Journal of Alternative Perspectives in the Social Sciences (2012) Volume 4 No 3, 640-662

Population Based LAND Value Tax to Assist in Human Evolution and the Growth of Man in Wealth

Gabriel James Tambunga, mexicanengineer911@gmail.com

Abstract: *The direction of the evolution of man may be determined by observing what precedes Natural Selection, and that being The Fundamental Law of Political Economy, "it is that all men seek to gratify their desires, whatever those desires may be, with the least exertion," as stated by Economist and Philosopher Henry George. If man acquires his desires with least possible labor, and those who produce desires produce at the least cost so more of man can acquire the desires, there will be some of man who will lose their employment due to innovations that cause desires to be produced at the least cost. If this trend would be allowed to continue, without protection of mans employment or safety nets to protect him from losing his wealth, man would be forced to learn new skills and quickly for the production of new desires. After generations man may be naturally selected to be ambidextrous and quick in learning. To assist in this direction economic practices are presented that allow man to be boundless in his productions and acquisitions of his desires, which includes access to LAND, ad coelum ideally, and taxation that contributes to the production and acquisition of desires.*

1. Introduction

Henry George stated a law of nature called The Fundamental Law of Political Economy, or Natural Law (Tambunga, 2011 and Tambunga, 2012), that describes a general behavior of man "it is that all men seek to gratify their desires, whatever those desires may be, with the least exertion," where desire is described as "All human actions-at least all conscious and voluntary actions-are prompted by desire, and have for their aim its satisfaction. It may be desire to gain something or a desire to escape something, as to obtain food or to enjoy a pleasing odor, or to escape cold or pain or a noisome smell; a desire to benefit or give pleasure to others or a desire to do them harm or give them pain. But whether positive or negative, physical or mental, beneficial or injurious, so invariably is desire the antecedent of action that when our attention is called to any human action we feel perplexed if we do not recognize the antecedent desire or motive, and at once begin to look for it, confident that it has to the action the relation of cause to effect" (George, 1992). Examples of Natural Law are when man creates tools to ease physical labor where the desire is to produce more with less or the same physical labor, and a reduction of physical labor due to automation where the desire is to reduce the cost of labor (Gaimon, 1985). Another example of Natural Law is the locations of the congregation of man, such as in cities, where large producers can easily find laborers and those of special skills to create products that satisfy desires. However, due to Natural Law conflicts during the economic growth of man can occur, where mans need to innovate and mans need to facilitate their labor can be a source of conflict with mans desire to fulfill his desires with the least exertion.

2. Natural Law and Conflict With Labor

According to Henry George, mans desires are unlimited (George, 2003). However, man has limitations on what he can acquire as what he can acquire is based on the exchange of his labor, where labor is defined as "all human exertion in the production of wealth" (George, 2003) and money is a measure of a desires value and a medium of exchange between mans labor and what he desires. Due to this limitation and the knowledge of Natural Law, man will generally acquire what is desired with the least effort by acquiring what is desired at least cost, as there would be less labor for the less expensive desires. As a result, large producers may intend to produce desires at the least cost and sell the desires at a lower cost to acquire the money from more people in a population where the amount of money a person or a family has may vary.

The reduction of the cost of production can include innovation that reduces the labor of man, for better consistency and increased speed of production, or a change in the placement of production for a reduced labor cost. A consequence to these actions is that a small group of man would not be employed. The more innovation and displacement of labor increases and spreads, the more small groups of man would not labor in what he was previously skilled in.[1] Further, if there is a reduction of man laboring due to innovation or displacement of labor there is a tendency, for those affected by the loss of labor, for man to fight innovation (Noble, 1995) or the displacement of labor (Glass and Saggi, 2001) to maintain employment in what he was skilled in, as it by the least effort of man to maintain his labor in what he was skilled in than to learn a new skill where others may be more experienced in. However, as mans desires are unlimited man will continue to acquire what he desires at the least cost, compounding further the need to innovate and/or to reduce costs by displacing labor.

3. Natural Law Guiding the Direction of Man and His Evolution

If mans desires are unlimited, this implies he will constantly crave new desires. For the beginnings of the creation of any item before becoming a desire, specialties in skills to accomplish the creation may be necessary, and resulting in those with the specialty skills to be employed or have higher wages. Natural Law does imply that man would be resistant to learning a new skill; however, it may be possible for the learning of a new skill to be the least exertion if posed with the option of loss of wealth or possibly starvation (i.e. no financial governmental safety nets such as unemployment), as Natural Law may originate from the summation of internal and external stimuli inside and outside of man, respectively (Tambunga, 2012). If the internal stimuli were the thoughts and feelings during starvation or its possibility, and the external stimuli was the resistance of learning a new skill, the reaction to the summation of the stimuli would be Natural Law. It is possible some of man may choose to lose wealth, starve or

[1] An example of this is the U.S. Agriculture industry in the U.S. where in the year 1790 90% of the U.S. workforce was employed in agriculture (Borders and Burnett, 2006), in 1900 the percentage changed to 41%, and by the year 2000 about 1.9% was employed in agricultures (Dimitri and Effland and Conklin, 2005), which may be due to the technological changes in agriculture (Mazoyer, 2006).

commit crimes to acquire desires as it may be their least exertion; however, as instincts for survival is in almost every living organism, the choice of starvation or the risking of a life during a crime may be minority decisions, leaving the general direction of man to learn new skills, and as quickly as possible, to be employed or to compete with the higher wages.

