

**The Radish**

**By Mike Curtis**

**A Primer That Goes To The Root of**

 **Political Economy & Social Philosophy —**

**inspired by the thesis of Henry George.**

**What is required for abundant opportunity and employment for all; what is required for wages to rise, and the cost of housing to fall; what will make recessions and inflation a thing of the past. How freedom and free markets can work for consumers, and governments and national healthcare could be funded from socially created wealth.**

“What oppresses the masses is their own ignorance; their own shortsighted selfishness” “The great work of the present for every man and every organization of men who would improve social conditions is the work of education. . .” Henry George

**The Problem:**

In spite of 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, for the majority of workers, they generate more immediate anxieties than the consequences of global warming or the nuclear arms race

To counteract these problems and alleviate poverty, the United States has established a myriad of government programs. In addition to the legal Minimum Wage, and the mandatory retirement accounts of Social Security and Medicare, approximately the same amount of tax dollars are spent on education that are spent 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. 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 re-distributions, none of these policies have created the needed jobs, reduced housing rents, or made home-ownership more generally affordable. Nor has the legal Minimum Wage been raised enough 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 as a way to create jobs and raise wages. But, there is no confirmation that there are more jobs or higher wages as a result of the increased spending on public education in the past. They have also advocated membership in labor unions as a way to raise the general rate of wages. It could help, but it would require the vast majority of the lowest wage workers to unionize, and sustain themselves for long periods without working — simply because wages for those with the least education and skill, tend to a bare subsistence, no matter how much they produce. Today, wages of the lowest paid workers are set by the legal Minimum Wage, and are the base on which all higher wages are paid.

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 day care, 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 in which everyone prospers, but to do so we must bring those declarations of inalienable rights to reality; we must insure an equal right to the bounty of nature and the synergistic results of community.

The Radish reconciles 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. Why, in spite of inventions, innovations, and new technologies that continue to increase the results of labor, wages do not rise. 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 or 20 years 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 attaches to land. In other words, it uses socially created wealth to fund government and social programs.

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

It is a policy that would create employment opportunities for all who are willing and able to work, with wages that increase with the general rise in productivity — while investments in buildings, machines, and inventories receive a fair and equitable return. What more could Liberals and Conservatives demand?

The Radish explains exactly why the programs of intervention and re-distribution 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 the lack of affordable housing. Nor can they solve racial oppression, poverty, and crime, the last of which is often motivated by the fear of want and the shame and humiliation of poverty as 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 own observation and reasoning.

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

**The Necessities of Life**

All people need some place to exist, as well as 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 simply alter what exists in nature for the preservation of life and the satisfaction of their desires. Tools, buildings, machines, and inventories are produced and used to give human exertion a greater efficiency in producing food, clothing, shelter, and everything else that is made for the preservation of life and satisfaction of desires.

**Production**

In this thesis the term **wealth** is limited to those material things that were produced by people and have a value in exchange (are capable of human satisfaction). They are the result of human exertion stored up in tangible form and available for subsequent consumption. Wealth is the primary vehicle of human satisfaction. Direct services like hair cuts and medical treatments are also part of satisfying human desires, and the same principles apply to them as well.

There are two basic 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 the term: **Labor** refers to all mental and physical exertions in the production of wealth. The term: **Land** refers to the entire material universe, excluding people and their products.

Production involves separating, combining, and changing natural materials in form or in place. It is the process of making wealth — ultimately, for the satisfaction of human desires.

To reiterate: The term wealth is limited to those material things that are produced by labor for the satisfaction of human desires and have a value in exchange.

The term: **Capital,** in this thesis, includes only that portion of wealth that is used to produce more wealth for exchange. It includes tools and machines for adapting (changing material in form or in place), wealth used to harness the productive and reproductive forces of nature (Sun, wind, and 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 land by labor, is the compound factor. It might be considered indirect labor, but for the long tradition. Labor and capital are the active factors; 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 own existence. 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 amount that is taken.

**Assignment of land**

Since no one made the surface of the Earth, you may wonder how 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 that was assigned to each family had the same potential, the assignment of land simply gave each family the opportunity 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. Without exclusive possession, no one would plant a crop or build a house, much less a modern factory; you couldn’t put up a fence or lock the doors. It would be difficult for people to keep securely what they produced on the land. Title to land (exclusive possession) enables landholders to keep, undisturbed, the product of their labor.

