The Radish

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Going to The Root of The Principles of Political Economy & Social Philosophy. A primer inspired by the thesis of Henry George.

What is necessary to create employment for all who are able and eager to work — with rising wages and affordable housing. How to create equal opportunity within free markets while funding the government (including social programs) from socially created wealth. How to prevent recessions.

The Problem:
Despite our relatively sparse population, the advance of science, the march of invention, and the resulting increase in productivity; there are never enough jobs, wages tend to remain static, and the cost of housing continues to be an excessive burden for the majority of workers — intensified with each succeeding recession. These are America's chronic problems. They have been with us for more than a century, and they divert the vast majority of people from working against the existential threats of global warming and nuclear war — the final consequence.

To counteract these problems and alleviate poverty, the United States has established a myriad of government programs. In addition to the legal Minimum Wage rates, and the mandatory retirement accounts of Social Security and Medicare, the government is spending approximately the same amount of tax dollars on education as it spends on the military. All this and a combined total of nearly a trillion dollars more is spent each year by different levels of government on programs that are enacted to help the poor. Yet, while they have gone a long way in alleviating the worst conditions endured by America's least educated and skilled, they have not reduced the need for such programs.

While our elected representatives have alternately increased and reduced the interventions and redistributions, none of these policies have created the needed jobs, reduced housing rents, or made homeownership more generally affordable — nor has the Minimum Wage been raised to keep up with the cost of living for nearly half a century.

In recent years Liberals have advocated significantly more public spending on public education to create jobs and raise wages. But, there is no confirmation that there are more jobs or higher wages due to the increased spending on public education in the past. They have also advocated membership in labor unions to raise the general rate of wages. It could help, but it would require a union of the vast majority of all workers before it could raise wages for those with the least education and skill. Wages for those with minor education and skill tend in the free market to bear subsistence, no matter how much they produce. However, they are ultimately set by the legal Minimum Wage and are the base on which all higher wages are added.

Given our fundamental institutions, it would not matter how much government and regulations were reduced or how much freer markets were made; they could not bring about full employment, raise wages, or make housing more affordable as conservative Republicans believe.

Given our fundamental institutions, raising the legal Minimum Wage, increasing taxes on high incomes, providing more and better free education, healthcare, and daycare, will not create the prosperity that liberal Democrats believe it will — simply because the redistribution of wealth cannot create the jobs and housing that are necessary for all Americans to prosper. Our intuition tells us that we can create a world where everyone lives well, but to do so, we must bring those declarations of inalienable rights to reality; we must ensure an equal right to the bounty of nature and the synergistic results of community.

The Radish explains the paradox: Why so many people are unable to put their labor into the economy in exchange for an equal value of the products and services of other people's labor. Despite inventions, innovations, and new technologies that continue to increase labor results, wages do not rise, which is why cheaper factory-built homes have not reduced the cost of housing. Why, without any change in the natural resources, the workforce, the tools and machines, and the money and credit system, the economy suddenly stalls in a serious recession or depression (increased unemployment), which it has done on average every 18 years or so for more than a century — lasting many months or even years.

The Radish puts forth a policy known as the Single Tax. It was advocated by Henry George in his classic work: Progress And Poverty, written in1879. It is a policy that makes land (all that exists in nature) a common asset. It takes for the community the socially created values that cannot be attributed to the efforts of individuals and corporations but arise from the conscious and sub-conscious cooperation of the community as a whole and attach to land. In other words, it uses socially created wealth to fund the government and social programs.

At the same time, it ensures that all wealth (products) attributed to the efforts of individuals, and groups of individuals working together, are retained as their private property. It permits free markets and enterprise, limited only by concerns for health, safety, and the environment; it reserves to the government business where there cannot reasonably be competition, such as the public roads, pipes, power, and communication cables.

It is a policy that would create employment for all seeking and able to work, with wages increasing as the general level of productivity goes up — while investments in buildings, machines, and inventories receive an equitable return.

The Radish explains precisely why the programs of intervention and redistribution such as the Minimum Wage, income taxes, and welfare programs, which have been in play for the better part of a century, have not and cannot solve the systemic problems of unemployment, static wages, and housing affordability. Nor can they solve racial oppression, poverty, or crime motivated by the fear of want and the shame and humiliation of poverty. It breeds the worship of wealth, no matter how immorally or illegally it is obtained.

To follow this thesis, readers need no special knowledge or training. They must only distinguish what they believe because of the reputation and credibility of experts and what they believe from their observation and reasoning.

The Radish is dedicated to those who see the disparity between those who work and produce and those who live off the work of others. Those who are willing to trace this exploitation to its root cause are working for a just distribution of opportunity and wealth — both as individuals and as members of the community and society they are part of.

The Necessities of Life

All people need someplace to exist and food, clothing, and shelter to sustain their lives. Nature has provided an abundance of places where the temperature and climate accommodate human existence and provide the material resources from which to produce. People can not make something out of nothing; they alter what exists in nature to preserve life and the satisfaction of their desires. Tools, buildings, machines, and inventories are produced and used to give human exertion greater efficiency in producing food, clothing, shelter, and everything else that is made to preserve life and satisfy desires.

Production

In this thesis, the term wealth is limited to those material things produced by people and have value in exchange (capable of human satisfaction). They result from human exertion stored in tangible form and available for subsequent consumption. Wealth is the primary vehicle of human satisfaction, but direct services like hair cuts and medical treatments largely satisfy human desires. These same principles apply to them as well.

There are two essential elements in the production of wealth: People and the Earth. There is human exertion, mental and physical, and there is the entire material universe excluding people and their products. Although people are a part of the universe, this distinction is necessary to understand the relationship of one person to another and the individual to the community.

In this thesis, human exertion (mental and physical) is called: **Labor** when used to produce wealth. Any part of the universe, excluding people and their products, is called: **Land**. Production is to satisfy human desires; it involves separating, combining, and changing natural materials in form or place. To reiterate: Only those material things that are manufactured for the satisfaction of human desires and have value in exchange are called wealth.

In this thesis, only wealth (products with a value in exchange) used to make more wealth for exchange is called: **Capital**. It includes tools and machines for adapting (changing material in form or place), wealth used to harness the reproductive forces of nature (things that grow), and wealth used to facilitate exchange (inventory).

So, the three factors of production are land, labor, and capital. Land and labor are the primary factors, and capital, made out of the land by labor, is the compound factor. It could be considered indirect labor, but for the long tradition. Labor and capital are the active factors; the land is the passive factor. These three factors are mutually exclusive — each excludes the others.

Ownership
Every worker feels an inherent right to own the product of their labor. It stems from the right of self-preservation, the inherent right of every person to themself and their existence. Therefore, whenever food, clothing, and shelter are taken from the producer, not only do they lose the incentive to produce, but at some point, they will die. Hence, it follows that the violation is proportional to the amount taken.

Assignment of land
Since no one made the surface of the Earth, you may wonder how the land became property. We are told by anthropologists that it came about with the transition from hunting and gathering to agriculture and the family as the individual unit within societies. As long as the land assigned to each family had the same potential, the assignment of land allowed each family to keep what they produced — satisfying the instinctive feelings of self-preservation.

When families (including corporations) are the individual units within a society, exclusive possession of land is necessary. Who would plant a crop or build a house without exclusive possession, much less a modern factory? You couldn't put up a fence or lock the doors; it would be difficult, if not impossible, for people to keep what they produced. Title (exclusive possession) ensures that the landholder retains the product of their labor.

However, with land title, as the most fertile land is all taken up, as the land around safe harbors and along navigable waterways is monopolized, the ownership of these superior opportunities offers the owners an advantage over others. As people are drawn to these superior opportunities, the larger and denser the population, the greater potential of people to specialize and exchange — increasing the total production of the community. This greater production that results from the ownership of superior land and denser populations is taken by the landowners — simply because measurably less will result from the same application of labor and capital on the inferior, less densely populated land that is still free.