However, if man becomes ambidextrous, quick in the learning of a new skill, and accepts employment will be generally limited to the times of innovation, man can be more employed and acquire what he desires. Natural Law may be a reason why Natural Selection occurs, which precedes evolution (Tambunga, 2012). If this is so, and if man is allowed the option to lose his wealth or starve when his employment is lost, then man becoming ambidextrous and quick in the learning of a new skill may be the direction of mans evolution, as innovation to mans necessity in becoming ambidextrous and quick in learning a new skill was directly influenced by Natural Law.

4. LAND's Effect on Evolution

If living organisms, outside of man, evolution can be affected by the abundance and/or lack of abundance of desires of the LAND they inhabit (Darwin, 1860), where LAND is the whole material universe outside of man himself and what he creates (George, 2003), then the evolution of man may be affected the same way. However, mans evolution may involve a cycle:

> (1) Man acquires from and/or uses LAND to satisfy his desires, via labor, as LAND may be the source of satisfaction of his desires.[1]

[1] "If man did not grow in population and did not take from the LAND for his desires, then whatever man has existing he can remold to satisfy another man's desire in return for something else, where money is only an intermediary. Mans activities would then revolve around remolding and its distribution, but there would be no increase of products to satisfy a man's desire and there would be no maintenance for the desires that degrade with age, unless some of man learns to reduce his desires for the satisfaction of others. If there was an increase in population demands would increase and without acquiring from

(2) Innovation causes a reduction of some labor causing man to be employed less.

(3) Man has unlimited desires, so man must constantly take from the LAND, *ad coelum* ideally, and/or use the LAND to create and satisfy more desires to constantly be employed.

For this cycle to perpetuate and possibly increase in speed, and possibly increasing mans speed in his proposed evolutionary direction where he will become faster and faster in being ambidextrous and learning new skills, in addition to unlimited access to LAND and to boundlessly innovate and a lack of safety nets, man must constantly acquire what he desires at the least cost. That is, he must constantly grow in his wealth, where wealth are "natural products that have been secured, moved, combined, separated, or in other ways modified by human exertion, so as to fit them for the gratification of human desires" (George, 2003).

5. To Grow in Wealth

For man to grow in wealth he must be as boundless as possible in what he can produce and must be able to maintain, or as much as possible, the wealth he acquires from his labors. There can be many discussions about what man practices and innovates that can affect his growth or his ability to maintain his wealth, but as societies are different in one part of the world and another and change over time, and innovation changes over time, there are no absolute practices or innovations, at this point in time, that all of man must adhere to for all time for man to grow in wealth. However, to reduce mans limitations in his growth communal funds would be necessary if the societal practice

---

the LAND, but the remolding remain, there would still be fewer desires for man. Therefore, from the LAND man must take what he needs for survival and more to satisfy his desires," (Tambunga, 2011).

From the statement above, if man is to grow in his wealth, man must have unlimited access to LAND, but man must also understand the consequences of taking from the LAND and possibly taking action in leu of the consequences by using innovation to reduce the harmful effects of taking from the LAND.

and/or innovation has been reasoned, and possibly communicated and adopted by the majority of a public, to show man as a whole would grow in wealth.

5.1 Distribution

Distribution allows for man to produce beyond what he can produce for a local population, and when he produces more, more wealth is created for man including those that are distributed to. However, for man to distribute what he produces it may be difficult for man to do without the assistance of public roads. That is, the expense of individuals creating roads or traveling through rugged terrain may be costly and time consuming, respectively. Therefore, for the benefit of man funds need to be acquired by a means that it is distributed over a larger group to reduce the burden of the expense, and possibly the time it takes to travel, to benefit the growth of the whole.

5.2 Security

There is diversity, especially in ideas and experiences, within the human species, where there may be differences in man where the path of least resistance to acquire what is desired is to acquire by taking by force what may have been earned at a great cost of labor from another. Fortunately, security for a population, including laws to protect a man’s wealth, has changed the internal stimuli, fear of prison, and external stimuli, fear of injury or death if caught in the act of theft, to cause the acquisition of desires by force to generally not be the path of least resistance. As a result, security for a population would be a necessity especially where populations are very high where there would be a diverse enough population to include those who do not take, or unaware of, enough precautions in security to protect their wealth. As populations can be very diverse there will some of man who would see the path of least resistance to be theft, but the security efforts for a population can be directed to protect the population as a whole, where most of the population would be able to maintain their wealth. For a population to grow in wealth most of mans efforts must directed towards the acquisition of individual wealth, and, as a result, efforts should be made to reduce his exertions in self protection if it interferes with the acquisition of personal wealth. Therefore, it may be a benefit for a population of man to provide some funds for the security of the population to reduce the amount of exertions an individual would perform for self protection, where the security for the population, including laws, would change or maintain the stimuli to cause the path of least resistance to be that to produce instead of stealing another's wealth. The amount of security can be determined by a population's experiences in what the path of least exertion would be and how much security is the population willing to accept outside of self protection.

