

The Compatibility of Georgist Economics and Ecological Economics

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INTRODUCTION

There are many indications that the paradigm that has dominated orthodox economic theory for the past century, what has come to be called neoclassical economics, is disintegrating.¹ This has led many economics students, as well as others interested in the power and promise this discipline holds, to look once more at the genesis of its theory and to attempt reformulations of its basic premises. Marxism has also ceased to be a viable alternative, perhaps more due to the failure of its institutional applications than to the failings of the theory itself. Only one other longstanding economics tradition has survived continuing scrutiny and remains a recognizable and venerable legacy to the present time. This is the tradition that has come to be known as Georgism. The Georgist tradition has seen a profound revival during the past decade and warrants a comparison with other upstart economics frameworks that have reached the level of separate identity.²

1. "The Puzzling Failure of Economics," Cover article and Editorial, *The Economist*, August 25, 1997; and William Pfaff, "Seeking a Broader Vision of Economic Society," *International Herald Tribune*, Saturday/Sunday, February 3-4, 1996.
2. As an example of the array of new approaches, see Fred Foldvary (Editor), *Beyond Neoclassical Economics: Heterodox Approaches to Economic Theory*, Edward Elgar, Publishers, 1996.

The Georgist school of thought takes its identity from the work and insights of 19th century journalist, economist, and political leader Henry George, who died in 1897 at the young age of 57. In his short life, however, he managed to spawn a school of economics of lasting impact, based on his prolific writing and speaking as well as his dedicated pursuit of economic justice and political change. George's most famous book, *Progress and Poverty*, has been in print ever since its initial publication in 1879. It had by 1906 sold more copies than any book ever published except the Bible. Not only did he travel internationally throughout the English-speaking world, strongly influencing policy in Australia, Canada, New Zealand, South Africa, and the United Kingdom, he was the candidate for the mayor of the city of New York on two occasions, elections that he might have won had it not been for Tammany Hall

corruption in the first instance and his death four days before the polls opened in the second. Current mainstream textbooks have reduced his program to advocacy of the “single tax,” often dismissing him as a crank, but his views were in fact far more complex. They constituted a total world view synthesized from several streams of thought current during the nineteenth century. The influence of his thinking in United States is manifest in the language of many state and local laws, even though only in the state of Pennsylvania have his ideas been put into practice in any concerted way.³

3. **ALANNA HARTZOK**, “Pennsylvania’s Success with Local Property Tax Reform: The Split Rate Tax,” *The American Journal of Economics and Sociology*, Vol 56, No.2 (April, 1997), pp. 205-214; **ANDELSON, ROBERT V.**(ed.) , (1998), *Land-Value Taxation Around the World: Reports on Current and Historical Efforts to Apply the Principle of Collecting the Community-Created Value of Many Land for Community Benefit*, New York: Robert Schalkenbach Foundation; Peddle, Francis K. (1994) *Cities and Greed: Taxes, Inflation and Land Speculation*, Ottawa: Canadian Research Committee on Taxation; and other studies available particularly from the Lincoln Institute of Land Policy, The Robert Schalkenbach Foundation, and the Center for the Study of Economics.

This paper constitutes an effort to compare, and if possible to integrate, the emerging discipline of ecological economics with Georgist economics. Ecological economics has the current distinction of having established, to its credit, a collegial, cross-disciplinary organization,⁴ a professional journal,⁵ and at least one graduate program authorized to grant doctorates in this subject.⁶ It has established itself sufficiently to have had annual international conferences for a decade and a half, and seen its works cited in several other scholarly disciplines. Georgist economics, while having no established doctoral program so distinctively tailored, has among its fold many economists of established pedigree,⁷ and many others outside the academy who contribute significantly to its discourse. There have been Henry George Schools in major cities around the world for decades, a network of organizations, frequent conferences, and at least thirty websites that exist to explicate and purvey the Georgist outlook.⁸

4. This, the International Society for Ecological Economics, founded in 1988 with a current membership of 1500 in over 60 nations, has an international office on the campus of the University of Maryland, College Park.
5. *Ecological Economics*, a quarterly journal currently in its eleventh year of publication.
6. This is at Rensselaer Polytechnic Institute; see [HTTP://WWW.RPI.EDU/DEPT/ECONOMICS/WWW/ECOLOGIC.HTML](http://www.rpi.edu/dept/economics/www/ecologic.html).
7. See note 37 below. The most distinguished and vocal adherent was the late **PROFESSOR WILLIAM VICKREY** of Columbia University, a winner of the Nobel Prize in Economics in 1996. One anthology containing most of Vickrey’s Georgist writing has recently been published. See Kenneth Wenzler (ed.), *Land-Value Taxation: The Equitable and Efficient Source of Public Finance*, New York: M.E. Sharpe, 1998.

8. Most of these websites can be accessed through [HTTP://WWW.CRCTAXATION.ORG/PAPERS.HTM](http://www.crctaxation.org/papers.htm). There one can access a site map of the other Georgist sites throughout the world. In the United States, the major ones are the Henry George Foundation and the Center for the Study of Economics at [HTTP://WWW.CRCTAXATION.ORG/PAPERS.HTM](http://www.crctaxation.org/papers.htm); The Progress Report at [HTTP://WWW.PROGRESS.ORG/](http://www.progress.org/); The Henry George Institute at [HTTP://WWW.HENRYGEORGE.ORG/](http://www.henrygeorge.org/); and The Robert Schalkenbach Foundation, at [HTTP://WWW.SCHALKENBACH.ORG/](http://www.schalkenbach.org/).