The Laws of Distribution
Wealth is divided between the landowners, labor, and capital that produced it. The laws of distribution indicate how much of every product goes to the owner of each factor. In formulating these laws, long and careful observation establishes two axioms (self-evident truths): 1. Human desires are never fully or permanently satisfied. And 2. People seek to satisfy their desires with the least exertion. In other words, people will always want more than they have at any given moment, and whatever their desires are, selfish or generous, they try to accomplish them with the least amount of work. These two Axioms (predictable patterns) of human behavior can be observed every time and place, as they govern the decisions we make in our daily lives. Then, having used the inductive method to establish these principles, they are applied deductively to explain how much of any product will go to those who exert their labor, advance the capital, and hold title to the land on and from which production takes place.

Wages, interest, and rent are all determined by the best quality land that is freely accessible to all — when such an opportunity exists. Taking the active factors, labor, and capital together, it is clear that no one would work and produce on another person's land unless they received as much as they could have produced working for themself on the best land opportunity that was freely available to them.

When the person who owns the capital and the person who uses it is two different people, the person who owns the capital gets whatever portion of the resulting product would have been necessary to induce them to store up the capital. The person who uses the capital gets an amount equal to the rest of the product that would have resulted in the labor and capital had been applied on the best land that was still free.

If the owner and user of capital are also the owners of superior land, then that portion of their income from producing on superior land is rent. If the land is underused, then the difference between what the labor and capital do produce and what it could have produced on the best land that is free is the actual rent. If nothing is produced, there is no actual rent.

Potential Rent

However, the Potential Rent, or in plain English, the rental value of land, measures the advantage that each landowner has over non-landowners, and with which this thesis and political economy are concerned. The Potential Rent is the highest rent a site is capable of generating.

In recent decades, it may be possible to determine the Potential Rent of agricultural land by letting it to the highest bidder. The user can supply the labor and capital and easily move if the landowner requires more than the land is worth.

In areas where residential and commercial uses generate the most rent, and buildings and other improvements are generally owned by the landowners (buildings can not be moved easily), the Potential Rent can be determined by income over expenses. By observing how much people pay for floor space in buildings on the site or nearby with similar locational benefits, and then by subtracting the interest that would be a return on the investment in the building, as well as depreciation, the cost of maintenance, management, and risk, the remainder is the rent. The Potential Rent is reached by providing the right sized building. If the building is too small, the income will be less than the Potential Rent. If the building is too big, the income will be less than the Potential Rent.

In the case of high-rise buildings, they cost more per story to build (each floor has to be supported by the floors below it) as they get higher. At some point, the interest and other expenses paid on higher, more expensive built floors (must be supported by floors below) would be greater than the income people would pay for floor space. At that height, the Potential Rent is gained.

In mining, the price paid for the ore in the market, minus the cost of extraction and transportation to the market, determines the rent. The Potential Rent is attained by just the right amount of labor and capital (machinery and infrastructure) at a given deposit of minerals.

Interest

Because capital, in general discourse, refers to any asset that yields an income, it seems important to digress and reiterate that in this thesis, capital is being used to identify products used to make more products for exchange. This would include buildings, tools, machines, seeds, and inventories. It would not include money, stocks certificates, land, or other monopolies. The latter is as valuable as products to the individual owner, but they do not add to the total value of things that satisfy human desires. A patent, for example, has value, but the income from a patent will diminish, to an equal amount, the consumption of the user of the patented item.

There is a generalization that the owners of capital exploit workers. That is to say: The owners of capital take a large portion of the values produced by workers who use capital. Because capital generally includes both land and products, a clear dichotomy between land and products seems necessary. Certainly, it can be observed, in the absence of intervention (in the free market), those with nothing but the labor tend to accept wages just enough to keep them working at maximum efficiency — no matter how much they produce. At the same time, those who consider themselves capitalists, owning land and products, say: "Without capital, the workers would be lucky to produce more than enough to stay alive. Therefore, we, as the owners of capital, are entitled to everything that is produced, beyond enough to incentivize people to work at maximum efficiency."

However, when land and products are separated into the two inherently different factors, it is possible to see the relationship between those who own the products used to increase the results of labor (capital) and those who use them. It is also possible to see the relationship between those who own the land and those who use it with labor and capital.

Capital is the concrete result of labor applied to land (the materials as they exist in nature). Therefore, the fundamental question is whether the owners of those products used to make more products have an unfair advantage over the users of those products when dividing the resulting wealth?

This is not an analysis of the income from secret knowledge or special skill, patents, or cartels that can monopolize or restrict the production of certain products. Instead, it is an examination of the income from the ownership of capital: products of labor stored up in concrete form, like buildings, tools, machines, seeds, and inventories used to increase the productivity of labor. It is a question of how the resulting wealth is divided between the owners and users of capital. It is simply asking: Why does the lender of capital expect to be paid, and the borrower of capital is willing to repay the owner more than was borrowed: interest.

With the use of capital, labor results are increased many times. Whether it is an ax or a tractor, a ship, or a store full of things for sale, capital grossly increases the results of labor, and that is what most people believe is the reason people pay interest. However, by focusing on a specific instance where capital directly increases labor results, it can be seen that increased efficiency is not the reason people pay interest.

Suppose I lent you a bow and arrows. You could start hunting immediately. Suppose the bow and arrows would last for 50 weeks, and it would take you the two remaining weeks of a year to make another bow and arrows for return. That way, I would receive in return what you borrowed, a new bow and arrows. Alternately, you could take the first two weeks of the year, make your bow and arrows and hunt for the remaining 50 weeks. Whether you borrow my bow and arrows or make your own, you will end up with 50 weeks' worth of game and a warn-out bow and arrows. Therefore, if any interest was paid to the loan of the bow and arrows, you, the user of capital, would have lost by an equal amount. Capital, the concrete results of labor, greatly increased the results of your labor, but in this particular instance, borrowing would not have given you an advantage.

It is certainly true that one person could not likely build an entire automobile in a lifetime. They would have to extract the raw materials and make the tools; they would have to use the tools to make the steel, glass, and rubber that they would form into all the different parts of a vehicle. And they would have to provide themself with food, clothing, and shelter while they were making the car.

Yet, tens of thousands of people do produce tens of thousands of cars in a minute fraction of the time it would take one person to do it. Some are working independently, and some are in concert. Some are producing the food, clothing, and shelter to sustain themselves and other workers. Some extract and process the materials, some make the parts, and still others assemble them into a car. In total, cars result from the cooperative efforts of labor — each worker adding value and then exchanging it for wages as raw materials are processed and moved to the consumer in the form of a car.

The accumulation of tools, machines, and inventories in this example, multiplies the results of labor many times more than in the first example, but it does not explain why it is more profitable to borrow capital than to make (save up) your own. If the payment of interest results from the increased productivity that capital gives to labor, the rate of interest would increase with the march of the invention and would likely be hundreds of percent. This is not the case.

Nonetheless, there are instances where there is clearly an advantage to borrowing capital over taking the time to produce and save it up, and people gladly pay interest for that advantage. Perhaps you could gather seeds as they exist in nature and then plant them at the proper time. But, suppose you had no seeds at the most advantageous time to plant. If you spent the first two weeks of the growing season gathering seeds, you would have experienced a measurably smaller yield at the time of harvest. Compare that to the results of borrowing seeds and planting at the perfect time. At the harvest, even after you extracted and returned the seeds you borrowed, you would have experienced a measurably larger reward. The capital would have increased in value and given an advantage to the borrower, for which interest would have been mutually agreed upon.

This is called the fructification thesis of interest. It asserts that interest arises from the increase in the value of capital in the mode of production called growing. It could be cropped, including fruit trees where the fruit is considered interest in the investment of the tree. It could be timber or livestock that grow. Perhaps the most obvious example of the increase in the value of capital is a winery. Unlike bricks or machines or basketballs, wine, under the proper conditions, ages and increases in value. This explains why the lender would expect, and the borrower would agree, to pay interest. This practice of paying interest for the loan of seeds is referenced in ancient Mesopotamia.

Certainly, there are many instances where there is an advantage of time in the use of existing capital. Growing food and lumber is one. Harnessing the sun or the wind is another example where you would have to expend a significant amount of time and work to build the collectors or windmill before you could get any energy; but if you could borrow the collectors or the mill, you would be getting the energy while you were producing the capital to be returned. That would give you an advantage for which the payment of interest would not be a loss to labor but a payment for a valuable benefit.

