The Economics of Henry George

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Henry George was an American economist and social philosopher who wrote during the last three decades of the 1800s. He combined economic analysis with moral philosophy, as one of his themes was that there is a harmony between economics and ethics: what is economically efficient is also morally just. I will present first his economic theory, then his moral philosophy, and then apply it to policy and markets. Finally, I analyze the relationship between Georgist thought and socioeconomics.

1. The economic thought of Henry George

a. Land and rent

The economics of Henry George was an advance on classical theory, and he is often referred to as the last of the classical economists. During the last three decades of the 1800s, mainstream economic thought was transformed, so that economic theory henceforth became labeled as neoclassical, to distinguish it from the preceding classical theory. The classical school of thought was founded by Adam Smith in 1776 with the publication of his landmark work, *The Wealth of Nations*. Smith in turn was influenced by the French school of thought of the 1700s, called Physiocracy, meaning the rule of natural law. Both Smith and the Physiocrats argued against the then prevailing doctrines of mercantilism, by which optimal economic outcomes was thought to require governmental regulation, especially of foreign trade.

The most influential and potent work of Henry George was his book *Progress and Poverty*, written in 1879. There is laid out his economic theory of land and labor, with the aim of explaining the puzzle of continuing poverty in the midst of economic progress. His subsequent book *Protection or Free Trade* (1886) remains the clearest and most comprehensive analysis of the economics of trade. His other books, speeches, and articles are applications and elaborations on his main themes: land tenure, taxation, trade, and social ethics.

The core of Georgist thought is the relationship between rent and wages. This relationship was explained previously by the classical economist David Ricardo (1817), but George (1879) took the analysis further. Classical economists recognized three basic categories of inputs: land, labor, and capital goods. Economic wealth, i.e. goods and services, is distributed to those having ownership rights to the factors. Neoclassical economists would later merge land into capital goods, making it a two-factor school, which then masks the distinct characteristics of land, and leads to incomplete and indeed, perverse, policy conclusions. Binary economics, where distribution has effects, typically suffers from the same problem when the distributional analysis is binary, focused on labor and capital, rather than recognizing the land factor.

Wages are the return to labor, including the earnings of the self-employed. Rent is the return to land, and the term "rent" as used here will refer only to the income from land, exclusive of returns to capital goods. A tenant renting a dwelling, for example, pays for three factors: wages for the labor services of the landlord or manager, rent for the space, and a rental for the use of the capital goods, e.g. the building, furniture, and landscaping.

George, like Ricardo, used a dynamic model to analyze the relationship between rent and wages. At first, we ignore capital goods, to focus more clearly on land and labor. Also, we simplify the economy by having only one good, corn. We also simplify labor by making all workers identical in ability, and having them all work the same number of hours. Workers are perfectly mobile, being able to move to any location. Also, a worker only cares about his income. Imagine an island where there are 11 grades of land, 10 bushels per time period being the most productive land for growing corn and zero being totally unproductive land.

Now we introduce labor as immigrants, with the rule that an immigrant can claim one plot of unclaimed land, all plots having the same size, and that this plot will be farmed. A newcomer will wish to maximize his output from his labor, and will therefore settle on the best free land available. The first newcomers thus settle on the 10-bushel land. So long as there is 10-bushel land available, it has no rent, so all the output goes to wages, which equal 10.

When all the 10-bushel land is claimed, the next settlers go to the 9-bushel land. The wage in the 9-bushel land is 9, so long as there is unclaimed land. What is the wage now in the 10-bushel land? If the owner were to hire labor, he would not have to offer more than 9 bushels, because for any higher wage, all the workers in the 9-bushel land would come to apply. Thus, the mobility and competition among workers equalizes the wage in the 10- and 9-bushel lands.

In 10-bushel land, the 1 bushel left after paying wages goes to rent. The factor returns are referred to as "economic rent" and "economic wages" to distinguish the real returns from any superficial appearances or accounting. Indeed, Henry George recognized that the main benefit of economic knowledge is *the ability to distinguish the implicit reality beneath the superficial appearance of economic activity*.