The organization of this paper has the following outline. It first looks at the basic economic premises underlying Georgist economics as they have evolved and been refined over the past century. It then continues with an examination of the moral dimensions of Georgism, contrasting it with neoclassical economics which claims to be value neutral. Thirdly it explores both its research and political agenda and goals to the extent that they can be identified as a cohesive approach. The same examination then follows for the new discipline of ecological economics. The paper concludes with an exploration of how the two approaches can be synthesized so as to create a stronger and more far-reaching interdisciplinary study of economics. Because the paper is a revision of an earlier attempt written in the year 2000, and because it is now being prepared for presentation to an audience of ecological economists, more attention is given to the explication of Georgist than to ecological economics. The author is also on firmer ground in discussion of Georgism, and comes only recently to his discovery of the ecological economics school of thought. Comments from the latter perspective are therefore especially invited.

GEORGIST ECONOMICS

Georgist Economics: Basic Premises⁹

9. This framework of presentation can be found in more elaborate form at one of the Georgist websites where a self-instruction course is offered. It is at [HTTP://WWW.HENRYGEORGE.ORG/](http://www.henrygeorge.org/).

The starting point of the Georgist framework is rigorous definition of the three factors of production — land, labor, and capital, as in classical economics. It should be further pointed out that these factors are mutually exclusive and jointly exhaustive of all things of economic value. Something must necessarily be in one category or another; there is nothing *outside* this total classification. Understanding of what constitutes labor differs little from definitions given elsewhere, regardless of which theory is used. But definitions of land and capital differ somewhat from common practice as well as sometimes in theory. Therefore, it is helpful to spend time explicating the definitions of each as they are used in Georgism, and to point out where these definitions diverge from those most often employed in neoclassical

economics applications. Many contemporary economics texts begin by taking note of the land-labor-capital distinction, but then make little use of it later. These distinctions will make apparent why Georgist economics leads to very different explanations of economic phenomena as well as to different policy solutions.

Critical to an understanding of Georgist economics is its recognition of land as a special and unique factor of production. "Land," to Georgists, as true for classical economists throughout the 19th century, is taken to mean not just the surface of the earth and locational space; it means also any and all those natural resources and non-human works that today can exact a market price. It includes the wealth of the earth in all its natural forms, the air and water as well as material elements. It includes phenomena of value like the electromagnetic spectrum used to transmit communications signals, and landing time slots such as have value at airports. As the world economies enter a new age of high technology, these radio spectrums and time allotments have gained ever increasing value. So also with geosynchronous satellite orbits and most recently the genetic codes of all the biota on earth.¹⁰

10. See the works of Vandana Shiva: *Biopiracy*, *Stolen Harvest*, *Water Wars*, and, most recently, *Protect or Plunder? The most recent discussion of the extensive elements of this commons, or land, is David Bollier's Silent Theft: The Private Plunder of Our Common Wealth*, Routledge, 2002, reviewed by this writer at www.progress.org/revboll.htm.

Sites have value relative to their location, and this is largely a function of where people choose to congregate. The highest value lands, in urban areas and in developed nations, have market worth many times that of sites even short distances away. Remote land sites sometimes have no market value whatsoever, and they are typically not "owned" by private individuals or corporations because they are not attractive for economic use. **In New York City, for example, the ownership of one small parcel of less than an acre in Times Square was transferred from Prudential Life Insurance Company to the Disney Corporation in 1998 for an estimated \$240 million.¹¹ This is more market value than all the land and buildings together in the region north of the Mohawk River/Erie Canal in New York State.** More recently, a nine-acre parcel just south of the United Nations complex, also available for development in New York City, was estimated to have a site value of \$750 million.¹² In both these cases, the cost of razing the existing obsolete buildings was included in these prices, a factor which suggests that the market value of the land would have been still higher were it not for this condition.¹³ In contrast there are land areas in Northern Canada and in the polar regions for which there are no private bidders at all.

11. New York Times, March 7, 1998.

12. Charles V. Bagli, "Winning Bid to Develop 9 Acres Near U.N.," New York Times, January 2, 1999.
13. There was a time, until the recent crash of the Japanese economy in the early 90s, when the land under the Emperor's Palace in Tokyo was estimated to have a value higher than all of California.

It is equally important to distinguish those factors that are not land in the classical sense of its economic use. Natural resources such as coal, oil, and minerals, once removed from their natural state are no longer regarded as land. A diamond lodged in the deep earth is land; that same diamond discovered by a prospector and then cut and polished by a jeweler, is no longer land but capital. Likewise, fish in the ocean are land, but fish once caught and in a boat are capital. This is why, in any courses taught on Georgist economics, considerable time is devoted to basic definitions. To carry the distinction just one step further, land in the Georgist lexicon, is not wealth, whereas in neoclassical economics it is. In the course of later discussion of the Georgist view relative to the ecological economics approach, this will emerge as a critical distinction, as it helps to demarcate the boundaries of what activities fall within the realm of economic behavior and what activities remain marginal.

This separate and identifiable recognition of land has significant importance for the definition of **capital** too, because capital, then, cannot be land. Capital, rather, is the product of labor and land (and perhaps other past capital) to add to the increased store of capital of individuals or of the community. Capital can be of many types, ranging from monetary wealth to technical knowledge. The store of capital applied to land and labor results in the further production of capital wealth. Capital allows labor to be employed with greater efficiency and productivity, through the use of technology and instruments and with increased human skill and knowledge.