It takes a lot of work to write and print the first copy of a book. Each subsequent copy takes a minute fraction of that time. As long as the capital (original copy in a computer) is maintained, an unlimited number of duplicate copies can be made for a fraction of the original cost. The use of existing capital, in this case, gives an advantage of time in production.

As long as a modern steel mill is maintained, the continuous production of steel can continue. However, if all the steel mills were destroyed, it would not mean there would be no more steel; it would mean that a much more basic process would have to be used until a new mill was built and put into operation. For that advantage of time, people pay interest.

Capital is necessary to maximize the results of labor in all three modes of production, adapting, growing, and trade. However, the primary benefit of capital in adapting (making things) is in use, and the primary beneficiary is the user. This seems equally true in regards to inventories and trade. The primary benefit of capital in growing things is the increase of capital, and the primary beneficiary is the owner. Any labor that is necessary to affect the increase (as intending crops) must be paid out of the increase, and they must be paid as much as their labor would have produced if it had been employed in adapting (making things). The owners of any capital that is borrowed for adapting must be paid as much as their capital would have increased in value if it had been maintained in a form capable of increase (like wine). My reasoning leads me to think that all applications of the capital where there is an advantage of time add to the increase of capital and are the reason for interest, whether it is the solar collector or never having to repeat steps that were originally necessary.

While some things grow much faster than others, there is a countervailing force that brings such investments into equilibrium. Knowing that rabbits multiply faster than horses and wanting to get the greatest increase of capital, investors are drawn to rabbits. As the supply of rabbits increases and the supply of horses contracts, the value of horses tends to rise, and the value of rabbits tends to fall until there is approximately the same rate of return for rabbits and horses. Through the mechanism of supply and demand, all the advantages of time in the use of existing capital are pooled or averaged.

In all modes of production: Adapting, Growing and exchanging, capital is necessary to maximize the results. In adapting and exchanging, capital grossly increases the results and the value of labor. The more the most efficient capital is, the greater the value of labor — up to the point of diminishing returns. In growing, the capital itself increases in value. The more the most efficient capital is, the greater the increase in value up to the point of diminishing returns. Because capital is the result of labor, and all forms of capital are interchangeable, the competing demand between the users (labor) and the owners of capital brings the return to all forms of capital to a common level or equilibrium, which varies only with risk.

To give an unencumbered example, let us say that grapes are grown on the best land that is free. Some years the grapes produce a highly desirable wine, which yields enormous increases in value; other years, there are blights, and there is no increase or even a loss in the value of capital. Because the grapes may yield no return at all, it requires a much higher reward to induce the storing up of grapes as capital. The much higher rates of return are offset by much lower rates of return comprising the total return to the grapes as capital.

Wages & Interest
Keep in mind that demand for capital is a demand for the labor to produce it, just as a reduction in the demand for capital is a reduction in the demand for the labor to produce it. While interest will be equal to the average increase of capital, or to focus on the reward, whatever amount of wealth is necessary to induce the storing up of capital, wages will be equal to the rest of what labor and capital could have produced on the best land that is free.

The wages of one worker, as compared with another, vary with the supply and demand for the results of each worker's particular skills, knowledge (amount produced), and the agreeableness of the endeavor.

Wages and Interest In Equilibrium
Although wages are measured by an amount, and interest is measured by a percentage, there is an equilibrium between wages and interest. People expend their labor producing capital in the form of tools and machines that increase the results of labor and tend to raise wages. But, they could expend their labor on producing capital that grows, like crops. If the increase in value was greater than wages, people would divert their labor to the production of capital that increases in value and get their reward indirectly — and vice versa.

Analogously, one person could invest his capital in a sawmill, increase the results of his labor, and get higher wages. Another person could invest her capital in seeds and farm equipment and get the increase in the capital: interest. The mode of production that yields the highest return will draw more labor and capital until supply and demand will bring the returns from these two modes of production to an equilibrium.

Population And Knowledge
As populations increase and settlement extends the free opportunities to lands of less and less quality, wages tend to fall. Just as no one would work for someone else for less than they could produce working for themself — no one would pay a worker (except under special circumstances) a significantly higher wage than they could produce working for themself on the best land that is free. However, with orderly development, the diminished quality of the best free land would be offset with inventions and the free land's proximity to the older, more densely populated communities with which people on the free land could trade.

Lands that are close to navigable water and superior for making things attract denser populations that enable specialization and trade. The denser the population becomes, the greater the potential to specialize labor, accumulate capital for each specific task, and exchange the results. The increase and concentration of population and the increase of knowledge affect the production and distribution of wealth. Every increase in population permits a greater specialization of labor — up to a point. Every increase in population enables tools and machines to be in more continuous operation. With every new worker, the total production of the community is greater per person than it was before — until the point of diminishing returns.

By working together, two people can build a house more than twice as fast as one. In some instances, they combine their efforts to lift and set the beams; in other instances, they divide their labor, specializing in framing or finishing. Perhaps three people could build a house more than three times as fast by keeping a nail gun in near-continuous operation — increasing the results from the use of capital. The addition of each worker increases the efficiency of all workers until they start getting in each other's way. Then, each additional worker reduces the efficiency of all workers in a given space.

The Law of Diminishing Returns

Two things cannot exist in the same place at the same time. There are a certain number of workers in a given space that will maximize productivity; any less gives a smaller result, and any more will give a smaller result. Each worker needs a certain amount of space, and they can only work so fast before the results are diminished by mistakes.

Modular home factories are a clear example of Inventions and innovations increasing the number of workers within a given space at a certain time before productivity is diminished. The way they build houses is reminiscent of the way Henry Ford built cars. They are able to increase the speed at which they operate before productivity falls.

Communities are affected by the same phenomenon. By building infrastructure (roads, pipes, wires) and providing civil service, more people are able to live and cooperate with denser populations and greater efficiency in a given area before reaching the point of diminishing efficiencies.

Inventions, innovations, and new discoveries continue to increase the results of labor, and to the degree that they increase it on the best land that is free, it raises the general rate of wages and compensates for the resort to less and less naturally desirable land. This, coupled with the ability of the new settlers to trade with the people in older communities where there is more infrastructure and populations are denser, goes a long way to compensate for the free-land opportunity being pushed to lands that are less and less potentially productive.

At the same time, the vast majority of inventions increase productivity more on land that is naturally superior and land where the population is dense. Farming machinery yields a greater harvest on more fertile land, and mining equipment yields a larger product where the deposits of ore are richer. Elevators and robotics add more to production where the population is dense. While wages and interest are increasing as an amount, technological advances generally increase the results of labor much more where the population is dense. And, where the population is dense, all the land that is owned. Therefore, the rent of land captures all greater increases in production — over and above those at the free land opportunity.

While rents are increasing on superior lands, wages and interest tends to increase as well. But, because rent is increasing faster than wages and interest, rent is becoming a larger portion of what is produced. This is how the rent of land captures an increasing portion of the wealth that is created by the conscious and subconscious cooperation of the community and society as a whole.

Population And Productivity
It is easy to imagine that you have discovered an uninhabited region. Let us suppose it is large enough for many, many people to live, each family with 160 acres. For now, let us imagine you are the only one, and you have established a shelter on the very best land that you could find. All the land nearby seems as good as every other and as good as any you are aware of anywhere else as well. It is not only very fertile but the weather and climate are ideal. You have delineated a parcel of land which is as big as you could possibly use and have claimed it to be yours.

Now, in spite of this land being ideal, you are extremely limited as to how much you can produce for yourself. Wild game is exceptionally plentiful, and you are able to gather many edible foods. You have a few tools that you have brought with you, and you are able to build a house from the stone and trees nearby. In order to get enough food to sustain you, clothing to keep you warm, and shelter to keep you dry, is a relatively easy matter. But, beyond that, each improvement is a monumental task. You could, as time went on, cultivate certain foods if you found them to be scarce or a distance away. You might make thread from natural fiber and weave it into cloth or sew animal pelts together; you might make a plow with a blade from some very hard wood, but each of these constructions would be of the greatest difficulty. No matter how much skill and knowledge one person has, the individual is enormously limited, even when engaging in the most bountiful opportunities of nature.

