest global corn producer, accounting for nearly one-third of the world's total production. Fueled mainly

by government subsidies over the past several decades, approximately one-third of the corn produced in the United States is for ethanol production, another one-third for animal feed, and the remaining one-third serves human consumption, export, and various industrial applications. With most corn finding its purpose in fuel, animal feed, export, or industry, it raises concerns regarding the overproduction of corn, specifically, the allocation of valuable farmland and the environmental consequences of these end products. Addressing this issue presents challenges since corn remains a vital agricultural resource. Still, the quantities in production may exceed genuine demand.

One potential strategy could be shifting away from extensively produced crops for non-food purposes, i.e., systematically reducing the production of farming corn for fuel, limiting the crop's export, etc. Instead, if we cultivate any crop for non-food applications, then it should serve us better than corn does. For instance, reducing subsidies for certain crops like corn and increasing support for other crops, such as hemp, might offer a means to

alleviate some of the environmental impacts of agriculture while ensuring adequate food supply, but also for clothing and housing to improve upon warmth, and by simply reevaluating farming subsidies. Human beings' basic need, warmth, could be better realized within our lifetime. As we add to our awareness and continue our reflection, the possibilities for practical actions and strategies continue accumulating and building upon the last. Things are starting to heat up.

Chapter 11 - A-2-C-2

Learning about the baseline of the Hierarchy of Needs is one thing, but building a praxis in a time of increased automation, advancements in AI, and the ongoing climate crisis **(A-2-C-2)** could kickstart this new chapter in our lives. A praxis that improves upon many things, from the general air quality, water quality and availability, and food quality and availability to now warmth to some degree, would provide a more reassuring direction in an otherwise less certain future. However, when it comes to connecting the end of our Basic Needs, like Warmth, with the next level of Maslow's

Hierarchy of Needs, Safety, there are a few things that I will put on your radar.

Growing up, do you recall math teachers telling the class we wouldn't always have a calculator in our pocket? That has since changed with the advent of smartphones. Just as we've experienced the advancements of our phones' capabilities, AI can, relatively speaking, answer questions in a homework assignment or take a test with greater accuracy than the mind of a passive student. So, what have we been working towards in the classroom? After all, how many of us will become contestants on Jeopardy anyway?

Education is a fundamental human right that empowers individuals to lead healthy and productive lives. Regardless of how advanced AI becomes, education should continue to equip us with the skills and knowledge necessary to participate in society actively, enhance our economic status, contribute to community development, and elevate our consciousness while fostering cultural synthesis within our communities. Whether the work we put in will lead us back to nature or further our

needs elsewhere, the lesson plan and conversations within the classroom should reflect what we want to accomplish. Knowing that AI will continue to change our future, how will the classroom change along with it and better prepare students for the future?

As we harken back to the book's beginning, we can reflect upon Paulo Freire's rejection of the traditional Banking Model of Education, where teachers deposit knowledge into passive students' minds and make withdrawals under high-stakes testing. But will the Problem-Posing Method be a better approach to democratically identifying, collaborating, and solving real-world problems?

In the context of **The F-M-L Theory**, Paulo Freire provides us with a "looking glass" to break free from the traditional classroom constraints and better realize our humanity. Abraham Maslow provides us with a "playbook" to place priority on our basic needs. As **A-2-C-2** continues, we must question our goals and what we want to accomplish in the classroom. But in all of this change that will occur, what about the teachers? Can they teach

us how to peer through the looking glass better, and what exactly could this playbook evolve into?

It's not just in the name; educators constitute the backbone of any education system. Teachers serve a pivotal role in shaping the future of societies. Without professors, there would be no higher education system to speak of. The importance of fair compensation for our mentors and the significance of investing in education cannot be understated. However, it is disheartening that many are underpaid and undervalued, leading to a decline in educational quality and a shortage of qualified instructors. Could achieving this be as simple as providing salary increases for academia to continue their work, work in underserved areas, or for students to want to become more scholarly themselves?