5.3 Utilities and Changing Technologies

Security and Distribution can be reasoned as a necessity for mans growth according to current societal practices and innovations, but over time innovations can cause changes in necessity. For example, drinkable water and its distribution to a man's home allows for man to thrive by reducing the time it takes for man to physically find fresh water and to treat it, where drinkable water is necessary for man to exist. This reduction in time and labor to acquire fresh water allows for man to spend his time acquiring other desires or laboring to acquire the other desires. Currently, in developed countries, many cities and boroughs subsidize, via city/borough taxes, some cost of the distribution and treatment of the water to make it drinkable and accessible in homes. However, with further development in technology, such as in atmospheric condensers, a technology where water is extracted from the air, the practice in taxing the public for affordable water can be reduced and acquiring and generating water maybe be less of a concern and less impacting to the general public, due to less taxes. This would result in more money for the general public to acquire more desires.

For now, some forms of security and distribution may exist despite innovations, and will be considered as a necessity for man to grow for the remainder of this paper, but the innovations over time may change the way security and distribution is practiced and possibly resulting in fewer taxes.

6. The Tax Burden on LAND Owners

Whether man is a single specialty skilled laborer or evolved multi-skilled laborer, a large congregation of these skilled workers would have a larger production[1] than a smaller congregation of the skilled workers. And it is at these locations where the taxes, used for societal practices that assist in the growth of man (security and distribution), would be the most effective as these are the locations where most of the desires are being created. If the congregation of man is smaller there may be less need for roads, security and use of LAND, and therefore less taxes needed for these practices. If the taxes would be most effective in the places where more of man congregates, then it is not the people or the LAND alone that is valuable in the production of desires, but the combination of both. Therefore, as it is the LAND that occupies the people that is the most valuable and the LAND itself contains the results of the funds necessary for the practices then the LAND itself, based on the size of the population and the time man occupies the LAND, is where the funds should be acquired for the practices that benefit man. That is, a sole tax on the LAND that is based on the population that occupies it and the time he occupies it. Those who own the LAND would be burdened but it is the LAND owners who do not labor to acquire the rents for the use of the LAND and may be forced to develop the LAND further to acquire more rents thereby contributing slightly to the growth of man. Further, for the non-LAND owners, those who labor on the LAND's, would keep all that he has earned, spending more to satisfy his desires, causing those who innovate to innovate more.

[1] It is important to note that Henry George indicated that production included distribution, where distribution included the transportation and final sale of a desire to a consumer (George, 2003), where this definition will be used in this paper.

7. LAND Tax Equations Based on Population and Time of Occupancy

7.1 Basic Tax Equation for a General Population Change

If a congregation of man (e.g. a city) was constant in its population for the entire year the tax amount (in monetary units) can be calculable, as decay in the city and necessary security may eventually be predictable. In this situation the tax for a populated area, S, necessary to maintain beneficial practices would be:

$$Tax(S) = \gamma \cdot U \cdot g(t) \tag{1}$$

where $g(t)$ is the population that is constant through time, U is the monetary units per person, and gamma (γ) is a unit-less factor that allows the new tax system associated with the congregation of man to have the same amount of money as the current tax system (i.e. if the calculation yields $5 million, but the current tax system is $10 million, the γ would be 2). Equation (1) is a scalar equation where the dot ($\cdot$) represents a multiplication and not a dot product between vectors. However, as the places of the congregation of man may not always be constant in population, such as in beach towns where the population swells during summer months, Equation (1) can be expanded to:

$$Tax(S) = \frac{\gamma \cdot U \cdot c_n}{T} \int_{\beta_{n-1}}^{\beta_n} g_n(t)dt \tag{2}$$

Equation (2) is a summation equation that adds up the integers of n to where β_n are increments of time that add to T, where β_n has the same units as T, where T is a chosen time where reoccurring patterns of population change can be easily observed, where c_n is a factor that accounts for excess or decreases in decay of the distribution system and changes in security during times of population changes.[1] $g_n(t)$ is the population change with respect to time and its definite integral, divided by T, is the population average during the time T. The following is an example of an expansion over a 12 month period.

$$Tax(S) = \frac{\gamma \cdot U}{T} \cdot \{c_1 \cdot \int_{\beta_0}^{\beta_1} g_1(t)dt + c_2 \cdot \int_{\beta_1}^{\beta_2} g_2(t)dt + \ldots + c_{12} \cdot \int_{\beta_{11}}^{\beta_{12}} g_{12}(t)dt\} \quad (3)$$

The integrals from β_0 to β_1 is month 1, β_1 to β_2 is month 2, and β_{11} to β_{12} is month 12. As indicated in Equation (3), every month would have a different population calculation, but the sum would account for the effects of these changes in the population for the whole year.