Now, imagine another settler coming and claiming a plot adjacent to yours. Both of you could work together, combining your strength for lifting, rolling, or pulling. Both of you could begin to specialize and produce different things for exchange. Perhaps you have found some of the hardest wood for a blade and have made yourself a plow. At the same time, your neighbor might have made a loom. Whether you plow his field and he weaves your fibers, or you make two plows, and he makes two looms, by specializing and exchanging, each of you would have gotten a greater result than you could have gotten without this cooperation.

With every new person comes a greater ability to combine and separate everyone's efforts. One group grows food, another makes clothing, and a third builds a shelter. This division of labor enables the accumulation of tools and machines designed specifically for each different type of production. It enables each tool and machine to be used for a longer percentage of the time, economizing its cost.

As the population of the region increases, some people are able to devote their efforts to transportation, facilitating trade with other communities — sending out timber, or perhaps different minerals, in exchange for manufactured products. Some of these products coming in would be in the form of capital, used to increase the results of labor. Others would be consumer goods.

The more people come to this special region, the greater the productivity of each of the people who are here. This draws people to the area and encourages the specialization of work. With every additional worker, the productivity of all workers is increased — until the mud begins to hamper travel, crossing creeks impedes transportation, freshwater is harder to establish, and waste is harder to get rid of. At some point, the addition of each new worker does not increase the productivity of all workers. The community has reached the point of diminishing returns. So, they stabilized the roads, built bridges across the creeks, established freshwater pipes, and so on. Then a larger population can cooperate with greater efficiency, and every worker will be more efficient than before.

The community evolves into a village and then a town. In several generations, it becomes a city with perhaps an auto assembly plant — minute divisions of labor and phenomenal economies of scale. Each worker produces many times what our first settler was able to produce. However, wages and interest are not determined by what people produce but by what they could have produced on the best land that is still free. All the greater productivity that comes from denser populations enabled by the infrastructure and public service and all the greater results of inventions that result from denser populations, which include the smallest divisions of labor and the largest economies of scale, is taken by the owners of the land.

The Selling Price (Value) Of Land

The rental value of land (Potential Rent) is the most that people are willing to pay for its exclusive possession — for a specified time. Taxes and other expenses are paid out of the rent and leave a lesser amount as an unearned income to the landowner. This unearned income is equated (compared) to the interest paid for the use of capital. The selling value of land is equal to the selling value of capital, yielding the same income. The equation is called capitalization. That is the starting point, and if the income from a parcel of land is not expected to increase in the future, that is the entire process.

However, what everyone knows is that as populations increase, technologies advance, and inventions march on, productivity and the potential income of most land go up. People are willing to offer more for land when they think the income will increase significantly in the years ahead. The selling value of land, like everything else, is set by the person who offers the most for it in exchange. The person who expects the largest income in the future, and can outbid all others, gets the land and, by doing so, sets its market value. That is why land usually sells for more than capital yielding the same income. In the most distressed areas of cities, land sometimes sells for less than capital yielding the same income because its income is expected to fall in the future.

Land Speculation

In the expectation of the selling value increasing, many parcels of land are held as an appreciating assets. It is like holding gold or silver and waiting for it to increase in value. This prematurely pushes the free-land opportunity to less potentially productive land; it reduces wages and interest everywhere and increases rents.

Inventions, innovations, and new technologies march on. This increases the potential of all land and compensates in varying degrees for the premature extension of the free land opportunity. Sometimes it makes previously unproductive or uninhabitable land productive or livable.
In some cases, land that is owned by speculators is completely unused. In other cases, the land is under-used. In the first case, the return to the landowner is the increase in the selling value of the land, minus taxes and other expenses; no capital is needed. In the second instance, some capital is required, and there is income that results from its use.

With the exception of an oceanfront beach where people pay to swim, very little can be produced anywhere without capital, and it is an exception where enough can be produced without capital to yield rent. In recent decades large parcels of agricultural land have been leased, and the capital (portable buildings and equipment) is supplied by the tenants. The landowners enjoy both the income and the increases in the selling value.

There are instances where land is used with long-term leases, and the tenants construct and own the buildings — even high-rise buildings, but generally, landowners provide the building and increase the charges more frequently as the location becomes more desirable.

Urban land is potentially more productive by many times than rural land. These concentrated populations with greater productivity are enabled by enormous government investments in infrastructure and public service: paved streets with access to water and sewer, pipes and wires that deliver gas, electric, and communications, trolly and subways, police, courts, and fire departments.

Although all cities and suburbs have numerous parcels of land sitting idle, there are many times as many parcels significantly underused. At one extreme, it could be a surface parking lot where the only capital is a layer of blacktop. Or, it could be a three or four-story building where a high-rise is needed to put the land to its most efficient use. These minimal uses like surface parking, a hotdog, or a news-stand, are called taxpayers. They often generate enough income over the return to the capital to pay the taxes and other expenses, so the landowner gets the entire increase in the selling value. In other cases where there is a substantial building, landowners gain from income in excess of the return to the building (capital) and the taxes, plus the increase in the selling value of the land. However, when the sale of land takes place, if the building is significantly undersized unless it can be enlarged, the value of the building is zero. That is because it will be torn down to make room for a new building that puts the site to its full economic use.

There are many lesser uses like Self storage units, Diners, Burger stores, and even Gas Stations that are put on trucks and moved to another location when the land is fully developed. Many of these would be full uses during the evolution from rural to suburban and urban development. Too often, they remain long after a much higher building is necessary to put the site to its full economic potential. In some cases, the Burger store would be just one unit on the street level of a high-rise building with a parking garage if the site were put to its full economic use.

Given that, it is the increase in the population that increases the value of land — if all landowners kept their land idle, waiting for it to increase in value, it would not increase in value. By the same principle, all non-use and under-use of the land reduces the population and the divisions of labor within any given area, wastes the public investment in infrastructure, and moves labor and capital to less potentially productive locations — all of which reduces productivity. By reducing production, land speculation lowers wages and interest far more than it raises rents.

Most often, these urban and suburban sites, which can be seen in every city, are broken-down buildings and trash-strewn eyesores. On rare occasions, they are beautifully maintained and open to the public, like privately owned golf courses. Unfortunately, just as they are needed most for parks and open spaces, they are built upon. Parkland that is privately owned does not insure it for the future.

Mineral lands, from gold to oil and gas, are often held idle for speculation. Given that deposits are of a fixed quantity, when the price of oil or minerals goes up rapidly, holding them in the ground sometimes yields a higher rate of return in the long run than extracting the minerals and selling them. That adds to the shortage in supply and increases the price even more. There is a long history of mineral owners holding deposits idle for speculation in America.

Land speculation: non-use and under-use of valuable land results from treating it as property. Any time the selling value of land increases more than the real estate tax levied against it, plus the current rate of interest, there is an incentive to hold it as an appreciating asset. In some cases, it is more profitable to hold two or three empty parcels rather than investing the same total amount of money in one parcel with buildings and other improvements that put the land to its full potential. By fully developing one site, the landowner receives interest on the capital, the actual income of the land, and the increase in its selling value. As long as it is profitable to hold un-used and under-used land, the free-land opportunity will be exhausted, no matter how much land a country might have in total.

No Free Land Opportunity

Today, there is no more free land in the United States that is capable of supporting subsistence. That is to say; there is no freely accessible place where a significant number of otherwise unemployed people can go legally, build a house and grow enough food to sustain themselves. There is nowhere they can get free access to land and produce something for exchange that will give them enough to provide food, clothing, and shelter.

There might be places where you could live without the landowner even knowing you are there. But, if there are, not enough people know about those places to make a difference. Because of the laws affirming squatter's rights, the owners of unused land have enormous incentives to clear their land of uninvited inhabitants. In some states, they need only document their occupancy of the land for five years to obtain legal status (adverse possession). So, the laws to help the landless sometimes make it harder to access unused land and get a living.