While most Americans have completed high school, we've been shadowing teachers as their impromptu apprentices throughout childhood and adolescence. But despite growing up in the classroom, many pursue careers outside of teaching because the pay is better, or they might

not want to spend their entire life in the classroom. Suppose we incentivize better pay for teachers to encourage young people to consider a career path in education, especially when many of the skills taught for today's jobs will likely become obsolete once more displacement from A2 unfolds. Therefore, it is crucial to attract the best teaching talent right now to educate us on the skills required for the jobs of tomorrow and to match the pay with how vital this role is for our future.

Still, it's not just about preparing a young student for tomorrow's economy but also preparing ourselves for the short-term and long-term effects of A-2-C-2 in and out of the classroom. As we continue to reevaluate education further and provide a new curriculum to prepare young people for this new world, we should also do so with the intent that the student's parents or legal guardians might also be in the classroom with their kids. When the machines free our time, we can become even more involved in our children's education and future. In doing so, education will dramatically improve because parents and legal guardians are

involved even more in their children's education.

Still, as we seek to change “what we discuss in schools” and who might find themselves back in the classroom, we must also remember the fundamental building blocks of society beyond the schools. This consideration is critical as we prioritize work in every country where **A-2-C-2** will impact our species' lives. So, let's continue to build upon our education like scaffolding. We have a solid foundation, but what else can we focus on that will help improve our lives and those who will inherit the Earth in due time?

Over the last several decades, globalization has led many businesses to ship their factories and offices to less expensive labor markets to remain competitive internationally. However, over the next several years, as even more machines and their software replace many jobs around the planet, the demand for inexpensive labor in factories and offices will be affected. What work can we prioritize once machines replace millions of jobs? Specifically, what work can serve our Basic Needs or carry over into

the next level of Maslow's Hierarchy of Needs, our Safety Needs?

With the undeniable need to focus on work that “must be done” in a country where the work cannot be outsourced or performed by a machine, infrastructure will serve as one of the most significant domestic job creators. After all, without systems like the electrical grid, roads, bridges, dams, highways, public transportation, water treatment facilities, sanitation systems, etc., that tie into our houses, a home is just another building that keeps us temporarily out of the elements. That is until we make it a home. Traditional infrastructure systems have fueled our economic development for the past century. Still, many empty or vacant buildings have remained abandoned for long periods between all of the homes, offices, and warehouses we have built. These old, abandoned buildings or lots, not limited to residential dwellings, are called **blight**. Blight refers to the process of deterioration and decay that occurs when a property is left neglected for an extended period. Abandoned areas that have experienced weather damage, lack of

maintenance, vandalism, or natural disasters can contribute to blighted property.

When an area becomes blighted, it can negatively impact the surrounding community. Abandoned buildings can attract criminal activity, lower property values, and contribute to the overall decline of a neighborhood. Due to this neglect, they can also pose safety hazards, as unstable structures lead to the accumulation of debris like garbage or even leach decaying building material into the soil or waterways. However, addressing blight requires a comprehensive approach involving public and private efforts. These efforts may include code enforcement, property tax incentives, grants, loans for renovation, community revitalization initiatives, and, in some cases, blighted properties that may need demolishing to make way for new development. But what can be done with the property once blight has been removed?

With every dollar invested in blight removal, there is an economic correlation with increased property values, decreased crime rates, and heightened economic activity in the

surrounding area. To revitalize communities and stimulate economic growth, an old building or neglected property could be turned into Green Space Infrastructure!

Green spaces allow nature to thrive, from grassy spots within urban areas to trees and shrubs, parks, gardens, forests, wetlands, mangroves, and various natural or landscaped areas. Green spaces serve multiple purposes, offering recreation, relaxation, and environmental conservation opportunities. They bring numerous benefits to surrounding communities, including improved air quality, noise reduction, and positive effects on mental health. Although it might seem like I'm suggesting we demolish every old building in sight, there are several things we could do before destroying everything we've forgotten that we've built.