So, for example, if a farm in the 10-bushel land is owner-occupied and the best free land produces 9 bushels, the farmer implicitly earns a wage of 9 and gets a rent of 1, even though in appearance, his output is 10 without such distinction. This is because the general wage level is 9, so that if he were to work elsewhere, his wage would be 9, and if he were to rent out his plot, his rental income would be 1. If some employer for some reason pays a worker 9.5 bushels instead of 9, then in terms of factor analysis, the real wage is 9, and the extra half is really rent that the landowner-employer chooses to transfer to the employee rather than keep for himself.

The least productive land in use is referred to as the "margin of production." We have seen that when the margin moved from 10 to 9, wages fell from 10 to 9. When the 9-bushel land is all taken, the next settlers go to the 8-bushel land. Wages there are 8, and thus wages in the superior lands fall to 8 also, since an immigrant will then be indifferent between being hired in the 10 and 9 land or being self-employed in the 8 land. With the margin at 8, rent in the 10 land is now 2, and the 9-bushel land now has a rent of 1. We can see first of all that the wage level and the rents are not arbitrary, but determined by the economics of land and labor. Secondly, we can now formulate two economic laws.

The "law of wages," discovered by Henry George (correcting Ricardo's flawed theory of wages), is that, most basically, the wage level for the economy is set by the wage that exists at the margin of production. If the wage at the margin is 8, it is 8 for the whole economy, i.e. where labor is mobile, being able to freely migrate. We can think of the wage level as being the typical wage for unskilled labor, as those with more training and education get a premium for their "human capital." This explains, for example, why wages for the least skilled are low everywhere in a poor country such as India, even in the more productive areas, because the extra productivity does not go to wages. Where it goes is explained by the next law regarding rent.

The "law of rent" states that the rent of a plot of land is most basically determined by the difference between its output and the output, using the same quality of labor and capital goods, at the margin of production. In our model, for example, if the margin is at 8, the rent in the 10 land is 2, the difference in output between that plot and marginal land. Rent is a residual left after paying for labor and capital goods. The owner of a plot in the 10-bushel land has done nothing in return for getting that rent, as in the model it is the result of population growth. Land rent is thus a pure surplus, a gain unrelated to any exertion by the title holder.

Returning to our model, after the 8-bushel land is filled, new farmers settle on the 7-bushel land, and wages fall to 7. As the margin keeps moving to ever less productive land, wages keep falling, while rent rises. If the population keeps growing, the process ends where the wage falls to subsistence, an income that just barely enables a family to survive. Below subsistence, they starve. Indeed, much of the planet's population does live at subsistence, and when a disaster such as a drought strikes, the people starve unless there is outside assistance.

This helps explain why there is so much poverty in countries such as Brazil or South Africa or India. Wages in marginal land are at subsistence, thus making wages everywhere low. Much of the land is owned by a few families, who obtain a large proportion of the economy's output as rent.

So far, the analysis is classical economics much as David Ricardo explained it. George took it further by introducing land speculation. Suppose, as is the practice in the real world, that one could claim land even if one did not use it productively. Change the rule in the model on claiming land so that a newcomer can claim several plots of land at the margin, without having to farm it. People know that as the population grows, those plots will fetch ever higher rents.

If, for example, the margin is at 8, the 8-bushel land will be claimed much more quickly as land speculators obtain plots with the expectation of renting them out later. Newcomers who would have farmed 8-bushel land now have to go to the 7-bushel land. Land speculation pushes the margin out farther and faster. This further depresses wages and raises rent, increasing inequality even further. Those who got land first are rich, while landless workers are poor.