Wages & Interest Without Free Land

When there is no longer a free land opportunity, wages tend to a bare minimum below which productivity would fall more than wages were diminished. The least demanded (least skilled and educated) workers would get hungry, weak, and sick. Their productivity would decline more than their wages were lowered. If the wages of skilled higher educated workers were lowered beyond a certain level, they would lose the incentive to acquire the skill and knowledge and work harder and more efficiently. The number of skilled workers would decline, and productivity would fall more than their wages were lowered.

When there is no longer a free land opportunity, interest (the return to buildings, machines, inventories) falls until were it to fall any more, the incentive to store up capital would diminish, and productivity would fall more than interest was lowered.

It seems possible that a banking system, which can create money, can lend it to landowners at exceptionally low rates of interest (land is collateral). With the money, landowners can buy capital and indirectly get the use of it at the same exceptionally low rates of interest. That is to say: landowners could, in this way, get the use of capital for less than anyone would be willing to produce capital and lend it to them. How long this could continue before there was hyperinflation, I don't know.

When the point is reached where any reduction in wages and interest reduces production more than wages and interest are lowered, it is at the expense of rent. That is the limit of the speculative advance of rent. Production, minus wages and interest, equal rent. This is like reducing the food of slaves. At some point, a reduction in food will reduce productivity more than the value of the food that is saved. That is the limit of slavery.

Unemployment

First, land speculation drives wages and interest to a minimum. Then, as each additional parcel of land is withheld, unused, or underused, it causes unemployment. In urban and suburban areas with intense infrastructure, the potential for employment is many times that of rural areas. Therefore, non-use and under-use of urban and suburban land cause many times more people to be unemployed than in rural areas. The same thing is true of housing. Land speculation is identified as the objective because it is the primary motivation. But, unused and underused land with value is the root cause of unemployment, low wages, and unaffordable housing, regardless of the motive.

Current Policies

Having explored the natural tendencies of the free market in the distribution of wealth, it is well to return to the current political policies instituted to preserve the middle class and alleviate poverty. The legal Minimum Wage and the eight-hour day safety regulations, Workman's Compensation, unemployment insurance, and that part of Social Security, and Medicare paid by employers, have certainly increased the rewards of all workers. Wages are higher than they would be in the free market. Public housing, Rent Control (stabilization), and Landlord-tenant codes have made housing rents more affordable for some. FHA and other government programs have helped other workers with homeownership. They have intervened or redistributed wealth and softened the tendency of wages to a minimum. However, these policies did not create the incentives necessary to put enough valuable land to fuller use. Therefore, they did not create the needed jobs and housing.

It is also true that wages and prices are not always independent. We know that there is a shortage of basic housing for low-wage workers, and no one wants to be homeless. Therefore, those with the lowest wages pay as much as they can for a roof over their heads. And, because there aren't enough houses for everyone, some of them are homeless nonetheless. So, with each rise in the Minimum Wage, much of it ultimately goes to higher housing rents. That is why Public Housing, in spite of its problems, has been such an important factor in the need for housing.

In recent years we have changed the tax code, so the rich and corporations pay significantly less than they did before, and we are debating an increase in taxes on the rich and corporations. It is true that these taxes are largely paid out of what would otherwise go to the owners of land and other monopolies. But to reiterate, we must create incentives so that valuable land that is sitting idle or underused is available for employment and housing.

Depressions And Recessions

Historians have recorded periods of unusually high unemployment for hundreds of years; some of them have lasted for as long as five years. The high unemployment during the "Great Depression" of the 1930s lasted the entire decade.

Economists designate recessions and depressions by the number of months in which the economy fails to expand or actually contracts. However, in practical terms, recessions, and depressions, which are severe recessions, are simply intensifications of the general problems of unemployment and lower wages.

There are a couple of things that tend to make recessions worse. Workers who become unemployed reduce their demand for the products of other people's labor, triggering a chain reaction that causes people to get laid off in other industries. And, because an increasing number of people fail to make payments on their mortgage and other debts, credit is withdrawn. The withdrawal of credit has the same effect as reducing the supply of money (Deflation); it lowers prices without lowering debts, causing bankruptcies, and throwing employees out of work.
The supply of money is often increased to counteract the withdrawal of credit and deflation. When the recession is over, and credit is increased again, the new money and the added credit compete and cause inflation. While fixed-rate mortgages and most debts remain the same, It increases the value of everything else. This cancels debts, but it does it at the expense of people who have or are owed money.

However, the root cause of recessions and depressions is labor and capital's inaccessibility to land. In other words, not enough land is sold or put into use by its owners to employ all the people who were replaced by machines and all the new workers that result from the increasing population.

Recessions and depressions often follow periods of technological advance. The Suez Canal and the Transcontinental Railroad were completed in 1869, enormously increasing the efficiency of transportation. The typewriter was improving communication, and many other inventions were increasing productivity. Then suddenly, in 1873, a worldwide depression caused high unemployment and lower wages for the next five years.

Half a century later, in what was known as the Roaring 20s, productivity was increasing, and the price of manufactured products was falling. In 1926, a Model T Ford cost $290. After adjusting for inflation, that was just 17 percent of its price in 1910. Trucks and tractors cost less than a team of horses. Every product that could be sold in mass quantities could then be made more cheaply on the assembly line and sold at a lower price. This was due to the development of heavy-duty interchangeable machine parts. They had previously learned to make them for rifles and sewing machines with smaller parts. In the 1920s, they were able to make them for cars, trucks, tractors, and farm machinery and put them together with the assembly line.

For much of the 1920s, invention after invention had eliminated jobs on the farm. There was a proliferation of tractors and trucks, threshers, balers, planters, cultivators, harvesters, and the use of commercial fertilizers. As each truck and tractor eliminated horses, the land that had grown horse feed was used for crops to sell. Farmers were exporting less food to Europe after WWI, and more food was being grown with many fewer workers as the demand for food diminished. Many farmers defaulted on their mortgages and went bankrupt.

However, at the same time, cities were thriving. The unemployed farmworkers migrated to the cities to work in the factories along the rivers making cars, trucks, tractors, and farm machinery. They were also making washing machines, refrigerators, radios, toasters, and all kinds of other electric appliances. At the same time, roads were being paved, electric and telephone wires were being strung, and urban areas were getting water and sewer systems. Steel framed buildings with elevators and multi-story factories were being constructed with electric lights and power that operated 24 hours a day, seven days a week.

Whenever it is possible to produce an item cheaper, the tendency is always to lower the price, expand sales, and increase profits with greater volume. That is how Henry Ford became the second richest man in the world.

It is easy to imagine: there were only so many industrial sites that were prime for manufacturing. They were along the rivers with access to the railroads and utilities. As inventions, innovations, and productivity accelerated, manufacturers bid against each other to get the choice of locations. They made offers based on future expectations.

Cities provided increased housing for factory workers. With the affordable car, land that was no longer needed for farming near the cities offered a place for workers who could live and drive to work in the urban factories on the newly paved roads. This land, too, was being bid up in value. On the other side of the equation, the owners of unused industrial (residential and commercial) land could only sell a parcel once, The more they were offered, the more they wondered how much they might be offered in the future, and the more many of them waited to see what they would be offered in the future.

The banks and lending institutions were extending credit with the expectation that productivity and profits would continue increasing at an accelerating pace. Some economic historians have said that the price of land continued upward, fueled by increased credit — until a significant number of borrowers failed in their payments. In reaction, the banks and lending institutions withdrew credit, and that, of course, lowered what was being offered to buy land. Land values fell dramatically.

If the owners of unused land had accepted, in each case, the highest offer, no matter how low, and sold their land as needed, the economy would have continued expanding with new technologies and the increase in population. However, when not enough of the lower offers were accepted (expecting higher offers later), businesses could not expand, build additional factories, and lower the price of their products. They could not hire the people that were being replaced by machinery on farms and elsewhere or people who were becoming adults and joining the workforce. That accounts for the first phase of unemployment.

Then as the people who had been working but were replaced by machines reduced their demand for the products of other people's labor, factories could not sell all the products they were currently making. The reduction in consumer demand prompted many factories to lay off a percentage of their workforce, while others closed. The economy contracted severely during the depression.