The next important step in understanding Georgist economics is recognition that each factor of production has its economic price: the price of labor is wages, the price of capital is interest, and the price of land is rent. When any of these prices are unpaid, distortions result in the economic equilibrium and problems become manifest in other realms of nature and society. In neoclassical economics compensation for the use of labor and capital continue to be important in the formulas and calculations employed to explain the economy. But for neoclassical economics, David Ricardo's "law of rent" is essentially ignored and has become for all practical purposes an artifact in the history of economics. Rent continues to exist of course; it is simply uncollected, left in the hands of those who maintain monopoly control of certain services of nature, adding to their market value in ways that distort the balance of markets. Failure to recognize the importance of land rent (sometimes called

economic rent) is for Georgists critical to an understanding of the problems of contemporary economies and economic analysis.¹⁴

14. The phenomenon of rent and rent-seeking is a proper consideration not just in economics but also particularly for the study of politics. A recent paper originally published in *Political Studies* /Vol. 45 (September, 1997), pp. 639-658, makes this clear: Paul Hutchcroft, "The Politics of Privilege: Assessing the Impact of Rents, Corruption, and Clientelism on Third World Development," also at [HTTP://WWW.COC.CEU.HU/HUTCHCROFT.HTML](http://www.coc.ceu.hu/hutchcroft.html).

Hence it becomes important, critically important, to understand the meaning of "ownership" and "property" in the Georgist lexicon. But it is not difficult, for they continue to have their classical meanings, just as for John Locke, Adam Smith, and all the major forerunners and thinkers of classical economics until the advent of neoclassical economics. What was the meaning of ownership and property in their classical sense? Property was the product of human labor and capital, and that alone. Items of property were household goods, personal attire, armaments, and similar such goods. Property belonged in the category of capital. Land was not part of property, but rather was its own category. **Land, broadly defined, belonged to everyone and was the common heritage of all humanity.¹⁵ One could no more "own" land than one could own water, air, or other parts of nature, at least in the sense of ownership that people often use today.** Much like the native-American concept of ownership, it was part of what was classically called "the commons."¹⁶ "What is this you call property?" Massasoit, a leader of the Wampanoag, asked the Plymouth colonists whom he had befriended in the 1620s. "It cannot be the earth, for the land is our mother, nourishing all her children, beasts, birds, fish, and all men. The woods, the streams, everything on it belongs to everybody and is for the use of all. How can one man say it belongs to him?"¹⁷ Indeed Georgists see a moral equivalency between monopoly ownership of land and nature and the ownership of slaves!

15. Two Georgist websites in fact celebrate that principle: [HTTP://WWW.ENVIROWEB.ORG/EARTHRIGHTS/INDEX.HTML](http://www.enviroweb.org/earthrights/index.html), [HTTP://WWW.EARTHSHARE.ORG/](http://www.earthshare.org/), and a third in Australia at: [HTTP://HOME.VICNET.NET.AU/~EARTHSHR/](http://home.vicnet.net.au/~earthshr/).
16. See Susan J. Buck, *The Global Commons: An Introduction*, Washington: Island Press, 1998. In the contemporary context, the commons could be extended to our genetic heritage, threatened as it is by pharmaceutical and agribusiness corporations that are patenting genes for private profit. See, Vandana Shiva, *Biopiracy: The Plunder of Nature and Knowledge*, Boston: South End Press, 1997, and her more recent works cited below. **The story is frequently told that when Dr. Jonas Salk was asked whether he was going to patent the polio vaccine he developed, he reacted with bewilderment. "Can one patent the sun?" he asked.**

17. Quoted in Andro Linklater, *Measuring America: How an Untamed Wilderness Shaped the United States and Fulfilled the Promise of Democracy*, New York: Walker & Company, 2002, p. 44, taken from D.W. Meinig, *The Shaping of America: A Geographical Perspective on 500 Years of History*, New Haven: Yale University Press, 1986, 1993, 1998.

Georgists' assumptions about property ownership rest upon premises profoundly different from their conventional use in western society — indeed increasingly in world society. In the discourse of legal philosophy, the notion of property and ownership are better understood as a collection of legal rights and responsibilities among people; for example, the right to possess, to use, to capitalize, to manage, and to retain the income from such.¹⁸ If one disaggregates these rights, one has a far clearer understanding of the potential array of socio-economic arrangements that are possible. The primary distinction to Georgists is that between ownership for use and ownership for gain. More will be said about the merit of this division at a later point, but it should be noted even here that the distinction is ancient,¹⁹ and has had expression at various times in human history long before the appearance of Henry George. Two sets of contrasting terms are often employed to distinguish the separate notions of ownership:

- leasehold versus freehold, or
- usufruct title versus fee-simple title.

18. This list, one among many, is that of A.M.A. Honoré, a well-known legal scholar, noted in John Christman, *The Myth of Property*, Oxford University Press, 1994, p. 19. Another writer lists nine: possession, use, alienation (the power to give away), consumption, modification, destruction, management, exchange, and profit taking. Donald A. Krueckeberg, "The Difficult Character of Property: To Whom Do Things Belong?" *Journal of the American Planning Association*, Vol. 61, No. 3, Summer, 1995.

In fact compensation for land held in usufruct was far more often in kind than it was in money. Typically, in Middle Eastern as well as in Asian societies, a percentage of a crop or of other products gained from the land were accepted as just payment for its use, paid usually to a king or nobleman in exchange for services which they in turn were expected to provide. This usually meant the protection against ravaging bands, arbitration of disputes, provision of sustenance in times of emergency, and so on. The pattern of leasehold ownership with either in-kind services, goods, or later fees paid to lords and kings is the hallmark feature of feudalism, widely known not only in the European past but throughout Asia and prehistoric Central American civilizations.

In the Georgist context a titleholder has the right to ownership of land in usufruct, but not in fee simple. As long as an owner uses land and other elements

of nature in accord with the rules and laws of society, one retains a possessory interest. That interest extends to the privilege to use land for all purposes consistent with its proper maintenance and care. It extends even in some cases to the right to preclude others from any trespass at all. **But what it typically does not include is the right to any speculative gain that would follow from title in freehold, or the right to use land beyond what it is capable of sustaining.** Use implies that its quality is not diminished for the future availability of others, and that there is an obligation for the user to pay to society a just price in exchange for such use. One had no right, for example, to strip a forest of its trees. Enough is known now about the arrangements of land ownership and use in comparative perspective to assert with confidence that the historical practice of title in fee simple or freehold has been far more the exception than rule.²⁰ Taking the long view of history, title in usufruct has been by far the more common pattern of ownership of natural resources, except where Roman jurisprudence and its offspring have spread throughout the world and come to dominate.