If one regards this inequality as unjust, one might at first seek a remedy in "rent control". But the economic reality is that no law can control the rent. Suppose that the margin is at 4, and the government decrees that no landlord may charge a rent more than 2 bushels. In the 10-bushel land, the economic wage is 4 and the landlord gets 2. That leaves 4 bushels of output that are kept by the renter. Economically, the 4 bushels are not wages, but rent that is kept by the tenant instead of being paid to the landlord. The tenant's income is 8, 4 being wages and 4 being rent. At the 9-bushel land, tenants have an income of 7, 4 being wages and 3 being rent, after paying 2 to the landlord.

So this law only shifts who receives the rent, rather than controlling the amount of rent. Landlords get less, while tenants in the best lands get more income. Tenants in marginal lands remain poor. Rent control reduces the inequality, but does not eliminate it.

A "minimum wage" has worse effects. Suppose the law decrees that wages cannot fall below 5. If the margin is below 5, all employees in lands of productivity below 5 will be laid off, since their productivity is less than what they have to be paid. Also, the law does not help those who are self-employed, as their economic wage remains the same.

Neither "rent control" nor a minimum wage affects the problem of land speculation, which shifted the margin out to a lower wage. They are attempts to treat the effects of the problem, rather than to eliminate the cause. Georgist policy, in contrast, seeks to cure the problem, to extricate poverty, by eliminating the cause.

The Georgist remedy is for the governing agency to collect all the land rent and distribute it equally to the whole population, either directly as cash (or, in the model, corn) or indirectly in public services. The public collection of land rent has three effects. First, it equalizes income. Secondly, it prevents land speculation. If all future rents will be paid to the community, there is no profit in land speculation. The margin will thus not be shifted out more than is warranted by the economic use of land, and wages will not be unnecessarily depressed.

Third, the elimination of land speculation makes the economy more productive, since landowners who are not using their land to maximum production will still have to pay the economic rent to the community, so for example vacant and underused lots, paying the same tax or charge on their rents as developed plots, will quickly be developed. This eliminates urban sprawl, since city land will be optimally developed, removing the pressure to develop land at the urban fringe, especially since the gains from increasing rents will go to the whole community.

b. Capital goods

The dynamic model has up to now abstracted from capital goods in order to clearly analyze the relationship between wages and rent. Now let capital goods be introduced. Capital goods are the produced tools of production, including buildings and the embedded technology in machines. We can analyze the effect of capital goods by introducing a plow that doubles production in all lands. The plow wears out and has to be replaced at each period of production. Suppose the margin is at 4, and the price of the plow is 2 bushels. Output doubles to 8 bushels. After paying 2 for the plow, 6 bushels of income remain, all going to wages, since rent is zero at the margin. Production has doubled, but because tools have to be paid for out of the increase in output, wages go up by 50%.

Now let's examine what happens in the formerly 5-bushel land. Output is now 10, which leaves 8 after paying for the capital good. The wage is 6, the same as at the margin. That leaves 2 bushels as rent. The rent was formerly 1 bushel, so rent has doubled. If we examine the formerly 10-bushel land, where the rent was 6, output is now 20, with 18 after paying for the plow and 12 after wages, so the rent there doubles also. Indeed, as production doubles, rent in all lands also double, increasing by 100% while wages increased by 50%. We can see by this example how much of the increase in productivity is taken as rent.

A real world example of this phenomenon is the huge increase in real estate prices that has occurred in the San Francisco Bay Area, especially during the economic boom of the late 1990s. House now typically sell for several hundred thousand dollars. A wage of $80,000 may appear to be high, but a house costing $600,000 could have an annual mortgage of $35,000. After paying $25,000 in taxes and $35,000 for housing, that leaves only $20,000 for food, travel, clothing, utilities, and everything else. Folks then instead buy a house at the urban margin, many miles away towards the Central Valley, and commute long distances to work. It takes economic understanding, especially Georgist economics, to understand the link between the crowded freeway and tax policy. If taxes were shifted from wages to land rent, the worker's wage would be higher, he would keep all his wage, and he could afford to live close to his work place.

c. A neoclassical analysis of the economics of Henry George

Neoclassical analysis cannot completely ignore the role of land, but it compartmentalizes it into nooks that get ignored when considering policy in general. In economics, the term "land" generally refers to all natural resources, including materials such as water, oil, and minerals. The focus here will be on the natural resource of space, whose supply is fixed by nature. Given some boundary of a jurisdiction such as a county, land cannot be expanded. We cannot import space or manufacture additional space. Spatial land is fixed both in extent and location.