How far an economy could shrink in a downward spiral where everyone who becomes unemployed buys less of other people's products, causing other people to get laid off, is not clear. In 1932 when the depression was at its worst, 25 percent of the workforce was believed to be unemployed, and 75 percent continued to work at lower wages.

Once a recession is in play, there are three things that would tend to diminish its severity or end it if applied sufficiently. Once the owners of unused land, capable of employing workers, settle on a price they would accept, then 1. any reduction in wages and interest would make the price of land more affordable. 2. Every increase in productivity (inventions, innovations, new skills, and knowledge) would give labor and capital more wealth to pay the purchase price of land. And 3. If the owners of unused potentially productive land accept a lower price, it will make the price of land more affordable. When enough land is put to use (generally sold), people go to work, and the recession or depression is over.

Some combination of these conditions prevents recessions and depressions from getting worse and ultimately brings them to an end. Inflation lowers the asking prices of land in terms of wealth as the value of money falls.

Once the recession is over, employment goes up to pre-recession levels, and as time goes on, the speculative price of land begins to rise again; the seeds of the next recession are sown.

WWII

There is no doubt that the Great Depression ended with WWII. Wars were fought over land, and the belligerents were suffering from severe unemployment. The industry could not expand enough to put everyone to work. This would explain the German government preparing to invade Poland — an effort to create a "Living Room." It may explain Italy invading Ethiopia and taking part of their farmland.

The United States did not diminish unemployment by putting its citizens to work on the land in other countries. But, in addition to sending people to fight the war, the U.S. government created the incentives so that previously idle land would be used for the war effort. The unemployed people went to work on the land, mining ore, making steel, and building war machines. The depression ended when labor got access to land. Nothing can be produced without access to land.

Current Ameliorations Of Poverty

Throughout American history, publicly funded education has been increased to promote competent, more productive citizens. In recent decades increasing public education was expected to increase employment. In 1937, Social Security required employers to deduct a percentage of most employees' pay and add an equal amount to a fund that would provide for old age or an inability to work. Ever since the depression of the 1930s, the federal government has taken on a greater role in the alleviation of poverty. In 1938, the legal Minimum Wage was instituted and required everyone except agricultural and domestic workers to be paid at least 25 cents per hour ($4.83 in 2021 dollars). In 1965, Medicare was started to cover the bulk of the costs of healthcare for Senior citizens over 65. These are now the biggest interventions in the distribution of wealth. In addition to Social Security and Medicare, there is a myriad of welfare programs aimed directly at alleviating poverty by the redistribution of wealth. They are conducted at all levels of government and cost by some estimates a total of nearly a trillion dollars per year.

The only reason these programs are needed is that land speculation has caused an artificial shortage of land in spite of its abundance. As a result, there are always more people seeking employment than the opportunities permit. Wages and interest constantly tend toward that point below which productivity would fall more than wages and interest were lowered, and there is always a shortage of housing. The shortage of land pushes the price of housing (for rental or sale) beyond the means of many Americans.

The Current System

We are still evolving from the feudal system, where the king, who sends a conquering army, divides the land among his subordinates and charges them feudal dues. In America, the land was, in many cases, discovered the way we might discover a good restaurant and claimed by a king before possession was taken by military force. It was then leased and subleased, and in many cases, the people who worked the land enjoyed the smallest part of the produce. The Dutch, for example, claimed and occupied New Amsterdam until the British forced them out and renamed it New York.

After 1783 when the colonies became independent, the king and many of his subordinates were out, and many of the Colonial soldiers got a little homestead. Nonetheless, most of the land was still titled to people who did not work it but collected rents or held it idle for resale in the future. Were we to trace the title of any parcel of land in what was the 13 Colonies to each preceding owner, we would eventually get to a claim based on the Right-of-discovery. That means claims by Christian European kings whose representatives had found it. In many cases, the native Americans were paid for the land, but these bills of sale from the natives were not legal titles; those came from Kings. They were agreements not to fight over the loss of their land, and many were agreed to under the threat of annihilation.

In the case of the Louisiana territory, which doubled the size of the country in 1803, the fifteen million dollars simply paid Napoleon not to interfere while the inhabitants were subjugated and eventually exterminated. The Oregon territory was divided with Britain, while most of the western territory was conquered by Mexico. The Mexican government had begun the process of native subjugation when the land was taken from them between1846 and 1848. Most of the Mexican titles were honored, but with bribes and fraud, most of the land was acquired within a few decades by English-speaking citizens of the United States.

The American government sold a large portion of the land they had taken. Enormous areas were sold to speculators by the square mile. They, in turn, resold to actual farmers in smaller parcels that could be farmed by a family. They made enormous profits. Later the government sold land in smaller plots to actual farmers, and squatters got to buy the land they occupied.

A total of 131 million acres were granted to the railroads in exchange for building and running the railroads. This gave a phenomenal increase to the productivity of the country. They gave one and a half million families 270 million acres (250,000 sq. Miles), mostly west of the Mississippi, in plots that were mostly 160 acres. A hundred million acres were given to the states, and much of it went for colleges, universities, and new towns.

It is estimated that nearly 60% of all the land in the U.S. is now privately owned and accounts for the best quality land, while about 33 percent is retained by the federal government and includes mountains and deserts or is underwater. It is generally considered very low-quality land. The small remainder is held publicly by the states and Indian tribes.

In the early days of the United States, public revenue for the states and local governments came primarily from taxes levied on real estate, which generally meant land, buildings, and fences. Primarily, the Federal government got its revenue from import taxes, the sale of public land, and excise taxes like the one on whiskey. The revenue from the sale of land was generally far less than imports, but in some years, it was nearly the same.

The biggest change to these policies started with the income tax in 1913 and payroll taxes in 1937. However, in terms of public revenue, Social Security deductions (and now Medicare) are not exactly taxes in the Normal sense. They are closer to a form of mandatory savings account for retirement with insurance premiums on the part of the workers. Perhaps, employers are paying into them with a tax or a forced contribution to the worker's retirement and insurance policies — like a provision of the Minimum Wage.

Today, less than ten percent of total federal, state, and local revenue comes from real estate, and it seems likely that less than five percent of total revenue comes from the value of the land.

Most taxes are paid out of what would otherwise be taken by the owners of land and other monopolies. In the absence of interventions and redistributions like the Minimum Wage and the Earned Income Tax Credits (government subsidies to low-wage workers), wages would tend to a point below which productivity would fall more than wages fell. At that point, rent would fall, so wages are not lowered anymore. The Min. Wage and the earned income tax credit raise wages beyond that market-driven floor, which in turn, allows sales taxes, wage taxes, and payroll taxes to bring wages of the lowest-paid workers back down toward that market minimum below which wages can not go any lower.

All higher wages are higher because employers are competing for workers with special or superior skills or knowledge. If any of the higher rewards that are necessary to attract those superior workers are taxed away, the incentive to acquire those superior skills and knowledge is diminished, fewer superior workers result, and productivity falls. Therefore, the taxes levied on the higher wages of superior workers are compensated with even higher wages and paid at the expense of rent. Being a monopoly income rent can be diminished completely by way of taxation on the wages of superior workers and interest without reducing the incentives to produce at all. However, although the vast majority of revenue at all levels of government comes indirectly from land rent and other monopoly income, only a land value tax imposes a penalty for speculation (idle and underused land), which is the cause of unemployment, low wages, and a shortage of housing.

There are many commentaries that exaggerate the degree to which our confiscatory tax system on income, sales, and capital gains diminishes the incentive to produce. While these taxes steal directly from workers and the owners of capital, most of the money is actually paid at the expense of rent. To reiterate: most taxes are offset with higher wages and interest. So, those taxes that are offset with higher wages and interest could be increased until the rent was reduced to zero without reducing net wages or the incentive to produce.

There are three clear exceptions where taxes do significantly reduce production. Import taxes divert labor and capital to less efficient applications. This results from increasing the price of imported products and therefore stimulating less efficient domestic production, which is able to charge higher prices. The second exception is the real estate tax that falls on high-rise buildings. Because buildings cost more per square foot to build as they get higher and higher, the tax based on the value of buildings increases the cost of providing high-rise buildings and lowers the height at which the cost of providing a building exceeds the income from the building and the land it sits on — significantly reducing the most profitable height of buildings.