However, all land does not offer the same quality of opportunity. As the most fertile land, and that around safe harbors and along navigable waterways is fully monopolized, the ownership of these superior opportunities offer their owners an advantage over others. As people are drawn to these superior opportunities, the larger and denser populations increase the potential to specialize and exchange — increasing the total production of the community. The greater production that results from superior land with denser populations is taken by the owners of that land simply because measurably less will result from the same application of labor and capital on the inferior and less densely populated land that is still free.

**The Laws of Distribution**

Wealth is divided between the owners of the land, labor, and capital that produced it. The laws of distribution indicate how much of every product goes to the owners of labor, capital, and land. 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 in every time and place, as they govern the decisions we make in our daily lives. Having used the inductive (observation) method to establish these principles, they are applied deductively (logically) to explain how much of any product will go to those who exert their labor, advance (own) 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 are 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, and the person who uses the capital gets an amount equal to the rest of the product that would have resulted if the labor and capital had been applied on the best land that was still free. These are the laws of wages and interest.

If the owner and user of capital are also the owner of superior land, then that portion of their income that results from producing on superior land, is rent. If the land is underused, then the amount that is produced, minus what is taken by labor and capital, is the actual rent. If nothing is produced, there is no actual rent.

**Potential Rent**

However, it is the Potential Rent, or in plain English, the rental value of land, that measures the advantage that each landowner has over non-landowners, and with which this thesis and political economy are much more 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 leasing it to the highest bidder. That is because the capital can be supplied by the user and easily moved if the landowner requires more than the land is worth in the future.

In areas where residential and commercial uses will 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 (equally desirable) buildings on the site or near by 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 of what is paid is rent for the use of land. The Potential Rent is reached by providing the right sized building and other improvements. 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 as they get higher (Each floor has to be supported by the floors below it). At some point the interest and other expenses that would be paid on higher more expensive to build floors would be greater than the income people pay for floor space. That is the height at which the Potential Rent is realized.

In mining, it is the price paid for the ore in the market, minus the cost of extraction and transportation to the market that 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 any asset that yields an income, it seems important to digress and reiterate: in this thesis capital refers to 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 are 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.

Certainly, if the gifts of nature are included in the term capital, it would be true. However, when land (gifts of nature) and capital (products used to produce more products for exchange) are separated into the two inherently different factors they are, 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 their labor and capital.

Capital is the concrete result of labor applied to land. 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. 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 the lender of capital expects to be paid, and the borrower of capital is willing to repay, more than was borrowed: interest.

With the use of capital the results of labor are increased many times. Whether it is an axe 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 the results of labor, 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 own bow and arrows and hunt for the remaining 50 weeks of the year. 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 had been paid for 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 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 in concert. Some are producing the food, clothing, and shelter to sustain themselves and other workers. Some extract and process the materials, some are making the parts, and still others are assembling 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 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 resulted from the increased productivity that capital gives to labor, the rate of interest would increase with the march of 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 it, and people gladly pay interest for that advantage. You could gather seeds as they exist in nature, and 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 amount of 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 crops including fruit trees where the fruit is considered interest on the investment of the tree. It could be timber, or live stock that grow. Perhaps the most obvious example of the increase in the value of capital is a winery. Unlike bricks or machines or basket balls, 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. The 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 timber 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 wind mill 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, a continuous production of steel can continue. However, if all the steel mills were destroyed, it would not mean there could be no more steel; it would mean that a much more basic process would have to be used until a new mill was build 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. The primary benefit of capital in adapting (making things) is in the 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 in tending crops), must be paid out of the increase, and they must be paid as much as their labor would have produced if it had be 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 capital where there is an advantage of time add to the increase of capital, and are the reason for interest. That would include a 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.

 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 an enormous increase in value; other years there are blights, and there is no increase or even a loss in the value of the 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 off-set at other times by much lower rates of return. In total, this brings the return of grapes and all other forms of capital to a common level.

**Wages & Interest**

Keep in mind that a 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 in producing capital that grows, like crops. If the increase in the value of capital was greater than wages, people would divert their labor from producing capital that increases the results of labor, and produce capital that aids an increase in value, like crops that grow. The reward would be received indirectly via the increased value of the capital.