Identifying vacant or underutilized buildings for repurposing before outright demolition is crucial. It will be essential to offer them as affordable housing units or shelters for people without homes. This holistic approach helps reduce homelessness, encourages urban

revitalization, preserves valuable resources without starting from scratch, and promotes long-term stability and cohesiveness in communities.

Ultimately, tackling these challenges will prepare us better for what comes next. Cities can work towards more equitable, resilient, and environmentally friendly urban environments in our ever-changing world, as the work we encounter will differ from usual.

So, with AI and Automation doing a lot of the heavy lifting in the next decade and beyond, we have a serious “time opportunity” opening up from the constraints of our current jobs and the classroom we’ve come to know. We need to use our time wisely and help the most disadvantaged in our society regain their humanity. In doing so, we can reclaim the humanity that we have lost. Being helpful, being useful, and being more present in the moment means we can pursue more meaningful work that provides us with a greater purpose. Solving **A-2-C-2** will be one of the most impressive endeavors we’ve ever undertaken.

Reexamining how we will allocate resources for public schools, including teacher salaries, classroom supplies, facility improvements, implementing early childhood education programs, strengthening after-school and extracurricular programs, fostering partnerships between schools, local businesses, community organizations, and supporting higher education and vocational training opportunities still in high demand for the economy of the future will be one of the most exciting times in many of our careers, and our connected lives.

In summary, the disciplines, topics, areas of interest, or studies mentioned throughout this book could mean a new curriculum is ahead of us as students in the classroom and as students of life. I know I'll never live to be 250 years old to discuss this with everyone, but suppose I can say something in a book that everyone could read or hear about. In that case, I look forward to what connects us as equal human beings in the classroom and beyond.

Chapter 12 - Dessert

So, what makes me so optimistic about the future? Is it the belief that there will be many

inspiring and life-enriching experiences to become lost within and enjoy? From what we'll collectively become more aware of, what we'll learn through our reflection on life itself and the unique era we're entering with this possible praxis before us? Not to count the seconds, but to make the seconds count? I believe the future is an ongoing and evolving idea open to everyone. I dream of living in a world where we can experience our freedoms and an abundance of the likes we've never known before.

When we clean up our air, water, and food, help others reclaim their humanity, learn with intention and purpose, and share this collective experience to live longer lives together, our future will be pretty impressive. I know we can take on such monumental pursuits, and I look forward to connecting with others we share this planet with. Despite our limited time in this world, we should continue to lead with humility, vulnerability, and love in all our noble pursuits during **A-2-C-2**. As we witness our ascent into the future, I look forward to testing the applicability of integrating Freire and Maslow's philosophies.

Maslow's Hierarchy of Needs isn't necessarily a checklist but more of a practice. Without first putting in the work along the baseline, it's difficult to imagine how the following levels would begin to stack up. It's not like someone can achieve the pinnacle of the hierarchy and expect to maintain this state of mind indefinitely. Also, speculating on every following level for our species on a macro scale and during **A-2-C-2** would be challenging, if not impossible. So, to look further into the future, here is a summary of the subsequent levels of Maslow's Hierarchy of Needs.

Safety Needs

Encompasses our security, stability, and order in one's life, including personal safety, financial security, health and well-being, and protection from various threats or dangers.

Love & Belonging Needs

This level includes the need for social connections, such as friendships, family bonds, and intimate relationships. It also encompasses the desire to feel accepted, loved, and connected with others within a community.

Esteem Needs

Esteem Needs involve the desire for self-respect, recognition, and appreciation from others, as well as the need for achievement, status, and a sense of competence and mastery in various aspects of life.

Self-Actualization Needs

At the top of the hierarchy, self-actualization represents pursuing personal growth, self-fulfillment, and realizing one's full potential. This level is about the ongoing process of becoming the best version of oneself and discovering one's purpose and passions in life.