19. See, for example, the recent collection of essays edited by **MICHAEL HUDSON** and Baruch Levine, *Privatization in the Ancient Near East and Classical World, and Urbanization and Land Ownership in the Ancient Near East*, both published by Harvard University's Peabody Museum of Archaeology and Ethnology, 1999.
20. E. Adamson Hoebel, *The Law of Primitive Man*, Cambridge: Harvard University Press, 1954, p. 56; and Leopold Pospisil, *Anthropology of Law: A Comparative Perspective*, New York: Harper & Row, 1971, pp. 273 ff. For American Indians, see Wendell H. Oswalt, *This Land was Theirs*, 6th Edition, Mayfield Publishing Co., 1998.

In the United States, the definition of real property as explicated in the legal Commentaries of Sir William Blackstone may have been pivotal in the adoption of freehold interpretations of ownership over leasehold.²¹ For several years after this nation was founded which system of title would prevail hung in the balance.²² Thomas Paine was certainly an advocate of the latter,²³ as was Jefferson.²⁴ Hamilton, on the other hand, was a defender of propertied interests and titles in fee simple, and especially to his in-laws, the landowning families of upstate New York known as the Patroons.²⁵ Leaseholds were used in several of the colonies, with the fees paid to governors.²⁶

21. Yet, despite the evolutionary application of Blackstone's law in the American context, he wrote that "the earth. . . is the general property of all mankind, from the immediate gift of the Creator."
22. For a detailed exposition of how American concepts of real property ownership changed in the early years, see Peter Charles Hoffer, *Law and People in Colonial America*, Baltimore: Johns Hopkins University Press, 1992 and Revised, 1998.

23. See Agrarian Justice, [HTTP://WWW.GEOCITIES.COM/ATHENS/ACROPOLIS/5148/PAINE_AGRARIANJUSTICE_01.HTML](http://www.geocities.com/Athens/Acropolis/5148/Paine_AgrarianJustice_01.html).
24. “Jefferson and the Land Question,” by Henry George, Jr., at [WWW.COOPERATIVEINDIVIDUALISM.ORG/GEORGE_JR_JEFFERSON_AND_LAND.HTML](http://www.cooperativeindividualism.org/george_jr_jefferson_and_land.html).
25. See Henry Christman, *Tin Horns and Calico*, New York: Henry Holt Press, 1945; reprinted in 1961, 1975 and 1978 by Hope Farm Press in Cornwallville, New York; Sung Bok Kim, *Landlord and Tenant in Colonial New York: Manorial Society, 1664-1775*, Chapel Hill: University of North Carolina Press, 1978; David Maldwyn Ellis, *Landlords and Farmers in the Hudson Mohawk Region, 1790-1850*, Ithaca: Cornell University Press, 1946; Reeve Huston, *Land and Freedom: Rural Society, Popular Protest, and Party Politics in Antebellum New York*: Oxford University Press, 2000; and Charles W. McCurdy, *The Anti-Rent Era in New York Law and Politics: 1839-1865*, Chapel Hill: University of North Carolina Press, 2001.
26. William B. Scott, *In Pursuit of Happiness: American Conceptions of Property from the Seventeenth to the Twentieth Century*, Bloomington: Indiana University Press, 1977.

Rent becomes critically important in Georgist economics, because rent is the increment of market gain that accrues to choice land parcels. This insight arose originally in the context of agricultural societies, where differential qualities of land were recognized by varied payment in rent. An individual’s return on investment was represented by his labor — that was his and his alone to keep. So also were whatever capital goods he acquired through the efforts of his past labor. On the other hand, whenever land offered a higher yield separate from whatever the individual’s labor investment might represent, this constituted a windfall gain above and beyond what might be minimally expected. This is land rent, and it exists even if it isn’t collected. Today, as earlier noted, the greatest land rents derive from their location, grown out of nearby social investment.

The concept of rent needs further explication precisely because it is so foreign to 20th century students, even those who have been schooled in economics at it is currently taught. Land rent has no relationship to the word rent as it is used in contemporary vernacular, that is, when one rents a car or an apartment. Rather, rent is a surplus, defined as the return on investment above and beyond what is minimally required to bring a service into production. **To take just an elementary example, consider that there are three parcels of land available for farming and three farmers of equal ability and enterprise.** But suppose the parcels differ in their productive capacity, due perhaps to their fertility, access to water, and so on. If planted with similar quality seed, the three parcels will yield different quantities of harvest, the one with the highest quality land having the best return. The one with the lowest quality land would in like fashion have the lowest return. Economic rent is defined as the amount of surplus harvest qualitatively measured by the difference between the parcel with

the highest return and that with the lowest return.

Even though its originator, David Ricardo, had in mind the differential return from agricultural lands, the concept of rent applies to other natural services as well. Consider what happens in the case of urban communities, using the simplest comparison with a tic-tac-toe board. When the lattice is completely undeveloped and consists only of vacant land squares, the locational sites have inconsequential value. But let us suppose that each square is then settled — the first by a hotel, the second by a department store, the third by a restaurant and so on — and supposing that the owner of the center square is reticent to build at all. Reserving his prerogative as titleholder he may intend ultimately to sell. Given the rules of economics as they apply today he may be wise to do so, keeping his money for other uses, as his square will have increased in market value more than all the others despite his having done nothing to improve it. It was this that prompted John Stuart Mill to observe that “Landlords grow richer in their sleep without working, risking or economizing. The increase in the value of land, aris[es] from the efforts of an entire community.. . .”²⁷ As will be discussed later below, the single greatest factor in determining the economic rental value of land today results not from nutrients or access to water but rather due to site value determined by location. And that can be priced and collected easily.