Analogously, one person could invest his capital in a saw mill, 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 capital: interest. The mode of production that yields the highest return will draw more labor and capital until the supply and demand for each will bring the returns from these two modes of production to an equilibrium.

As interest rates go up, the demand for capital goes up, and more labor is expended in increasing the supply of capital. At some point the increased supply of capital results in diminishing results. (over supply is less efficient), and the return to capital (rate of interest) falls. As the rate of interest declines, more wealth is accumulated in the hands of consumers as wages. As capital is consumed, production declines from the reduced supply of capital, so the rate of interest goes back up, and an equilibrium is established between wages and interest.

**Population And Knowledge**

As populations increase and settlement extends the free opportunities to lands of less and less quality, wages and interest tend to fall.

No-one would pay their workers (except under special circumstances) significantly higher wages than they could produce working for themselves on the best land that is free. However, with an orderly development, the diminished quality of the best free land would be off-set 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 more tools and machines to be used for a larger portion of the time. 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 person working alone. 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 their 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 is 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 that increase the number of workers within a given space at a certain time before productivity per person per hour is diminished. Henry Ford did a similar thing with the moving assembly line.

Communities are enhanced in the same way. 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 capital. To the degree that they increase it on the best land that is free, it raises wages and interest. And, coupled with proximity to more densely populated communities, they tend to compensate for the diminishing quality of the free-land opportunities.

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

While rents are increasing on superior lands, wages and interest tend 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 results from 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 a 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 near by. In order to get enough food to sustain you, clothing to keep you warm, and shelter to keep you dry, it 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 a natural fiber and weave it into cloth, or sew animal pelts together; you might make a plough 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 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. While you have used some of the hardest wood to make a plough, your neighbor might have made a loom. Whether you plough his field and he weaves your fibers, or you make two ploughs 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 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 portions of time, economizing their 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, while 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 continues to draw 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, fresh water 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 stabilize the roads, build bridges across the creeks, establish fresh water pipes and so on. Then a larger population can cooperate with greater efficiency, and every worker is more efficient than before.

**Increasing Rents**

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 would have produced on the best land that is still free. Most of 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 includes the smallest divisions of labor and the largest economies of scale, is taken by the owners of land. In an orderly development, the people on the best free-land share some of these benefits because of their proximity to the densely populated land with infrastructure and public service that is completely owned.

**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. 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 calculation.

However, what everyone knows is that as populations increase, technologies advance, and inventions march on, productivity and the potential income of most land goes 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 incomes in the future, and can out bid 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 sells for less than capital yielding the same income because its income is expected to fall in the future.

**Land Speculation**

It is often said that every homeowner is a land speculator. This is true in the sense that people pay more for the land under their house than they would pay for an equal amount of capital that could yield the same income. They pay the higher price because they expect that the potential income or savings from owning the land will increase in the future. The land under houses, and land in general, has increased in value over time, and it has increased far more than inflation. However, this is very different from what is generally referred to as land that is held for speculation. In the expectation of the selling value increasing, many parcels of land are held unused or greatly underused as an appreciating asset. It is like holding gold or silver and waiting for it to increase in value. This non-use and under-use 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 many 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 levied on the land and other expenses; no capital is needed. In the second instance, some capital is required, and there is also income that results from its use.

With a few exceptions like an ocean front beach where people pay to swim, land does not generally yield enough wealth without the use of capital to generate 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 productive potential are enabled by enormous government investments in infrastructure and public service: paved streets, access to water and sewage, gas, electric, communications (pipes and wires), trollies 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 would put the land to its most efficient use. These minimal uses like surface parking, a hotdog or news-stand, are called taxpayers. They often generate enough income in addition to the return to the capital that it pays the taxes and other expenses; so, the landowner gets the entire increase in the selling value of the land. In other cases where there are substantial buildings, landowners gain from the income in excess of the return to the building and the taxes, plus the increase in the selling value of the land. In other words, they also enjoy an income from the land. However, when the real estate is sold, if the building is significantly undersized, unless it can be enlarged, the value of the building is zero. It adds a negative value because it will cost money to have it torn down — making room for a new building that will put the site to its full economic use, maximizing the income.

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 underneath if the site were put to its full economic use.

It is the increase in the population that increases the value of land, yet 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 land moves labor and capital to less potentially productive locations, wastes the public investment in infrastructure, reduces the divisions of labor, and impedes cooperation — all of which reduces productivity.