The **Freire-Maslow-Life Theory**, or **The F-M-L Theory**, could be a launching pad for many more ideas, but *did you save room for dessert?*

Consider the dominoes falling: as machines multiply, the need for human labor diminishes. For companies adopting AI, payroll expenses drop. With AI's growing presence, unemployment rises, and the unemployed seek unemployment benefits from the government. However, with every traditional avenue that

taxes would usually be collected from, whether it's tax revenue from a worker's paycheck to the sales tax collected by the previously employed spending their paychecks, governments will run the risk of significant deficits to pay for the promises of any social safety net. So, how can we maintain the world economy when fewer people go to work, governments collect less tax revenue, and the demand for benefits is at its greatest in human history? Wait a minute, what happened to the dessert menu we were promised earlier?

To address these challenges, employees, employers, and the government should seek an equally harmonious solution. Instead of simply laying off workers, businesses should replace as many humans with machines as possible but under the condition that they continue to pay their staff a minimum of 90% of their pre-taxed paycheck. However, employees who continue to receive their paycheck will not receive any benefits like sick pay, vacation pay, matching 401k contributions, employer-provided health insurance, maternity leave, Christmas parties, stock options, etc., and these same employees would not be subject to paying any taxes on this

income to the government, in perpetuity. But why would businesses or the government agree to such a sweet deal for the people?

If hundreds of millions to billions of workers around the planet were to stop receiving paychecks, there would be a significant economic downturn, and the general lack of commerce would affect the global economy. Governments would also face the challenge of dealing with hundreds of millions if not over a billion collectively unemployed citizens. After all, a functioning economy relies on the circulation of money.

Without customers, companies don't have a business, and governments don't have the same tax base to fund the governments at every level. Alternatively, companies can reduce payroll by 10%, payout zero benefits, and ensure customers are still coming through their front doors. In this scenario, they still have a business, and the government doesn't have to worry about where the money will come from to keep the economy running. Our increased total take-home pay would translate to

increased consumer spending and consequently mean more sales tax collected.

Governments could attempt to manage the new world without this new look, with more machines in the workforce, increased poverty and crime rates, an even more significant national debt burden than we are currently dealing with, and fewer taxes coming in. Alternatively, they could support a free market solution between laborers and companies.

When I mentioned “dessert” earlier, I think everyone now knows what I am referring to: Universal Basic Income for those who worked to build the global world economy but have since been “let go” by their employer because of the actual machines. So, can everyone I share the planet with expect to have their cake and eat it, too? With more money than most people are used to coming their way, the question is, “What’s next?” Although everyone laid off due to A2 would receive a pay reduction, they do not have to pay taxes, which means they’ll see a more significant amount to take home. This influx of money in anyone's life could mean anything from early retirement to volunteering,

returning to school, starting their businesses, or pursuing additional employment opportunities, as we've been discussing throughout the chapters of this book. These require our attention either way because everything is on the table with **A-2-C-2**.

Mentioned earlier is our education and what we can dedicate our time to learning. Imagine parents going to school alongside their children, learning about the changing world, and adapting to the fact that many existing jobs will no longer be available. If parents know they are getting paid, families, communities, and society continue to progress. But for us to flourish, it's essential to be adaptable and consider critical questions, knowing that the children of those laid off will not receive any money; after all, those kids didn't build the machines. However, once they leave school, they will still need skill sets for their livelihood, and we must prepare them for this new era ahead of us.

Thoughts to consider:

- How would you utilize your time if you didn't have to go to work anymore, received 90% of what you currently

make, and didn't have to pay any taxes on this money?

- How do you envision the subsequent levels of Maslow's Hierarchy of Needs playing out in front of us, with hundreds of millions being allowed to engage in essential work for ourselves, family, community, society, and our planet within our lifetimes?
- Will governments and businesses view the coming decade and beyond through a human-first lens, without reproach, and prioritizing humanity above all else?
- Did you save room for dessert? It's the pâtissier chef's specialty dish!

To all the beautiful, sexy creatures of planet Earth, here is to our future. I love you!