7.2 Division of Taxes by Size of Property

Properties within a Borough or City are not always the same in size, and some properties are made to generate an income while other properties are not as developed. However, as larger properties have a greater potential in generating more revenue through the development of their property, properties should be burdened with the tax relative to their size, as road decay and security would have the potential of being utilized more in developed properties. A consequence to this thought is that land owners, in the same area, would have the same tax if the land was the same size despite the developments of the property.

$$Tax(S) = \frac{Tax(S)}{S}(a_1 + a_2 + a_3 + \ldots) = \frac{Tax(S)}{S} a_j \quad (4)$$

Equation (4) is a summation equation where Tax(S) is the calculated tax of Equation (2) and a_j are the individual

[1] The factor may turn to zero if there is no usage of security or distribution, or turn to one if there are no changes.

properties that add up to the surface area, S, of the Borough or City, and each integer value of j is the unique indice that represents a specific property. The word "properties" mentioned here and thereafter refers to the definition of LAND previously mentioned, or can be thought of as a surface area of the earth *ad coelum*.

If there are a lot of properties it may be cumbersome to find out exactly what taxes are owed by what property. A solution to this is to use a kronecker delta function that will zero all properties except for the desired property.

$$\frac{Tax(S)}{S} \cdot a_j \cdot \delta_{j',j} \qquad (5)$$

The j' is the integer that represents a specific property, where when j' does not equal j the delta function turns to zero. The kronecker delta function is usually used for vectors that are orthonormal to each other; however, due to the simplicity the kronecker delta function offers, the delta function will be used and all properties will be regarded as vectors orthonormal to each other but reduced to scalar form in the equations presented for this paper.

7.3 Further Division of Taxes by Area

Some parts of a City or Borough may be more populated than others, where the less populated areas within a City or Borough would have less need, ideally, for repair or security. Therefore, the taxes applied to properties should be divided according to the use of security and distribution. Equation (2) can then be modified to reflect this.

$$Tax(S) = Tax(s_i) = \frac{\gamma \cdot U \cdot c_{n,i}}{T} \int_{\beta_{n-1}}^{\beta_n} g_{n,i}(t)dt \qquad (6)$$

Equation (6) is a summation equation for the expected tax of the City or Borough, where the sum of s_i's, the surface area of the individual areas, add up to S, the total surface of the City or Borough, where i is an integer that represents a specific area in S. The factor that accounts for excess decay would be different for each area, so c_n was modified to $c_{n,i}$ to account for this. And as the population is different for each area the population change with respect to time $g_n(t)$ was modified to $g_{n,i}(t)$.

In Equation (6), for each s_i, there are associated private properties within the area, and if all areas within s_i are private properties then the private properties should add up to s_i. To determine the tax for each private property within a specific area Equation (6) can be multiplied by:

$$\frac{a_{i,j}}{s_i} \cdot \delta_{i',i} \cdot \delta_{j',j} \tag{7}$$

where $a_{i,j}$ are the surface areas of the individual properties that add up to s_i, and j is the indice associated with the private property within area s_i. If $\delta_{j',j}$ is not used and $\delta_{i',i}$ remains in Equation (7), the tax expected for each area can be determined, as i' is the integer that represents a specific area. If both delta functions are removed the total tax expected from the City or Borough, Tax(S), would remain the same as the summation of $a_{i,j}/s_i$ in a single integer of i is equal to one.

The $c_{n,i}$ and $g_{n,i}(t)$ of Equation (6) was not expanded to each individual property due to the arguments indicated in "Division of Tax by Size of Property" above. That is, some properties may be underdeveloped and have a zero population but would still have roads in front of the property and may be in need of security, such as firefighters.

7.4 The Additional Cost of Public Property

Within a City or Borough there are public properties that benefit the population in smaller areas, s_i, and other public properties may benefit the entire population of the City or Borough, S. Examples of these public properties are fire stations, police stations and court houses, which would require road maintenance and some security as private property would. In addition, there may be costs associated in operating the public properties, such as wages for a police officer and toilet paper for public bathrooms in court houses. As these are public properties the cost for maintaining the roads, security and operation would come from acquired taxes.

$$\frac{P_{i,k}}{s_i} \cdot \frac{\gamma \cdot U \cdot c_{n,i}}{T} \cdot \int_{\beta_{n-1}}^{\beta_n} g_{n,i}(t)dt + Cost(P_{i,k}) \quad (8)$$

The first part of Equation (8) is the cost for maintaining roads and the cost for security as if the public property was private. The second part of Equation (8) is the cost for operating the property. $P_{i,k}$ is the sum of the surface areas of the public properties within the City or Borough, where the indice k represent integers that represents a specific public property in specific area s_i, and s_i is now the sum of all the surface areas of the private and public properties.