Non-use and under-use of land can be seen in every city and suburb. They are often broken-down buildings and trash strewn lots. Sometimes they are beautiful little houses in the midst of high-rise commercial districts. Sometimes under-used land is accessible to the public, beautifully maintained, and a part of much needed open-space. This is exemplified by privately owned golf courses. Certainly it is in the public interest to have parks and recreational open-space. However, privately owned open-space is all too often a form of land speculation, developed when it is most needed as public space. All privately owned valuable idle and under-used land prematurely extends the free-land opportunity; it drives wages and interest down, and rents up. By moving labor and capital to potentially less productive land, it reduces productivity. Therefore, it lowers wages and interest far more than it raises rents.

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 go 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 straightaway. This 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 parcels empty 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 from the land, and the increase in its selling value. However, 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 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 legally go, build a house and grow enough food to sustain themselves. There is no free-land where anyone can go, produce something, and sell it for enough money to buy 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). The laws to help the landless sometimes make it harder to access unused land and make 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 become 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, 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, and inventories) falls until, were it to fall any more, the incentive to store up capital would diminish until productivity fell more than interest was lowered.

It seems possible that a banking system, which can create money, could lend it to landowners at exceptionally low rates of interest (using land is collateral). With this money, landowners could, in turn, buy capital and indirectly obtain the use of such at the same exceptionally low rates of interest. That is to say, landowners could in this way obtain the use of capital for less than anyone would be willing to produce it and lend it to them. How long this practice could continue before it resulted in significant inflation, is not certain. Inflation was 7% in 2021

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, equals 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 under-used, it causes unemployment and a shortage of housing. In urban and suburban areas with intense infrastructure, the potential for employment and housing is many times that of rural areas. Therefore, non-use and under-use of urban and suburban land causes many times more people to be unemployed and homeless than in rural areas.Land speculation is identified as the objective, because it is the primary motivation. But, even where the motivation is not the increase in land value, unused and underused land with value is the root cause of unemployment, low wages, and unaffordable housing.

**Current Policies**

Having explored the natural tendencies of the free market in the distribution of wealth, it seems 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, Workmans Compensation, unemployment insurance, and that part of Social Security, and Medicare paid by employers, have certainly increased the rewards of all workers. Wages are definitely higher than they would have been with a 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 the tax code has been changed so the rich and corporations pay significantly less than they did before. Now many are advocating an increase in taxes on the rich and corporations. It is true that these taxes are largely paid out of what would otherwise go the the owners of land and other monopolies, but they do not create the incentives necessary to stop land speculation and create needed jobs and housing.

**Depressions And Recessions**

Historians have recorded periods of unusually high unemployment for hundreds of years with some of them lasting for as long as five years. The high unemployment during the “Great Depression” of the 1930slasted 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 low 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, which in turn, causes people in other industries to get laid off. As a result, an increasing number of people fail to make payments on their mortgage and other debts, and 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 people 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 dollar value of everything else. This cancels debts, and it does it at the expense of those who have or are owed money.

However, the root cause of recessions and depressions is labor and capitals 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 new workers that result from increasing population.

Recessions and depressions often follow periods of technological advance. The Suez Canal and the Transcontinental Railroad were completed in 1869 — along with dynamite, the motorcycle, and barbed wire. They increased transportation and productivity, and preceded the world wide depression of 1873. High unemployment was present worldwide, and lasted for the next five years.

Half a century later in what was known as the Roaring 20s, productivity was increasing and the prices of manufactured products were 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. Many products that could be sold in mass quantities could then be made more cheaply with the assembly line and sold at lower prices. 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 using 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, bailers, 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 less workers. As the demand for food diminished, many farmers defaulted on their mortgages and went bankrupted as a result.

However, at the same time cities were thriving. The unemployed farm workers 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 many other electric appliances. At the same time, roads were being paved, telephone and electric 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 versatile 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 exactly how Henry Ford became the second richest man in the world at the time.

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 buy up prime locations, making offers based on future expectations.

Cities provided increased housing for factory workers. With the affordable car, land near the cities that had lost value for farming offered a place for workers who could live and drive to work in the urban factories on the newly paved roads. The value of this land was being bid up as well.

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 pondered how much they might be offered in the future. As productivity increased, the more many of them waited to see what they would be offered later on.