27. John Stuart Mill, *Principles of Political Economy*, Book 5, ch 2, Sec.5.

Lastly, one must appreciate that the market value of “land” of every sort is entirely rent, as there is no human factor of labor that accounts for its origination. Services of nature have no prior cost to bring them into production existence — the electromagnetic spectrum, for example, exists regardless of human presence on earth and so presumably does time. Ocean fish, fossil fuels, and heavy metals are all found in nature, not the result of human creation. They are, in 19th century classical economics, the fruits not of man’s labor but of God’s. And it is to God, or at least to God’s representative on earth — the lords and kings — that rent was owed, just as much as it was their role to provide reciprocal services to the tenants of the land. That bargain, so well refined in feudal economic arrangements, was an equilibrium balance, disrupted, one might say, by the annulment of rent collection and the exploitation of land without recognition of its price. The practice effectively ended with what in Britain is known as the “enclosure movement” of the early Tudor reign, driving the peasants off the land into cities to provide cheap labor for the early English industrialists.²⁸ But the theory continued long afterwards. Georgists today argue that land rent should be collected from titleholders so that it is not left to render economic distortions. This in turn affects the price of labor and the price of money. Government’s role, whatever else it does, is at the very least responsible for defending

the commons, to ascertain titles and to collect rent. Although there are many differences about the proper role, scope and domain of government among Georgist adherents, the collection of rent and the supervision of open markets is central to its tenets.

28. Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time* (Boston: Beacon Press), 1957, 1963.

Despite assiduous efforts to make clear the extent and the limits of the economic rent as a concept — known as well as land rent, Ricardian rent, and ground rent, even the best of contemporary neoclassical economists disagree. Some texts argue that certain athletes or other star performers with great natural ability reap returns for their efforts far above what is in fact necessary to “bring them into productive use.” The difference between what it would minimally take to entice them to perform and the price they are actually paid is all economic rent. Babe Ruth, Michael Jordan, Britney Spears, and the Beatles have all been compensated with impressive amounts of economic rent.²⁹ Georgists and classical economists are of mixed minds, arguing sometimes that such payments are either wages or else are simply transfers that in no way reflect productivity.³⁰

29. See, for example, “What Determines John Elway’s Salary?” in William J. Baumol and Alan S. Blinder, *Economics: Principles and Policy*, Fifth edition, (New York: Harcourt, Brace & Jovanovich, 1991, pp. 752-754.

30. Personal communication with Professors Mason Gaffney, Nic Tideman and others.

As with all nineteenth century moral philosophers, Henry George subscribed to a belief in natural law. The natural order of things as he saw it required that land be held in usufruct and that rent from such should be returned to society. The theory was inspired by his deeply religious roots and grounded in his reading of the prominent thinkers that predated him. The natural order was also a moral order, and the failure to comply with the order of nature and society as he saw it was a perversion of justice. The fruits of the land belonged to everyone, just as the fruits of one’s own labor were uniquely one’s own. Since one owned one’s body, one was entitled to keep the product of one’s physical efforts. Society had no more right to confiscate the earnings of one’s sweat and brow than it ought to leave in the hands of rich landowners the rent that was everyone’s inherent birthright to be shared. There were just and unjust taxes, and the only just tax was that which grew out of rent, of the unearned increment that visited certain land sites as windfall gains because of the efforts and investments by the community. Income and excise taxes were unjust and confiscatory — even theft, as especially were tariffs. Taxing or collecting land rent alone was the means of ending poverty and restoring progress. Indeed many Georgists reject use of the word tax entirely, preferring instead to talk instead about rent collection. There is even a lapel

button Georgists use that says “Abolish all taxes; collect ground rent instead.”

Georgist Economics: Moral Premises

What distinguished Henry George’s views from those of his adversaries in the last decade of his life was his assertion that economics was necessarily a moral science. Unlike those who became the founders of the American Economics Association in 1885, most of whom were transitional figures to what would become neoclassical economics, the primary focus of George and his disciplines was economic justice. This is not to say that explanation was cast aside; indeed the subtitle of his magnum opus, *PROGRESS AND POVERTY*, was *An Inquiry into the Cause of Industrial Depressions and of Increase of Want with Increase of Wealth . . . The Remedy*. Why, he asked, in the midst of such boundless plenty is there such abject poverty? He would dedicate his book, first published in 1879, “to those who, seeing the vice and misery that spring from the unequal distribution of wealth and privilege, feel the possibility of a higher social state and would strive for its attainment.” He had known poverty first hand when he was struggling to support his young family and establish himself as a printer, a journalist and a publisher. He could also see before him the fruits of land and nature easily available to be harvested but for its legal capture by monopoly titleholders. He wrote of all this in some six books and countless other essays, the focus always on the theme of economic justice.

Along with Robert Ingersoll, he was likely the most stimulating orator of his age, a fiery moralist at a time during which there were many others who might claim such a title. He traveled widely, was a champion of labor, the landless, and the urban poor, particularly influential in the struggle over the Irish land question and in the positions of the Liberal party in the early 20th century. His admirers among the great of the time were myriad: Sun Yat Sen, Leo Tolstoi, Winston Churchill, Theodore Roosevelt, Charles Beard, Samuel Clemens, Robert Maynard Hutchins, and John Dewey to name a few. Forewarned in 1897 that running for mayor of New York a second time and trying at the same time to finish another authoritative statement of his philosophy would kill him, the prophesy was fulfilled nonetheless with his death four days before election day. In 1886 he lost a rigged election³¹ when matched against a scion of banking wealth Abram S. Hewitt, who was recruited by Seth Low, President of Columbia University, but he beat the third place finisher, Teddy Roosevelt. His funeral on the streets of New York drew the largest crowd of mourners ever assembled until that time, and until much later. No one doubted Henry George’s passionate commitment to justice.