In cases where taxes are paid at the expense of wages, the Minimum Wage could be raised in sync with the increase in the per capita productivity of the country. That way, it wouldn't diminish rents as an amount but would share some of the increase in productivity with labor.
In the third case, city slums, all taxes diminish production. These areas are so depressed that the total taxes add up to more than the rent of land. It makes it unprofitable for investors to provide housing and places of employment. That is, after taxes, there isn't enough left to pay wages and interest, so production stops.

Nonetheless, at their root, these intractable problems of employment, low wages, and affordable housing are caused by the non-use and under-use of land. Land speculation reduces productivity by forcing labor and capital to less potentially productive locations. And in the process, it wastes large investments in the infrastructure and public service; It requires roads, pipes, and wires to be built and maintained in front of unused and underused land; it increases the distances that must be traveled and goods transported.

Whether it is a soup kitchen, food bank, or homeless shelter run by a charity; welfare payments, subsidized housing, and Medicaid run by the government; or it is publicly funded education, Social Security, and Medicare, these are all measures aimed at the alleviation or the prevention of poverty. However, as more and more money is spent on these programs, the need for these programs becomes greater and greater. That is because we are not addressing the cause of poverty. It is as though we are devising more and more efficient ways to bail out the ship of state as the hole in her bottom gets bigger and bigger by the day.

The Remedy

The simple yet effective solution to unemployment, static wages, and the increasing cost of housing is to make the land a common opportunity — a common asset. Keep in mind that land includes all the offerings of nature, including the airwaves and the path that satellites travel. Land does not include people and their products. Common ownership of land can be achieved by simply making the title to land conditional upon the payment of its rental value.

If we do that, we can safely abolish all taxes that take wealth and income from those who produce it, and we can socialize (have government-run) all businesses that are in their nature monopolies — businesses in which there cannot reasonably be a competition like the roads and railroad tracks and the wires and pipes that run along with them.

To anyone who has not followed the analysis, taxing the rental value of land will seem like a simplistic solution to an immensely complicated problem. To those who have grasped these principles, it will be a logical prescription because these intractable problems of unemployment, subsistence wages, and the shortage of housing are at their root a matter of treating land as property and the non-use and under-use that result.

For those who are fully using their land, the payment is equal to the value of the benefits received — nothing more. For those who hold title to land that is not used, the payment becomes a burden so great that the owner will have to put the land too full use or give it to someone who will; for idle land yields no income, and the rent would have to be paid in spite of it.

As the most potentially productive land is fully used, cities will be developed and redeveloped to their full potential. First, empty buildings and vacant lots will be rebuilt and put to their highest and best use in all the valuable areas. This will include high-rise buildings in the most valuable commercial regions. Their height will be limited by the point at which the income from additional floors would exceed expenses or legal limits for the public good.

The absence of taxes on buildings, sales, and wages will make some previously distressed areas of cities profitable right away. As the development and redevelopment of valuable land go on, it will radiate into the previously worthless slums. The proximity to healthy functioning neighborhoods will stimulate economic activity within the previously worthless regions. As jobs, housing, and profitable enterprise emerge in a safe, clean, and aesthetically pleasing environment, the value of land will rise, and those previously worthless areas will yield public revenue in proportion to the value of benefits received.

In many cases, idle industrial sites are worthless because of polluted land. Governments may have to acquire the sites and bear the expense of cleaning them up. However, after that, the community will collect the full rental value of the land from the new landholders, and it will add to the common opportunities and a healthy environment.

It is true that mineral land with value will then be mined with an incentive to get the minerals out of the ground and to the markets quickly, as the rents paid will be based on the value of the minerals still in the ground. This policy will put a screeching halt to companies spending money on exploration. The expense would be wasted because as soon as the minerals were known to be there, the government would collect the rental value of the land containing them. Future exploration would have to be done by the government. Therefore, the government could spend the same amount of money previously spent looking for coal, oil, or gas on developing solar, wind, or other non-carbon omitting safe sources of energy.

In the suburbs, there will be infill as empty lots are developed and put to their full potential. In general, urban and suburban land will be put to its most economic use, limited by legislation that protects our health, safety, and the environment. A major focus will be deciding on the best investment in physical infrastructure needed to enable the dense populations that specialize their labor and produce more and more efficiently in ever greater economies of scale.

As our cities and suburbs are redeveloped and evolve to their full capacity, those who hold the land will hire more labor and acquire more capital necessary to maximize production — to pay the rent and get the best reward for their labor and capital. That will draw people from the less potentially productive land until much of the least potentially productive land in the country has no value at all.

There, the Free-land frontier will be re-created. There, all wages and interest will be determined. Whatever enhances the lives of those who live and work on the free-land opportunity will enhance the lives of all other workers, for no one will work for another person unless they are paid as much as they could have produced working for themself where the opportunity to do so is free.

Some people will continue to live in the least desirable rural areas and pay nothing to the government because the land has no value. Others will go there because the land is free. They will only have to buy the existing buildings and other improvements, and everything they produce or buy will be tax-free. There will be no purchase price to be paid and no tax on the land because it will have no value.

However, most people in those rural areas will migrate toward the superior, more densely populated areas in the suburbs and cities, where landholders will compete for workers needed to maximize productivity — in order to get the highest possible incomes. That is why the free land opportunity will not be exhausted.

Not only will the free land opportunity not be overwhelmed, but this program relieves the present pressure to develop the wilderness that is so important to the environment.

By collecting the rental value of land for public use, much of the money will be spent on providing for the infrastructure and public service, without which the dense populations and their efficiencies could not be maintained; productivity and the value of land would fall. However, when there is an efficient infrastructure and land is fully used, the rent on superior lands is far in excess of the amount needed for the infrastructure and public service. Here is a fund that grows synergistically with the population and the march of technology. Here is a fund that grows with the increasing needs of the population. Here is a fund with which to pay for social programs like Social Security and National healthcare. Here is a source of revenue for medical and environmental research. And, at some point in the evolution of civilization, a cash dividend could be provided to all. That would be of great help to those who are not as gifted, healthy, or as intelligent as others. It would not be a charity or a confiscation from those who produced, as everyone would receive it equally, and it would come from the socially created wealth that all, by their presence and cooperation, had created.

Under the Single Tax program, the government would be "Limited Government," confined to the socially created wealth generated by communities and society as a whole.

Summary: By applying labor to the Earth's natural opportunities (equally needed by all), food, clothing, shelter, and all other products are brought forth (produced) for the preservation of life and the satisfaction of our desires. Capital is produced by labor and used to increase the efficiency of labor; its return is what is necessary to induce its production and accumulation. The land is assigned with the title so people can keep what they produce upon it.

However, as the population increases and invention goes on, the ownership of land gives an increasing advantage over others. This increasing advantage leads to hoarding, which prematurely extends the free-land opportunity to less potentially productive land until there is no longer a free-land opportunity. This drives wages and interest to a minimum, causing unemployment and the cycles of recession.

By making the title to land conditional upon the payment of its rental value and taking this fund for the community and society as a whole, we prevent the unearned income and speculation in the land (unused and underused land). We satisfy all other people's equal right to any particular parcel of land.

By collecting the rental value of each parcel of privately held land, we ensure that all valuable land will be put to its full economic use within limits enacted for our health, safety, and the environment. By limiting the title in that way, it ensures the free-land opportunity offers an alternative place to live and produce that is well above subsistence for the average person and increases with the march of technology. By this policy, everyone receives what their labor and capital would have produced by taking advantage of the natural opportunities that are equally available to everyone.

At the same time, the community uses the socially created wealth to maintain the infrastructure and public service and provide for the preservation of order, the administration of justice, and national defense. Without this expenditure, the rental value of land would be greatly diminished. With this expenditure, the total rent of land far exceeds what is needed. Here is a fund with which provisions can be made for the sick, the weak, and the less intelligent. Here is a socially created fund to provide for social programs and the science needed to restore and preserve the environment and healthy living, develop medicine, and advance our civilization.