Market prices are determined by supply and demand, where the quantity supplied equals the quantity demanded. For space, the basic price is the economic rent, what the space would fetch in an auction. The purchase price is based on the expected future rents, as capitalized or made into an asset value by the rate of interest. A higher rate of interest results in a lower price of land, as it does with bonds or any asset. For example, a bond paying $100 per year when the interest rate is 10%, has a purchase price of $1000. When the market interest rate falls to 5%, the market price rises to $2000, since a 5% return on $2000 is $100.

The tax rate has the same effect on the price of land as the interest rate. The rent has to pay both the market return to the owner and the tax. A higher tax rate thus lowers the price of land, since after paying some of the rent in tax, the price of land has to be lower to make the net return equal to that of other assets.

Taxes on the sale of produced goods increase the price paid by the buyer, since the tax has to be added to the costs of production. The higher price reduces the quantity sold and produced. Taxes on income have the same effect. They increase the cost of labor, reducing employment while also reducing net (after-tax) wages. This reduction in production and employment is referred to as the "excess burden" of taxation, also called the deadweight loss.

Neoclassical economics recognizes that where the supply of a factor is fixed, there is no excess burden, because there is no reduction of the input or the output. Land having a fixed supply, a tax on land rent or land value has no deadweight loss, no excess burden. The total excess burden of taxation in the United States has been estimated at over $1 trillion per year.

A second aspect of land is capitalization. As shown by the classical model, an increase in productivity increases the land rent and land value. Government services such as streets, highways, transit, security, fire protection, recreation, schooling, and subsidies, all increase the rent and value of land. If these works are financed by taxes on wages, worker-tenants get double billed, while landowners get subsidized. Worker-tenants pay taxes on their wages and higher housing rentals. This is an implicit transfer and redistribution of wealth from workers and tenants to landowners.

The Georgist tax policy of taxing land rent and not taxing wages eliminates this double payment and land subsidy. When landowners pay the taxes, they pay back value received from government services. A tax that collects most of the land rent also equalizes the benefits from the general productivity of the economy and the natural features of locations. The public collection of land rent is thus both equitable and efficient (Foldvary, 2004).

The tax policy proposed by Henry George was to eliminate all taxes other than on land rent. We can add to this charges on pollution, which are in effect payments for using natural resources such as the atmosphere or the oceans as a dump. Thus most generally, Georgist tax policy would include tapping the rent of space, rentals on materials such as oil, rentals for the use of radio frequencies, and pollution charges that compensate for (and thus greatly reduce) environmental damages.

2. The moral philosophy of Henry George

Henry George was a follower of John Locke, the British natural-law philosopher who influenced the American revolutionaries. As with Locke (1690), George's moral philosophy begins with self-ownership. Each human being properly owns his body, life, and time. Therefore a person fully owns his labor and the fruits of his labor.

Any forceful taking of wages is therefore theft, whether it is done by a single thief or by a gang of thieves or by a majority of persons via taxes imposed by a government. For George, to the extent one's wages are taken by force, one is a slave to the thief. Thus the taxation of wages or exchange or production is not only inefficient, creating an excess burden; it is also unjust.

But self-ownership does not apply to what the self has not produced, namely, natural resources. John Locke wrote that one may appropriate unclaimed nature only with the proviso that there be land of that quality freely available to others. George thus took Lockean ethical philosophy to its logical conclusion. Super-marginal land is not available free, so human equality requires its rent to be shared by all persons in the relevant community.