The banks and lending institutions were extending credit in 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 it was, 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 and build additional factories. 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. This accounts for the first phase of unemployment.

Then, as people who were replaced by machines, lost their ability to buy the products of other people’s labor, the demand for those products fell. This reduction in demand, meant that factories could not sell all the products they were currently making. This reduction in consumer demand, prompted many factories to lay off a portion of their workforce, while others closed. The economy contracted severely in 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 offer, it would 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 prevent recessions and depressions from getting worse, and ultimately bring them to an end. Inflation lowers the asking prices of land in terms of wealth, as the value of money falls.

Once a recession is over, employment goes up to pre-recession levels, and as time goes on, the speculative price of land begins to rise again — sowing the seeds of the next recession

WWII

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

The United States did not diminish unemployment by putting their citizens to work on land in other countries. But, in addition to sending people to fight the war, the US 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 gained 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 employee’s 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 roll 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 are 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 around a trillion dollars per year. The only reason these programs are needed is because 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 available 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. It was claimed by a king before possession was taken by military force. It was then leased and subleased, and in most cases the people who worked the land enjoyed far less than they produced (some workers were slaves). The Dutch, for example, who took the land from the indigenous peoples, claimed and occupied it as New Amsterdam until the British forced them out and renamed it New York.

 After 1783 when the the colonies became independent, the king and many of his subordinates were out, and many of the Colonial soldiers received a small homestead. Nonetheless, much of the land was still legally owned by 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 every parcel of land in what was the 13 Colonies through each preceding owner we would eventually reach a claim, in every case, based on the Right-of-discovery. That means a claim by a Christian European king who’s 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. Instead, they were agreements not to fight over the land they believed was theirs, often signed under threat of annihilation.

The Louisiana Purchase 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 from 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 governments 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 each. 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 under water. 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 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 in concept to a 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 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 any more. The Minimum 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 is 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. In the case of taxes that are paid by Minimum Wage workers, they definitely diminish take-home wages, everyone’s wages. But, if they diminished wages to the point where productivity fell, rents would fall as well. Therefore, wages would be raised to maintain rents.

Although the vast majority of public 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, which steals directly from workers and the owners of capital, diminishes productivity. However, here are three instances where they significantly reduce production. Taxes on imports (Tariffs) encourage the production of more expensive domestically produced products. That diverts labor and capital from more efficient applications in favor of more profitable productions, and diminishes the results of labor and capital.

 The second instance is the tax on high-rise buildings that is paid every year. Because buildings cost more per square foot to build as they get higher, the tax increases as the buildings get higher. So, the point at which the expenses of the building (interest and taxes on the building) exceed the income paid for floor space occurs at much fewer floors. The third instance is in the worst city slums. Because of the crime and the unhealthy environment productivity and, therefore, land rent is so low that it can not absorb the taxes on buildings, sales, or wages. That is, after taxes were paid there wouldn’t be 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 valuable land. Land speculation reduces productivity by forcing labor and capital to less potentially productive locations with the very least skilled and educated unemployed. 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, in spite of more and more money being spent on these programs, the need for these programs is becoming 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 our society as the hole in her bottom gets bigger and bigger by the day.

**The Sovereign Remedy**

The simple yet effective solution to unemployment, static wages, and the increasing cost of housing is to make 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 competition like the roads and railroad tracks and the wires and pipes that run along them.

To anyone who has not followed this 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 being used, the payment becomes a burden so great that the owner will have to put the land to full use or give it to someone who will — for the rent will have to be paid whether there was any income or not.

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 not exceed expenses, or legal limits enacted 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 goes 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 there will arise, 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 bare the expense of cleaning them up. However, afterwards, the community will be able to collect the full rental value of the land from the new titleholders. The rents will replenish the fund from which the clean up was paid for, 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, 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. Governments could then designate common land needed for public parks, to be shared by all. 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 — in order to pay the rent and get the best reward for their labor and capital. This will draw people from the less potentially productive land until there are large rural areas with 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 on which they live and work will have 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 for the land, and no tax will be levied against 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 land holders 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 in 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 land 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 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. At some point in the evolution of civilization, a cash dividend could be provided to all. This would be of great help to those who are not as gifted, healthy, or as intelligent as others. It would not be charity or a confiscation from those who produced, everyone would receive it equally, as it would come from the socially created wealth that all, by their presence and cooperation, had created.