The Law of Human Progress
Henry George assigns the first law of human progress to an association. Unless there is an association, there can be no cooperation, no division of labor, and no trade; the diversity of nature limits each person to their local resources. The second law of human progress, he attributes to equality. Without equality, all the benefits of the association are lost to fruitless struggles. Control over the bounty of nature is the primary method of exploitation. Those who lose are in a condition like slavery; their efforts are consumed by survival. Those who win put their energy into maintaining control so they can take what others produce. Therefore, the law of human progress is Association in Equality. Progress is stimulated with the closer association and greater equality, and it is retarded by inequality and disassociation.

Partial Applications
In light of this analysis, there is no reason why any and all levels of government could not shift their tax base to the value of the land. The rental value is even better than the selling value because it is not based on expectations of future incomes; it measures exactly the current value of benefits received. The more any city, county, or state shifts its taxes from sales, income, and buildings to the value of land, the greater the incentive to put privately owned land to its potential — resulting in more jobs, units of housing, and the overall rejuvenation of communities. As long as a localized application increases productivity or desirability more than it increases the total taxes on the site, its value will increase. That is the case on a local level because it does not create a free-land opportunity. A free-land opportunity can only be created when land value taxes are applied to a whole country or where immigration can be limited.

And, because a local application can not create a free-land opportunity, it can not raise wages or interest. Because local jurisdictions collect only enough of the rent to maintain the local government expenditures, the largest financial beneficiaries of local shifts to land value taxes are the owners of the land. The fact that local applications can not raise wages and interest or make housing cheaper is unfortunate, but increasing the number of jobs and units of housing is a lifeline for those who get them. Land value taxes ensure local governments can raise ample funds for education, welfare, public service, and public housing without diminishing their tax base. Although it can not itself raise wages or lower the cost of housing, It is far better that people have a job than be unemployed. It is far better that people have a place to live than to be homeless — even if the landowners are the largest financial beneficiaries of a local application.

With these partial applications of land value taxation, minimum wage rates can be raised without causing an increase in unemployment, public housing can be increased, and stricter housing codes can be enacted without diminishing the supply of housing.

It is when enough to rent is collected for public purposes throughout the country, and land speculation is diminished enough to create a free land opportunity that wages and interest will systemically rise. It is when the full rental value of all land in a country is collected for a public purpose that wages and interest will be maximized, and the community and society will share the highest possible rents.

After Thoughts

When there is a free-land opportunity, the monthly payment for a house belonging to one person and lived in by another on the free land will be straightforward. It will be the current rate of interest times the value of the house (building), plus depreciation, maintenance, management, and risk. The land has no value, so nothing would be paid for the land it sits on. If a tax is levied on the value of buildings, the charge for the house will go up by the amount of the tax. That is because it would increase the cost of providing the house. All houses on superior land would then charge the same additional amount, plus whatever people were willing to pay for the superior land. Primarily, that would include closer proximity to external things like jobs, stores, services, recreational opportunities, access to public utilities, and a higher level of safety and community in the surrounding area. It would also include any inherent qualities of the land, including topography, but only if they were superior to the best land that was still free.

Today, for all intents and purposes, there is no longer a free land opportunity. This makes it a very different equation. It is generally believed that taxes on wealth, like a sales tax, raise the price of products because they increase the cost of production — i.e., the cost of getting a natural resource to the consumer in the desired form. However, without a free-land opportunity, the value of land is the sum total of all the advantages that come with it, minus the disadvantages. Since you can't make any more land, like an antique, it is worth whatever people are willing to pay rather than go without it. All taxes that are paid by landowners add to the disadvantages and lower the value of the land.

Every reduction in the cost of providing buildings adds to the value of land, and every increase in the cost of providing buildings reduces the value of the land. As more efficient heating systems become standard, the rent captures the benefits; no less than an increase in the price of heating fuel reduces the rent people are willing to pay. This is important because shifting taxes from the value of buildings to the value of land within a local jurisdiction, with adjustments to generate the same total revenue, does not reduce the value of land but increases it.

The rental value of land is the potential income that can be obtained by putting land to its highest and best use. Because those who were holding unused or underused land will pay more with a shift to land value taxation, those whose land is already in full use will pay less. This reduction in taxes increases the potential income of land and the selling price upon which it is based. Even after the idle and underused land is put to full use, it does not significantly increase the cost of infrastructure and public service.

A Cash dividend

Many people are advocating an equal payment of cash to all families as a redistribution of excessive incomes. It is called a Citizens Dividend, Basic Income Guarantee, or Universal Basic Income. Some of those advocates realize that paying for it with a tax on the value of land would be completely just and fair. The land is a natural opportunity, and its value is created by the community as a whole. It would certainly help those with low-value lands, like those with owner-occupied houses in the slums. However, without a free-land opportunity, it would only help those who already own the land they live on. That is, it would only help people that are not subject to increases in land rent. If there were a free-land opportunity, it would help everyone.

But when there is no free land, it only helps those who are not subject to increases in the rental value of the land on which they live.

To reiterate: in the absence of free land, the value of residential land is the sum total of all the advantages, minus the disadvantages. If the neighborhood is safe and clean, and aesthetically pleasing, people pay more for the land than if it is not. People pay more if the public schools are high quality and if the residents get a cash payment — just as people pay less for residential land in places where taxes or utility bills are extra high.

Over Population

Until some time in the 1970s, it seemed, many people were still thinking that the world was overpopulated. The hunger of nearly a billion people was caused by too many people. Reducing the birth rate seemed to many the way forward. Then as the years went by, it became clear that there was no correlation between poverty, hunger, and the density of population from country to country, but that too many consumers were causing pollution, global warming, and the struggle over natural resources. Once again, many people are thinking the only way to make the Earth a sustainable foundation for human civilization is to reduce the population.

However, it is obvious that with our current population, unemployment, subsistence wages, and affordable housing could be cured by ending land speculation. Solving these three problems would enable people to afford things that were produced in a way that does not pollute or contribute to global warming.

By negotiating the question of sovereignty with all the peoples of the world, it seems reasonable to expect we could build a consensus on what gives any nation the right to exist as a nation and secure its borders by exploring what gives a nation the right to deny immigration or allow emigration, and how access to the mineral deposits of the world could be shared. We must build a consensus as to what constitutes the right of ownership. It is a universal principle of the most basic social order:

Greed

Whether we are talking about John D. Rockefeller or Jeff Bezos, it is impossible to imagine why a person would strive to accumulate more than 200,000 times more wealth than the average person accumulates in a lifetime. Of what possible benefit could it confer, except the admiration and social status that comes with being rich, especially the richest person in the world. So why do people envy and admire a person who expends their life accumulating wealth they will never consume? Why don't we pity as a fool a person who waists their life hoarding wealth the way we would think of a person who wore a stack of hats or kept a room full of shoes? The only possible explanation is the admiration that comes with the command over wealth.

In the final chapter of their life, it seems that most of these billionaires make a new career out of giving much of their wealth away. Whether they endow Libraries and universities, museums and opera halls, or in exceptional cases helping the poor, as Bill Gates and his wife have done, it invokes an approbation and gratitude, the strongest motivation of human action.

In the same vein, we may wonder why there is a disproportionate tendency among the lower classes to steal when there are so few people who are hungry due to the pervasive welfare programs. Well, if the fear of want has been tempered, the degradation and humiliation of poverty have not. There is an impulsive struggle that grasps people to get as far above poverty as they can. There is so much more envy and admiration of a criminal who is rich than an honest paper that I can only wonder why there isn't far more crime than there is.

Principles vs. savior

The majority of the world's people no longer expect to be ruled by a king or queen. They believe in democracy as long as they are in the majority. When they are in the minority, most people do not put their faith in the will of the majority — for a good reason.

The vast majority of people attempt to elect a savior who will be smart enough and kind enough to protect their wellbeing. It doesn't even work for the majority of those who vote for a savior. The people themselves must think, for the people alone can act in their own self-interest.

For perspective on immigration, trade, and the Minimum Wage, go to henrygeorgeacademy.org