If some public properties were to only benefit some areas, and other properties were to benefit all areas, then only the private properties that benefit should be burdened with the public property cost. Equation (8) could then be multiplied by:

$$\frac{a_{l,j}}{A_l} \cdot \delta_{i',l} \cdot \delta_{j',j} \quad (9)$$

where $a_{l,j}$ are the surface areas of the affected private properties that add up to A_l. The indice l is associated with the areas the public properties affect. Therefore, l can be a function of indices i and k, where each unique integer of i and k cause l to be specific integers, where only the private properties associated with the areas indice l shall be part of the summation of Equation (9), which is multiplied to Equation (8) to determine the cost an affected private property would have to pay for a public property.

There may be costs that are not associated with a public property. That is, for example, a police department may lease a space from a privately owned building on a private property and funds may be needed for salary, building lease, and utilities. As this cost is different from the costs associated in Equation (8), an additional cost equation is needed. However, as the private land owner would already pay for the security and distribution costs associated with the private property, as indicated in Equation (6), the integral equation would not be necessary.

$$Cost(Q_{i,m}) \tag{10}$$

Equation (10) indicates the additional costs in each area, where m is the number of the non-property related costs associated in area i. As some of the costs may benefit a specific area or the entire City or Borough, Equation (10) could be multiplied by:

$$\frac{a_{r,j}}{A_r} \cdot \delta_{i',r} \cdot \delta_{j',j} \tag{11}$$

The same explanation for the indices and surface areas after Equation (9) applies to Equation (11).

7.5 Total Tax Efficiency of Government

A City or Borough's total tax requirement would come from the addition of Equations (6), (8) and (10). To determine the tax requirements from each property Equations (7), (9) and (11) would be multiplied to Equations (6), (8) and (10), respectively, and summed, if all necessary indices, areas and costs are known.

The use of these tax equations may require details of a City or Borough that would have not been considered before. However, with the details known the residents of a City or

Borough can see where the taxes would be spent. And if it is a goal of the City or Borough to maintain or lower taxes, it could be determined where efficiency would be needed and if some costs are necessary. As these equations are detailing where the collected taxes are being spent, it may be a benefit for residents to know of these details with clarity, implying a goal for members of the local government.

8. LAND Tax for Multiple Levels of Government

There are multiple levels of government that require funds for operation, and the funds are acquired from taxes imposed on the people. However, as mentioned, the taxes can be beneficial to the growth of man if directed toward activities that allow him to maintain his wealth and grow. For example, on a state level, roads can connect cities to cities if funds were collected from all cities that benefited from the distribution. The arguments for a population based land tax indicated in "The Tax Burden on LAND owners" above can still apply to all levels of government. As a result, tax Equations (6) to (11) can be used, though modified, to fit the level of government. All of the following Equations will refer to the same lettered and numbered indices, as it is a goal in this section of this paper to combine all of the taxes for a specific private property into one large Equation and possibly a single tax, though each section discussed separately by level of government, and to show the possibility that each tax payer would know exactly where each tax dollar would be spent.

8.1 Modifications for Federal Tax Equations

$$\frac{\gamma^{(F)} \cdot U \cdot c^{(F)}_{n,i,j,k,l}}{T} \cdot \int_{\beta_{n-1}}^{\beta_n} g_{n,i,j,k,l}(t)dt + Cost(P^{(F)}_{i,j,k,l,A}) + Cost(Q^{(F)}_{B}) \qquad (12)$$

Equation (12) is a combination of Equations (6), (8) and (10). However, as the first part of Equation (8) is associated with the maintenance of local roads and local security, it will be included and discussed with Equation (24), which are the taxes and costs associated on the local level. For the same reasons Equations (16) and (20) will also not contain a modified integral equation of Equation (8), but will also be included and discussed with Equation (24).

In Equation (12), the superscripts of (F) are not a power but allows what it is superscripted to be unique values, and unique for the federal level as indicated by the letter F. Other parenthesizes superscripts that allow unique values or integers of what is superscripted will follow. However, indices i, j, k and l are indices associated with a particular state, county, City or Borough, and area within the City or Borough, respectively. However, as there may be different number of areas between Cities and Boroughs, and there may be a different number of Cities and Boroughs between counties and there may be different number of counties between states, the indices are functions of each other. That is, j is a function of i, k is a function of i and j, and l is a function of i, j and k. Further, as there are a different number of private properties within an area, m, an indice that represents a specific private properties, m will be a function of i, j, k, and l. For example, a specific integer i will limit the number of integers j can be, a specific i and j will limit the number of integers k can be, a specific i, j, and k will limit the number of integers l can be, and a specific i, j, k and l will limit the number of integers m can be, where the unique combination of indices i, j, k, l and m refer to a specific private property and the specific $a_{i,j,k,l,m}$ will refer to a specific surface area of the specific private property. The indice n is still associated with time. However, n is a function of i, j, k, and l, and the specific population change over time, $g(t)$, in a specific area is dependent on the specific location indicated by the specific combination of indices i, j, k, l. The indices A and B are integers that represent costs associated with specific federal properties and not associated with properties, respectively. The indice A is a function of indices i, j, k, and l, and a specific combination of all indices mentioned refers to a specific cost in a specific location. All indices referring to cost, property related or not, will be a function of all indices within its set of indices. To determine the tax from each private property, the first part of Equation (12) can be multiplied by:

$$\frac{a_{i,j,k,l,m}}{A^{(F1)}} \cdot \delta_{i',i} \cdot \delta_{j',j} \cdot \delta_{k',k} \cdot \delta_{l',l} \cdot \delta_{m',m} \quad (13)$$

where $A^{(F1)}$ is the surface area of the sum of all the private properties within the federal government, and where m is the indice that represents the private property within a specific area, indicated by indice l, which is within a specific City or Borough, indicated by indice k, which is within a specific County, indicated by indice j, which is within a specific state indicated by indice i. The second part of Equation (12) can be multiplied by:

$$\frac{a_{J,K,L,M,m}}{A^{(F2)}} \cdot \delta_{i',J} \cdot \delta_{j',K} \cdot \delta_{k',L} \cdot \delta_{l',M} \cdot \delta_{m',m} \quad (14)$$

where $a_{J,K,L,M,m}$ are the surface areas of the affected private properties that add up to $A^{(F2)}$, and where indices J,K, L, M are all functions of indices i, j, k, l and A. The third part of Equation (12) can be multiplied by:

$$\frac{a_{R,V,W,X,m}}{A^{(F3)}} \cdot \delta_{i',R} \cdot \delta_{j',V} \cdot \delta_{k',W} \cdot \delta_{l',X} \cdot \delta_{m',m} \quad (15)$$

where $a_{R,V,W,X,Y}$ are the surface areas of the affected properties that add up to $A^{(F3)}$, and where indices R, V, W, X, and Y are all functions of indice B.

8.2 Modifications for State Tax Equations

$$\frac{\gamma_i^{(S)} \cdot U \cdot c_{n,i,j,k,l}^{(S)}}{T} \cdot \int_{\beta_{n-1}}^{\beta_n} g_{n,i,j,k,l}(t)dt + Cost(P_{i,j,k,l,Z}^{(S)}) + Cost(Q_{i,D}^{(S)}) \quad (16)$$

In Equation (16), the superscripts and indice explanations are similar to the explanations indicated after Equation (12). To determine the tax from each private property, the first part of Equation 16 can be multiplied by:

$$\frac{a_{i,j,k,l,m}}{A_i^{(S1)}} \cdot \delta_{i',i} \cdot \delta_{j',j} \cdot \delta_{k',k} \cdot \delta_{l',l} \cdot \delta_{m',m} \quad (17)$$

where $A_i^{(S1)}$ is the sum of the surface areas of all private properties within the state indicated by indice i. The second part of Equation (16) can be multiplied by:

$$\frac{a_{i,K^{(1)},L^{(1)},M^{(1)},m}}{A_i^{(S2)}} \cdot \delta_{i',i} \cdot \delta_{j',K^{(1)}} \cdot \delta_{k',L^{(1)}} \cdot \delta_{l',M^{(1)}} \cdot \delta_{m',m} \quad (18)$$

where $a_{i,K^{(1)},L^{(1)},M^{(1)},m}$ are the surface areas of the affected private properties that add up to $A_i^{(S2)}$, and where indices $K^{(1)}$, $L^{(1)}$, $M^{(1)}$ are all functions of indices i, j, k, l and Z. The third part of Equation (16) can be multiplied by:

$$\frac{a_{i,V^{(1)},W^{(1)},X^{(1)},m}}{A_i^{(S3)}} \cdot \delta_{i',i} \cdot \delta_{j',V^{(1)}} \cdot \delta_{k',W^{(1)}} \cdot \delta_{l',X^{(1)}} \cdot \delta_{m',m} \quad (19)$$

where $a_{i,V^{(1)},W^{(1)},X^{(1)},m}$ are the surface areas of the affected private properties that add up to $A_i^{(S3)}$, and where indices $V^{(1)}$, $W^{(1)}$, $X^{(1)}$ are all functions of indices i and D.