And so, there is harmony between what is morally just and what is economically efficient. Rent is the most efficient source of government revenue, and justice also requires the land rent to be shared equally by all in a community. Perhaps there is a disagreement here with socioeconomics, since in Georgist thought, wealth maximization is synonymous with efficiency maximization.

George thus concludes that human beings have two basic natural rights. First, a person has a natural right to his own person and labor. Second, a person has a natural right to an equal share of the benefits provided by nature and by his local community as reflected in the land rent.

3. Henry George and the free market

In the context of society, "freedom" does not mean "anything goes." The concept of a "free society" does not refer to physical freedom, where one is "free" to steal and destroy the property of others. A "free society" is an ethical concept, where all voluntary acts are allowed while coercively harmful acts are prohibited, in accord with the natural moral law described by John Locke. The natural right of self-ownership therefore includes the moral right to do anything that does not coercively harm others, e.g. by force or fraud.

A "free market" is nothing more than a free society in economic affairs. In a pure free market, all economic activity is voluntary for everyone. Any harm to another, such as damage by pollution, has to be compensated. In a truly free market, there is no restriction or tax on honest and peaceful activity (Foldvary, 1980).

Applying Georgist thought, the only public revenues compatible with a free market are voluntary user fees, penalties for imposing harm on others, and the tapping of economic rent. George was thus an advocate of free trade, as any imposed trade barrier, whether as a tax or as a restriction, is a violation of property rights. Unlike neoclassical free traders, George was thorough and consistent in his views of free trade, applying the concept to domestic trade, since any tax on exchanges or labor is a trade barrier.

In a pure free market, there would be no reason for unemployment other than the "frictional" case of people temporarily between jobs. If a worker's marginal product is greater than zero, there is no economic reason why he should be unemployed. The ultimate limit to production is labor, so the natural economic tendency is for labor to be fully employed.

What prevents full employment is government intervention. For example, if the legal minimum wage is $7, but the worker's productivity is only $6, he will not be hired. Taxes on profits, sales, and wages artificially increases the cost of labor, decreasing employment. Arbitrary restrictions on enterprise - licensing requirements, permits, subsidies, and protection from competition - all reduce the opportunity to become self-employed. Labor laws that induce excessive litigation or make it difficulty to fire unproductive workers also reduce employment. Full employment also creates a better work environment, since vacancies become costly.

More generally, unutilized productive capacity is caused by barriers to trade which are erected by government. Critics of market economies often point to idle labor and capital as faults of the market, whereas there have never been any truly free markets in human history. The empirical study "Economic Freedom of the World" (http://www.freetheworld.com) provides evidence that indeed, economic freedom is strongly correlated with higher per-capita economic growth.

As George showed, economic efficiency requires the public collection of rent. Land speculation, induced by the implicit subsidy of taxing wages to finance civic services, creates unutilized capacity in land, while the taxation of labor and capital creates the unutilized capacity in the excess burden, goods that would have been produced if not for the taxes. Moreover, the public collection of land rent deflates the price of land, shifting investment to capital goods rather than the purchase of sites. Some of the unutilized capacity of capital goods is thus due to the diversion funds to land purchase and speculation rather than towards real investments.

There is also unused capital-goods capacity from government borrowing, as funds that would have been invested in capital goods are shifted to loans to governments for current consumption. Governments borrow rather than tax because it is realized that higher taxes reduce growth and output. But when the taxes fall on land value, there is no such negative effect, and there is less pressure to borrow.

In classical economics, and consistent with Georgist thought, savings are not a "leakage" from an economy, as proposed by demand-side economists such as Keynesians. In a truly free market, there is always a demand for loanable funds, so any savings will be loaned at the market rate of interest. Leakage occurs when savings increase but either the rate of interest does not decrease or if despite such decrease, borrowing does not increase. Either of these outcomes implies some intervention, such banking regulations. Contrary to popular thought, the Great Depression was not caused by a non-existent free market, but by massive government interventions, including failures in monetary policy by the Fed, high tariffs, an failed attempt to keep wages high after 1929, and most importantly, rampart land speculation that would have been prevented with a Georgist tax policy.