31. See “Capitalism by Fraud,” in Gustavus Myers, *History of Great American Fortunes*, New York: Random House Modern Library Edition, 1936, pp. 356-358, as well as biographies of George.

The heart of George's economics was, in a way, Biblical. As the son of a religious book publisher born in Philadelphia, he had adequate opportunity to witness the early growth of the American republic in a unique way. On his own in San Francisco and responsible for a wife and child at a young age, his first effort at resolving the puzzles of injustice were a manuscript printed in 1871. But only after additional exposure to Ricardian rent theory was he able to refine his ideas such that they could form the basis of his *Progress and Poverty* eight years later. His Christian roots led him to a deep commitment to the basic moral equality of all people; his challenge was to find a way to ensure that this equality was manifest in economic fairness.

As noted earlier, the starting point of Georgist philosophy is that nature belongs to owners only in usufruct and not in freehold. Because any monetary wealth that accrued to that nature stemmed directly from the physical presence of people and was therefore social in character, the resulting added increment of value that constituted rent belonged in turn to the community that created it. Nature would have no economic price without people. Hence rent was the community's entitlement and not that of individuals, and the land rent that accrued to parcels as a result of social investment should be returned to — recaptured by — the community. **It was obvious to George that the wealthiest people in the nation usually owed their fortune not to the sweat of their brow or the inventiveness of their minds. Rather their position was due to their success as land speculators, to an increase in rent on land they had captured title to, land rightfully belonging to all.** The earth and all its product, he argued, was the common heritage of humanity, a birthright of all people.

Any failure to pay back that increment to society, or of government to recapture it in the form of taxes, constituted not only an injustice to the poor but a distortion of economic equilibrium. He witnessed first hand the perverted configurations of land use that today we know as **sprawl** development — even in his time it was apparent that urban, high value land parcels were being held off the market for speculative gain by meretricious interests. He witnessed also the boom and bust cycles of the land markets on account of such speculation, effects which spread far wider than just land prices. These inevitable cycles would dislocate labor and capital supply, giving impetus to the impoverishment and suffering which he himself had experienced. He understood that holding the most strategically valuable landsites out of circulation constituted a burden on the economy. He understood that financial resources spent to pay exorbitant land prices had a depressing effect on capital and labor. And because government was taxing labor and capital instead of recovering land rent, it was further restricting the job market and the growth of capital. He realized that people who captured monopoly control of strategically valuable landsites could do so because

they were privy to information prior to its public release. It was not by any means his insight alone; it was captured also by George Washington Plunkett writing at the same time:

There's an honest graft, and I'm an example of how it works. I might sum up the whole thing by sayin': "I seen my opportunities and I took 'em."

Just let me explain by examples. My party's in power in the city, and it's goin' to undertake a lot of public improvements. Well, I'm tipped off, say, that they're going to lay out a new park in a certain place.

I see my opportunity and I take it. I go to that place and I buy up all the land I can in the neighborhood. Then the board of this or that makes its plan public, and there is a rush to get my land, which nobody cared particularly for before.

Ain't it perfectly honest to charge a good price and make a profit on my investment and foresight? Of course, it is. Well, that's honest graft. 32

32. William L. Riordan, *Plunkett of Tammany Hall*. New York: Dutton, 1963, p. 3.

All society needed to do was to collect the economic rent from landholders as its rightful due, a solution that became part of the subtitle of his book, "the remedy." Taxing the land (or, alternatively, collecting the economic rent) was something common citizens could understand.

They knew well the enormous disparity in fortune between the landed and the landless. They knew also that there was in fact land enough for all, except for a system of ownership that made no distinction between the right of land use and the right of land gain. George had no doubt read Frenchman P. J. Proudhon's more strident pamphlet that "property is theft." 33 He knew that there was a long tradition of land taxation, well articulated by a French school of philosophers known as the Physiocrats. It was a natural and comprehensible solution for him to advocate the adoption of the "single tax" on land, according to its market value, to collect the economic rent.

33. Pierre-Joseph Proudhon (1809-1865), *What is Property?* (orig. 1840) New York: Cambridge University Press, 1994.

There was another dimension to George's economic views as well. As Locke and later classical economists argued, one owned the items with which one "mixed his labor." By extension one also owned items which one purchased in trade from others who had similarly created their wealth. Hence it was unjust and immoral for society to claim

any parts of the fruits of one's own efforts in the form of tariffs, sales taxes, and especially the income tax. Of course, except for a short period during the American Civil War, the American government had never implemented an income tax. But Britain had, and there was much discussion of a need for an income tax in the United States; it was again instituted in this country in 1913.

During the late 19th century, the burden of various direct taxes was not so large that many common people felt their acute impact. It was, however, a time of extreme disparities between the poor and the wealthy, and the single tax was a means by which to redress some of those disparities. It would also foster the availability of employment by making labor more attractive relative to land and capital investment. In a word, people would more likely have to earn their money. The fruits of land wealth, distributed among people equally in the form of government services, would go far toward both enhancing economic opportunity and correcting inequality.