8.3 Modifications for County Tax Equations

$$\frac{\gamma_{i,j}^{(C)} \cdot U \cdot c_{n,i,j,k,l}^{(C)}}{T} \cdot \int_{\beta_{n-1}}^{\beta_n} g_{n,i,j,k,l}(t)dt + Cost(P_{i,j,k,l,E}^{(C)}) + Cost(Q_{i,j,G}^{(C)}) \quad (20)$$

To determine the tax from each private property, the first part of Equation (20) can be multiplied by:

$$\frac{a_{i,j,k,l,m}}{A_{i,j}^{(C1)}} \cdot \delta_{i',i} \cdot \delta_{j',j} \cdot \delta_{k',k} \cdot \delta_{l',l} \cdot \delta_{m',m} \quad (21)$$

where $A_{i,j}^{(C1)}$ is the sum of the surface areas of all private properties within the specific County, indicated indice j, which is within the specific State indicated by indice i. The second part of Equation (20) can be multiplied by:

$$\frac{a_{i,j,L^{(2)},M^{(2)},m}}{A_{i,j}^{(C2)}} \cdot \delta_{i',i} \cdot \delta_{j',j} \cdot \delta_{k',L^{(2)}} \cdot \delta_{l',M^{(2)}} \cdot \delta_{m',m} \quad (22)$$

where $a_{i,j,L^{(2)},M^{(2)},m}$ are the surface areas of the affected private properties that add up to $A_{i,j}^{(C2)}$, and where indices $L^{(2)}$ and $M^{(2)}$ are functions of indices i, j, k, l and E. The third part of Equation (20) can be multiplied by:

$$\frac{a_{i,j,W^{(2)},X^{(2)},m}}{A_{i,j}^{(C3)}} \cdot \delta_{i',i} \cdot \delta_{j',j} \cdot \delta_{k',W^{(2)}} \cdot \delta_{l',X^{(2)}} \cdot \delta_{m',m} \quad (23)$$

where $a_{i,j,W^{(2)},X^{(2)},m}$ are the surface areas of the affected private properties that add up to $A_{i,j}^{(C3)}$, and where indices $W^{(2)}$, $X^{(2)}$ are all functions of indices i, j and G.

8.4 Modifications for City or Borough Tax Equations

$$\frac{\gamma_{i,j,k}^{(B)} \cdot U \cdot c_{n,i,j,k,l}^{(B)}}{T} \cdot \int_{\beta_{n-1}}^{\beta_n} g_{n,i,j,k,l}(t)dt + Cost(P_{i,j,k,l,H}^{(B)}) + Cost(Q_{i,j,k,l}^{(B)}) + \quad (24)$$

$$\frac{\gamma_{i,j,k}^{(B)} \cdot U \cdot c_{n,i,j,k,l}^{(B)}}{T} \cdot \int_{\beta_{n-1}}^{\beta_n} g_{n,i,j,k,l}(t)dt \cdot \frac{P_{i,j,k,l,H}^{(B)}}{A_{i,j,k}^{(B1)}} + \frac{\gamma_{i,j,k}^{(B)} \cdot U \cdot c_{n,i,j,k,l}^{(B)}}{T} \cdot \int_{\beta_{n-1}}^{\beta_n} g_{n,i,j,k,l}(t)dt \cdot \frac{P_{i,j,k,l,E}^{(C)}}{A_{i,j,k}^{(B1)}} +$$

$$\frac{\gamma_{i,j,k}^{(B)} \cdot U \cdot c_{n,i,j,k,l}^{(B)}}{T} \cdot \int_{\beta_{n-1}}^{\beta_n} g_{n,i,j,k,l}(t)dt \cdot \frac{P_{i,j,k,l,Z}^{(S)}}{A_{i,j,k}^{(B1)}} + \frac{\gamma_{i,j,k}^{(B)} \cdot U \cdot c_{n,i,j,k,l}^{(B)}}{T} \cdot \int_{\beta_{n-1}}^{\beta_n} g_{n,i,j,k,l}(t)dt \cdot \frac{P_{i,j,k,l,A}^{(F)}}{A_{i,j,k}^{(B1)}}$$

To determine the tax from each private property, the first part of Equation (24) can be multiplied by:

$$\frac{a_{i,j,k,l,m}}{A_{i,j,k}^{(B1)}} \cdot \delta_{i',i} \cdot \delta_{j',j} \cdot \delta_{k',k} \cdot \delta_{l',l} \cdot \delta_{m',m} \quad (25)$$

where $A_{i,j,k}^{(B1)}$ is the sum of the surface areas of all private, City or Borough, County, State and Federal properties within the City or Borough, indicated by indice k, that is within the specific County, indicated by indice j, which is within the specific state, indicated by indice i. The second part of Equation (24) can be multiplied by:

$$\frac{a_{i,j,k,M^{(3)},m}}{A_{i,j,k}^{(B2)}} \cdot \delta_{i',i} \cdot \delta_{j',j} \cdot \delta_{k',k} \cdot \delta_{l',M^{(3)}} \cdot \delta_{m',m} \quad (26)$$

where $a_{i,j,k,M^{(3)},m}$ are the surface areas of the affected private properties that add up to $A_{i,j,k}^{(B2)}$, and where indice $M^{(3)}$ is a function of indices i, j, k, l and H. The third part of Equation (24) can be multiplied by

$$\frac{a_{i,j,k,X^{(3)},m}}{A_{i,j,k}^{(B3)}} \cdot \delta_{i',i} \cdot \delta_{j',j} \cdot \delta_{k',k} \cdot \delta_{l',X^{(3)}} \cdot \delta_{m',m} \quad (27)$$

where $a_{i,j,k,X^{(3)},m}$ are the surface areas of the affected private properties that add up to $A_{i,j,k}^{(B3)}$, and where indice $X^{(3)}$ is a function of indices i, j, k and I.