Under the Single Tax program, government would be “Limited Government”, confined to the socially created wealth generated by communities and society as a whole. Government could only spend the rent it had collected.

**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 human desires. Capital is produced by labor and used to increase the efficiency of labor; its return is what is necessary to bring about its production and accumulation. Land is assigned with title so people can keep what they produce on and out of it.

However, as 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 its unearned income and speculation (unused and underused land), and 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 insure that all valuable land will be put to its full economic use within the limits enacted for our health, safety, and the environment. By limiting the title in that way, it will insure that the free-land opportunity offers an alternative place to live and produce that is well above subsistence, and increases with the march of technology. By this policy, everyone receives what their labor and capital could 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, provide for the preservation of order, the administration of justice, and national defense. Without these expenditures, the rental value of land would be greatly diminished. With these expenditures the total rent of land far exceeds them. The additional rent can be devoted to social programs and the advance of civilization.

**The Law of Human Progress**

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

**Over Population And War**

Until some time in the 1970s it seemed, many people were still thinking that the world was over populated. That 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. Today, many concerned people worry that too many consumers are causing pollution, global warming, and the struggle over natural resources, and they 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 unaffordable housing could be cured by ending land speculation. Solving these three problems would enable people to well afford things that were produced in a way that does not pollute or contribute to global warming.

By exploring the question of sovereignty with all the peoples of the world it seems reasonable that a consensus could be derived as to what gives a nation the right to exist as a nation and secure its borders. And it follows that immigration, emigration, and access to natural resources may be at their root an extension of the equal right of all people to the bounty of nature. This coupled with a universal principle of ownership, and civilization could advance without the illusion of overpopulation or war.

**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 land. Taxing the rental value is even better than taxing the selling value of land 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 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 insure local governments can raise ample funds for education, welfare, public service, and public housing without diminishing their tax base. Although it can not of 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 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 only when enough rent is collected for public purpose throughout the country, and land speculation is diminished enough to create a free land opportunity, that wages and interest will systemically rise. It is only when the full rental value of all privately held land in a country is collected for public purpose, that wages and interest will be maximized and the community and society will share the highest possible rents.

**After Thoughts**

**Taxes on Buildings And The Cost of Rental Housing**

When there is a free-land opportunity, the monthly payment for a house belonging to one person and lived in by another at the free land opportunity would be straight forward. It would approximate 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. All houses on superior land would charge the same 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 the higher level of safety and community in the surrounding area. It would also include any inherent qualities of the land, including topography that were superior to the best land that was still free.

If a tax is levied on the value of buildings under these circumstances, the charge for the house would go up by the amount of the tax. That is because it would increase the cost of production: the cost of providing the house.

Today, for all intents and purposes, there is no longer a free land opportunity. That makes it a different equation. Without a free-land opportunity, the value of a parcel of land is the sum total of all the advantages minus the disadvantages that come with it. It has no cost of production, and there is no free-land alternative.

Since you can’t make any more land, it is worth whatever people are willing to pay rather than go without it. Any taxes that are levied on buildings are paid out of what would go to the owner of the land in their absence. Every reduction in the cost of providing buildings adds to the value of land, just as every increase in the cost of providing buildings reduces the value of 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 rents people are willing to pay. It’s the same reason people pay more to live closer to a freeway, or where there isn’t a sales tax. It adds to the desirability of the land.

This is important because shifting taxes from the value of buildings to the value of land within a local jurisdiction, with adjustments in the tax rates so that the same total revenue is collected, does not reduce the selling value of land; it actually 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 who’s land is put to full use will pay less. This reduction in taxes increases the potential income from the 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 proportionately increase the cost of infrastructure and public service. Desirability increases far more than taxes, so the selling value of land increases.

Wherever a shift to land value taxation is implemented, it stimulates the redevelopment and greater development of the community and makes it a more desirable place to live, work, and do business. Therefore, the value of its land increases again.

**Money & Credit**

Trade is the engine in the advance of civilizations, and money facilitates trade. Although credit may have preceded the use of money, and is still an intricate part of conducting trade, whatever is accepted as a medium of exchange in any time and place is in that time and place: money. There are references to salt, tobacco, and rice being used in different times and places as a medium of exchange (money). Gold, silver, and copper were made into coins and used as money for more than two thousand years.