Georgists today adhere to much the same points of view, although there are some significant differences. George himself was an ardent free trader, mainly because he believed that the single tax should supplant tariffs. After Ricardo, he accepted the idea of comparative advantage that arose from trade, but only after land (resource) rents were collected so as to preclude the raping of the natural environments of countries rich in such resources. He also believed that population growth was good — the more the better, and took special pains to refute Malthus. But one should also recall that he was living at a time when the expanse of the American continent was still open to any homesteader who chose to do so. Population growth was not a problem at that time. These elements of George's thought are inconsequential to his followers today. **Yet it is important to note that Georgists are not socialists; they do not subscribe to the view that society should own the means of production. These should remain privately owned by and large (except perhaps as today's economic theory would call for, i.e., natural monopolies, public goods, and other government instruments). They are, rather, free-marketers in the full sense of the word, even more ardently than many contemporary American conservatives.** He believed that removing the accretion of economic rent from landsites would restore self-regulating equilibrium of the marketplace, thus obviating the need for the heavy hand of government controls.

Restoring land sites to the arena and influence of market forces by collecting land rents eliminates the incentive to hold them for speculative investment and thus expands the reach of the free market. As much as that term has been now overused, Georgism constitutes a "third way." It is the distinction between the right of real property ownership for use versus real property ownership for gain that sets Georgists

apart from other free market capitalists.³⁴

34. John Christman, *The Myth of Property*, note 16, builds on this thesis.

Georgists today are also frequently very divided on the role of government in society. Many are vehemently anti-government and are subscribers to libertarian views;³⁵ others are rather conventional progressives in their belief and confidence in the role of government to provide the full array of public services which are typically found in modern democratic societies. The axis of Georgist thought cuts completely across conventional political party lines as a consequence: one finds hardline conservatives and progressive “liberals” united only in the view that economic land rent should not be left in the hands of titleholders. Most would use such revenues to finance the support of government services, abolishing completely the wide array of income, sales, corporate franchise and other taxes that are currently used, keeping only environmental fees and user fees.

35. Here Georgists distinguish fundamentally between Geo-Libertarians, whom they support, and Royal Libertarians whom they do not. The latter support privatization of real property and the economic rent that stems from it. See, Dan Sullivan, “Are you a Real Libertarian or a Royal Libertarian,” a pamphlet published by the Libertarian Party of Allegheny County (Pittsburgh), Pennsylvania, and accessible at <http://geolib.pair.com/>. See also Harold Kyriazi, *Libertarian Party at Sea on Land*, New York: Robert Schalkenbach Foundation, 2000.

Adherents of minimalist government believe that any extra rent revenue collected from holders of land should be returned to people individually in the form of a “citizen’s dividend.” Given the choice of using the full amount of surplus rent to support government services or collecting only a portion, many libertarian Georgists would collect it all; leaving it otherwise in the hands of property holders, they believe, has more negative consequences than not collecting it. Not collecting the economic rent, so they argue, is worse than throwing it “into the sea” for all its distorting and destructive consequences. Others advocates would prefer to collect it not for financing the services of government but rather to distribute it as a “citizen’s dividend.” There is widespread recognition of the destructive consequences of the failure to collect land rent. Some Georgists would allow a token amount of rent to be retained by landholders so as to facilitate real estate markets above and beyond what might otherwise be realized.

Economic justice was and is the primary concern of Georgist economics, but not the only one. Land ownership is far more concentrated than other forms of income or of

wealth;³⁶ as a rough rule of thumb, approximately one third of the households in the United States own no land at all. Because a tax on land cannot be passed forward, these households therefore pay no taxes at all.³⁷ The taxes come instead roughly equally from residential and non-residential parcel owners alike. Farmers and foresters, who typically own land of very low market value on account of its remote location, pay a negligible amount of taxes. This means, of course that most of the non-residential tax burden falls upon commercial parcels, but the burden on tenants represents no change from the going rate of floor space whatsoever. George himself had given considerable attention to the virtues of land taxation. Measured against the current principles of sound tax theory typically enumerated by schools of economics and public administration, contemporary advocates give the tax high marks. It is no accident, for example that a total of eight Nobel-Prize-winning economists have endorsed the principles of land taxation.³⁸ The criteria typically used by experts in tax policy besides equity are variously defined to include neutrality, efficiency, simplicity, administrability, and stability. Because taxation inevitably has a moral dimension, the way in which taxes are designed and administered is also therefore profoundly moral in its content.

36. For example, 95% of the USA is owned by the richest 3% of Americans; 60% of El Salvador is owned by the richest 2% of El Salvadorans; 86% of South Africa is owned by the white minority; 74% of United Kingdom is owned by the richest 2% of Britons; and 84% of Scotland is owned by the richest 7% of Scots. This probably understates the concentration, because it measures ownership not by land value but by land area. See <http://www.geocities.com/RainForest/3046/>. Also Frank Ackerman, *The Political Economy of Inequality*, Washington: Island Press, 2000, and <http://www.islandpress.org/ecocompass/changingnatow/inequality.html>.
37. For a further explication of the economic dimensions of collecting land rent, see the author's "The Merit of Site Value Taxation," presented at a symposium of the Global Institute for Taxation of St. John's University, Staten Island at The World Trade Center on October 1-2, 1999.
38. Eight Nobel Prize-winning Economists have Endorsed Land Value Taxation:
MILTON FRIEDMAN: "I share your view that taxes would be best placed on the land, and not on improvements," and "In my opinion, the least bad tax is the property tax on the unimproved value of land, the Henry George argument of many, many years ago."
Herbert Simon: "Assuming that a tax increase is necessary, it is clearly preferable to impose the additional cost on land by increasing the land tax, rather than to increase the wage tax— the two alternatives open to the City (of Pittsburgh). It is the use and occupancy of property that creates the need for the municipal services that appear as the largest item in the budget— fire and police protection, waste removal, and public works. The average increase in tax bills of city residents will be about twice as great with wage tax increase than with a land tax increase."
Paul Samuelson: "Pure land rent is in the nature of a 'surplus' which can be taxed heavily without distorting production incentives or efficiency." A land value tax can be called "the useful tax on measured land surplus."