One problem in today's economies is that interest rates are not set by a non-existent free market, but are heavily influenced by central banks and government policies. Today's currencies are fiat monies not tied to any commodity, the supply determined by the monetary policies of central banks such as the Federal Reserve system. Most currencies have had continuous price inflation.

The taxation of interest and dividend income further skews the rates of interest. Interest rates are thus not allowed to do their proper job of allocating resource between investment and consumption in accord with the preferences of the people.

Wages depend on the premium for human capital as well as the general wage level, so educational opportunities are important, more so in a global economy where the comparative advantage includes technology. An a free-market economy, private and governmental schools would compete in an equal financial setting to provide not just an equal opportunity for schooling but also to induce the best educational provision.

With full employment and the highest wages that productivity will provide, there is no need for governmental employment programs or a redistribution of income. The full ownership of wages and the freedom to be self-employed, plus receiving an equal share of the rent, provides a natural "basic income" for all.

In such ways, truly free markets provide for maximum prosperity, optimal environmental protection, and social justice. Georgist free-market policy eliminates poverty, reduces crime, and alleviates problems such as congestion and urban blight and sprawl.

Georgist policy thus combines and harmonizes the best of free enterprise and socialism. Enterprises and labor are free to produce without tax burdens and arbitrary restrictions. The aim of pure socialism, social justice, is achieved by equalizing or socializing the land factor while leaving workers free while maximizing their wages. The elimination of unemployment puts labor in a strong bargaining position, while better empowering workers to create workers' cooperatives and have a greater ownership of the means of production.

- Henry George and socioeconomics.

  In Robert Ashford's analysis of Socioeconomics, some assumptions of neoclassical economics are challenged.

  1) The neoclassical concept of "rationality" is indeed narrow. Neoclassical economics confines rationality to the doctrine of "rational expectations," where rational actors do not make systematic mistakes or engage in continuing suboptimal behavior. But economic rationality needs to be distinguished from rationality as a psychologist or sociologist might analyze it. In economics, there is no judgment of people's ends or goals or preferences. A properly economic concept of rationality has two principles: logically consistent preferences, and economizing behavior. The latter means that costs are minimized or benefits maximized. Henry George explicitly used the economizing principle in his analysis and assumed rationality in the broad economic sense rather than the "rational expectations sense" as in modern economics.

  2) That people act only in their narrow self-interest is not really a premise of neoclassical economics. It is typically only an assumption made for the purposes of deducing a model or theory, rather than a description of reality. However, there is too much emphasis on the narrow self-interest assumption. Henry George (1879) recognized that moral and

emotional considerations can be much more powerful than financial self-interest. Indeed, Adam Smith also recognized the motivation of sympathy with others in his book *The Theory of Moral Sentiments*.

3) Perfect competition is a benchmark model used as an assumption for analysis, but no neoclassical economist believes that it describes economic reality. Economists well recognize that the actual distribution of income is not what it would be under perfect competition. However, when it comes to the income from land, neoclassical economics is deficient, as it either ignores the rent of land or treats land as having a marginal product similar to that of labor or capital goods.

Of course land has a marginal product similar to those of labor and capital goods, but as the classical economists recognized, the rent is also a differential among lands of various qualities, and it is a surplus. Neoclassical economics masks this surplus under the rubric of a "producer surplus," the textbooks seldom venturing to ask who receives it.

Ignoring a major cause of inequality, the unequal ownership of land value, neoclassical economists only think of equalizing wealth by redistribution from the rich to the poor, with a trade-off in lower productivity. Henry George, in contrast, recognized that the source of wealth matters. Instead of redistributing income in general, justice only requires a proper initial distribution of wealth. For labor and capital, to the creator belongs the creation. For land, created by God or nature, to humanity belongs the rent in equal shares.

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