The value of these products called, commodity money, tends to equal the amount of labor that would be saved by having them (the least amount of labor for which they could be acquired). They will exchange equally for all other products requiring an equal amount of labor to acquire.

Because money is a medium of exchange, it is also used as a store and a measure of value. When we ask what something is worth, it is answered in money. Although the value of commodity money results from the labor embodied in it, because all labor does not yield the same result, it is the product of labor rather than the labor itself that is used to measure the value of things. As the labor required to make a particular product increases or decreases, similar items made in the past, will tend to increase or decrease in value — regardless of the exertion required to make them or embodied in them. This applies to commodity money, which is the measure of value, and to all the things for which money is exchanged.

Governments have stamped gold, silver, and copper coins to certify that they contain specific metal of a certain amount. Over time, governments have issued paper money with a promise to exchange the notes for a certain quantity and quality of precious metals — of which they’ve held a small percentage to insure trust in the value of the paper money. This is called credit money. The one inherent difference between money (commodity-money and credit-money) and credit, is that with money the transaction is complete. No trust is required from the person who gives the money.

Today, governments control the supply of paper money, and of greater quantity, non-physical money in accounts — without promising to give any product for it on demand. In the short run, they rely on inertia or an expectation that people will accept it to a certain value in exchange for all things of value, the possession of which will save the labor needed to acquire it.

**Inflation**

As an economy expands and there are more things that people are trying to buy, the value of money tends to go up relative to other things. The money will exchange for more labor than before (deflation). As governments increase the supply of money and private credit is extended, relative to all the things that people are trying to by, it looses value. It exchanges for less labor (inflation). Governments, which control the supply of money via central banks (Federal Reserve), increase the supply through rather complicated policies, and are able to disperse money without raising taxes. In the process, they cancel debts, and redistribute claims on wealth.

Inflation, which is caused by a disproportionate increase in the supply of money relative to things being bought, tends to reduce private and government debt. And by reducing debt, it steals from those who are holding or are owed money, and It alters contracts.

It should be acknowledged that contracts and debts could be agreed to in a way that would compensate for inflation, like an adjustable rate mortgage, but, in the case of wages, the workers have no alternative place to work and produce, so inflation simply becomes the mechanism by which wages are lowered to the level they would ultimately fall to in the absence of inflation. In times with very high inflation, wages do rise, but they don’t generally rise as much as inflation, because wages in terms of a standard of living, are falling from the lack of an alternate opportunity.

**A Cash dividend**

Many people are advocating an equal payment of cash to all families as a redistribution of excessive (undeserved) 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. Land is a natural opportunity, and its value is created by the conscious and sub-conscious cooperation of the community as a whole. It would certainly help those with low value land, like those with owner occupied houses in the distressed areas. 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.

**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, or museums and opera halls or in exceptional cases helping the poor, as Bill and Malinda Gates have done, it invokes a sense of 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 expansive welfare programs. If the fear of want has been tempered, the degradation and humiliation of poverty has not. There is an impulsive urge that compels 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 a honest pauper, that one 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 who inherited a throne. They believe in some form of democratic representative government where the majority of people choose those who make the rules. But, instead of exploring and developing a set of principles that the majority of people can agree on, they continue to support one person or another who they believe will act as a savior, protecting their interests and those of the people in general. It never works, even for the majority of those who vote for a political leader. The people, themselves, must think, for only the majority can act in their own self interest.

Although the majority of people may not consciously know how to fairly organize a civilized society, there clearly is no person or special group that can be trusted to act fairly in the interest of all other people. Therefore, we must build a consensus among all people in establishing our governing principles.

**Chattel** **Slavery and Wage Slavery.**

With chattel slavery we think of chains and the ownership of human beings, the absence of political rights, and the futility of the struggle against it. At the root of chattel slavery is exploitation. One person takes a large part of what another person produces. In the United States slavery was the norm when land was cheap and labor was expensive. In fact, during the eighteenth century American wages were thought to be the highest in the world. As the eighteenth century drew to a close, land In the northern states was becoming more valuable as wages began to fall. Perhaps the conscience of the landowners was less in conflict with their finances and slavery was given up. In the Southern states in 1860 land was relatively cheap and free labor was relatively dear on plantations. As the national conscience began to turn against slavery, the Southern states attempted to secede. They were defeated, the Union was preserved, and slavery was abolished.