Parts four to seven of Equation (24) include the local distribution and local security costs for all levels of government. Despite level of government all of the properties would be located in some specific City or Borough, and as a result must use the City or Borough's local security and local distribution resources. However, as the City or Borough, State, County and Federal governments do not generate income, the costs would need to be distributed, ideally, to the private properties that benefit from these costs. To distribute these costs according to the level of government and to the private properties that would benefit, part four of Equation (24) would be multiplied by Equation (26), part five would be multiplied by Equation (22), part six would be multiplied by Equation (18), and part seven would be multiplied by Equation (14). A consequence to this distribution of costs is that levels of government would be acquiring funds from the affected private properties and then finally pay, ideally, to the local governments. It may be less cumbersome to apply these costs to the local private properties; however, excess tax to private properties may discourage some growth from the property owners if there is less money to build on the private properties. That is, for this tax system to be effective, taxes must be levied to an amount to where man can grow to his maximum potential, ideally, but only to this amount as any more taxes may hinder growth. Further, the γ's introduced in this paper are intended to bring a current tax system to this introduced tax system and not meant to be modified after its initial application. Changes in the equations should be brought about by: changes in population; changes in the c values that may be affected by technology and a change in population; and possibly changes in the surface areas.

9. Conclusion

If evolution was a consequence of Natural Law, and man has the ability to control the difficulty of acquiring what he desires by his economic practices, then man may be the only living organism to control the direction of his evolution. Man must be unbound in the production and acquisition of his desires, which includes his access to LAND and taxation that aids in his distribution and the protection of his desires. Through a sole tax on populated LAND, where the funds acquired from taxation will be applied, man will have the ability to grow in wealth boundlessly and evolve to a highly ambidextrous and with enhanced abilities to learn quickly a new skill, as there will be no reductions of what he labors for so he can acquire what he desires with the least exertion.

The economic practices presented does imply a change from current economic practices, and as it may be easier to modify an existing practice than to learn and put into a society a new economic practice, this new economic practice may not be easily accepted, as per Natural Law. However, as there are multiple levels of government there may be some opportunities to use these economic practices. A general change in the evolution of man may not occur in sporadic places with these new economic practices, but would have fewer binds for man to grow in wealth in those sporadic places. And if there is success in increasing the general wealth in these sporadic places, an influence may occur in other places that may lead to a general change in the economic practices.

If man has no direction in his change he will remain the same and he will develop desires, which includes ideas to improve lives, in ways that reflects his current evolutionary state. However, if man changes in his evolution he will develop desires, including improvements in life, in ways man may not have thought of in a previous evolutionary state. If man believes his children deserves better than he then it may be a responsibility of man to direct his evolution to improve the lives of the generations to come.

References

Borders, M. and Burnett, H. S. (2008). Farm Subsidies: Devastating the World's Poor and the Environment. National Center for Policy Analysis, 547.

Darwin, C. (1860). On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life, New York, USA: D. Appleton and Company.

Dimitri, C. and Effland, A. and Conklin, N. (2005). The 20th Century Transformation of U.S. Agriculture and Farm Policy. United States Department of Agriculture, Economic Research Service, 3.

Gaimon, C. (1985). The Optimal Acquisition of Automation to Enhance the Productivity of Labor, Management Science, 31, 9, pp. 1175-1190.

George, H. (1992). The Science of Political Economy, New York, USA: Robert Schalkenbach Foundation.

George, H. (2003). Progress and Poverty, New York, USA: Robert Schalkenbach Foundation.

Glass, A. and Saggi, K. (2001). Innovation and Wage Effects of International Outsourcing. European Economic Review, 45, pp. 67-86.

Mazoyer, M. and Roudart, L. (2006). A History of World Agriculture: From the Neolithic Age to the Current Crisis, London, UK: Earthscan.

Noble, D. (1995). Progress Without People: New Technology, Unemployment, and the Message of Resistance, Toronto, Ontario Canada: Between the Lines.

Tambunga, G. (2011). Man's Access and Balance to the LAND and Indication of His Economic Predicament. Journal of Alternative Perspectives in the Social Sciences, Volume 3, Number 3, pp. 809-816.

Tambunga, G. (2012). Origins of Natural Law. Journal of Alternative Perspectives in the Social Sciences, Volume 4, Number 1, pp. 290-294.