 Twenty five years later, as the frontier and the homestead lands were becoming exhausted, wages were falling and land was increasing in value. Just as Henry George had predicted, once the free-land opportunity was exhausted (around 1890), were chattel slavery re-established and landowners could again purchase slaves, few would have done so. Considering the cost of buying and feeding, of clothing and housing, and caring for them when they are sick, it would have been measurably cheaper to hire them. It they got sick or old or had an accident, their employer would not have lost an investment, and another worker could have been hired without any expenditure of assets.

There was a period after the war in which the Ku Klux Clan and other terrorist organizations kept many of the former slaves so scared to migrate that they continued to work for the former slave owners and were paid little more than they had received as chattel slaves. This was combined with laws against vagrancy (unemployment) to make sure the former slaves were willing to work for one landowner or another. There were also chain gangs where people were convicted of minor crimes or falsely accused and convicted of crimes they didn’t commit. They were re-enslaved and leased from the government to a landowners as slaves. Although these practices continued with a diminishing intensity over the decades, voter suppression prevented former slaves and their descendants from participating and benefiting from the political process. While black people are still being discriminated against in education, housing, employment, and the judicial system, I believe the biggest factor in the disparity of wealth is the inertia of your parents not having had a quality education, not inheriting a home from your grandparents in a prosperous neighborhood and so on. It takes generations to ascend the middle class.

At the same time America has been evolving into a more feudalistic society. There are the landowners and the non-landowners. Wages tend to remain constant, as productivity increases. Therefore, wages are becoming a smaller portion of what’s produced. As time goes on, a smaller and smaller portion of the workers own the land on which they work. Whether they own a small business or they are a stockholder of the corporation that they work for, fewer and fewer workers are sharing in the socially created values that attach to land. Rental housing continues to take a larger portion of the average worker’s income, and the percentage of people owning their home has decreased.

It is as though the majority of Americans have resigned themselves to the status of Wage Slaves. There are no debates about what portion of production wages should be, only that wages should be higher, so the least skilled and educated can buy the necessities they need. There is no debate about the importance of land in the creation of jobs, only the best way to increase the level of education and skill in order to make workers more profitable and therefore, more employable.

We see this slave mentality in our trading relations with other countries. We strive to export more than we import, so we will have more jobs. And, from the perspective of the the wage-earning slave, jobs and the demand for labor are paramount. But the idea that any country could benefit from giving more than they get in exchange is an obvious charade.[]

Go to [henrygeorgeacademy.org](http://henrygeorgeacademy.org) For a perspective on immigration, trade, the Minimum Wage, numerous articles and presentations.

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**Terms & Definitions:**

**Axiom 1.** Human desires are unlimited.

**Axiom 2.** Humans seek to satisfy their desires with the least exertion.

**Political** **Economy**: The science that treats of the nature of wealth, and the natural laws that govern its production and distribution.

**Wealth**: all material things that are produced by labor and are capable of satisfying human desire with a value in exchange.

**The factors of production**. **Land**: The entire material universe, excluding people and their products. **Labor**: All human exertion (mental and Physical) in the production of wealth. **Capital**: Wealth used to produce more wealth for exchange.

**The laws of distribution. Wages** are the return to labor, andwill equal the entire results of labor, minus what is necessary to induce the storing up of capital where the land is free. **Interest:** is the return to the owners of capital, and will equal what is necessary to induce the storing up of capital where the land is free. It results from the advantage of time or the increase in the value of capital. **Rent:** is the return to the owners of land, and will be the difference between what any particular parcel of land will yield and what the best free-land opportunity will yield, both with the most efficient proportions of labor and capital.

**The Law of Wages:** Wages will be the entire product, minus whatever is necessary to induce the storing up of capital, where the land is free.

**The Law of Interest:** Interest will be equal to the whatever reward is necessary to induce the storing up of capital on the best land that is free. This is equal to the average increase in the value of capital resulting from the advantage of time on the best land that is free.

**The Law of Rent:** Rent will be the difference between the results of labor and capital on any particular land, and the same application of labor and capital on the best land that is still free.

The Potential Rent assumes that labor and capital are used in the most efficient ratios with the most efficient workers available,

**Land speculation:** Holding un-used or significantly under-used land as an appreciating asset.

INTEREST