James Tobin: “I think in principle it’s a good idea to tax unimproved land, and particularly capital gains (windfalls) on it. Theory says we should try to tax items with zero or low elasticity, and those include sites.”

James Buchanan: “The landowner who withdraws land from productive use to a purely private use should be required to pay higher, not lower, taxes.”

Franco Modigliani: “It is important that the rent of land be retained as a source of government revenue. Some persons who could make excellent use of land would be unable to raise money for the purchase price. Collecting rent annually provides access to land for persons with limited access to credit.”

Robert Solow: “Users of land should not be allowed to acquire rights of indefinite duration for single payments. For efficiency, for adequate revenue and for justice, every user of land should be required to make an annual payment to the local government equal to the current rental value of the land that he or she prevents others from using.

WILLIAM VICKREY: “It (land value taxation) guarantees that no one dispossess fellow citizens by obtaining a disproportionate share of what nature provides for humanity.” The endorsements from the last four economists named above were taken from a letter dated November 7, 1990 to Mikhail Gorbachev signed by 30 prominent U.S. economists. That letter is reprinted in Richard Noyes (ed.), *Now the Synthesis: Capitalism, Socialism, & the New Social Contract*. London: Shephard-Walwyn, 1991, pp. 225-230.

The second Friedman quotation is from *Human Events*, November 18, 1978, p. 14; quoted also in the *Fortune Encyclopedia of Economics*, New York: Warner Books, 1993.

A tax that is neutral is one that in no way alters the behavior of the markets by its imposition; that is people perform and make choices in the same way as if there was no tax at all.³⁹ Because a tax on “land” broadly defined is inelastic, i.e., has a fixed supply, any tax on this base is completely capitalized in the market price of the land itself. It is, in effect, a tax on the land rent, or a recapture of the land rent by government in the name of society, just as the rent is a creation of that society.

39. "The striking result is that a tax on rent will lead to no distortions or economic inefficiencies. Why not? Because a tax on pure economic rent does not change anyone's economic behavior. Demanders are unaffected because their price is unchanged. The behavior of suppliers is unaffected because the supply of land is fixed and cannot react. Hence, the economy operates after the tax exactly as it did before the tax--with no distortions or inefficiencies arising as a result of the land tax." P. Samuelson and W. D. Nordhaus, *Economics*, 16th ed., p. 250.

A land tax is efficient because there is no economic distortion of market choices as a consequence of its neutrality. This means that there is no wasted economic behavior in the form of excess burden or deadweight loss typically associated with other tax designs. As an example of the inefficiencies of other taxes, for example, one might consider the altered behavior that occurs in consequence of the presence of the income tax or the sales tax. This deadweight loss in American and British economies has been estimated to be roughly 20% of the national domestic product in each nation. Put

differently, were there no deadweight loss as a result of the tax structure, the society would essentially be 20% more productive — and 20% richer in the aggregate.⁴⁰

40. Fred Harrison (Ed.), *The Losses of Nations: Deadweight Politics versus Public Rent Dividends*, London: Othila, 1998, and Dale Jorgenson and Kun-Young Yun, “The Excess Burden of Taxation in the United States,” *Journal of Accounting, Auditing, and Finance*, fall, 1991. Harrison, et al. calculate that the deadweight loss of the current tax system of United States is a trillion dollars annually. Nicolaus Tideman et al. have modeled “The Avoidable Excess Burden of U.S. Broadbased Taxes,” in *Public Finance Review* (September, 2002), showing a “net gain of about \$10,000 per worker (16% of NDP) in the first year, rising to \$17,800 (23.7% of NDP) after 20 years for the most productive tax reform, which involves collecting 90% of the rent of land and using the income tax as a residual tax. When the sales tax is used as the residual tax, the gain per worker is about \$3,300 less.” This and other work is summarized in “The Gains from Taxing Land,” in *Geophilos*, No.03(1) (Spring, 2003), pp. 56-60. See also Alan Durning notes that “Complying [with the personal income tax alone] takes Americans 5 billion hours each year. For every dollar raised, U.S. taxpayers spend nine cents obeying the law. Cheating is widespread; roughly one-fifth of income goes unreported.” Alan Durning and Yoram Bauman, *Tax Shift: How to Help the Economy, Improve the Environment, and Get the Tax Man Off Our Backs*, Seattle: Northwest Environment Watch, April, 1998. p. 17. This is further corroborated in Donald L. Barlett & James B. Steele, *The Great American Tax Dodge* (Boston: Little, Brown & Co., 2000), where the authors note (p. 23) that the proportion of U.S. taxpayers deliberately engaged in cheating on their income taxes now approaches “between one-third and one-half of the tax-paying population.”

Because a tax on land is essentially a flat rate percent levied on a base of assessed full market value, it is simple and easy for people to understand. On account of that attribute, a tax on land value is easily visible and is perceived by the public to be fair. Finally, now that applied computer technology can be used to accurately assess the value of land whether or not it is improved, one of the last traditional objections to the administrative feasibility to land value taxation has been allayed. All this enhances the legitimacy of government. The tax is therefore not simply efficient from the narrow measure of tax efficiency as described above. It is efficient also in the broader sense, by its ability to foster sounder government performance, better community relations, more livable community configurations, and enhanced social productivity. It is not just from the standpoint of tax theory alone that a tax on land should be evaluated.

The most compelling arguments to many supporters stem from its environmental consequences. A tax on land sites is the most powerful instrument available to neutralize and reverse the centrifugal forces of urban sprawl. This is because incentives are present — the higher the tax the more power it has — to improve the high-value sites to the full extent that their market value warrants. Titleholders are induced to build on their parcels in order to recover the carrying costs of their increased taxes. The inelastic supply of land sites means that taxes are shouldered

fully by owners, without being passed on to tenants. (Of course a tenant's charges can be raised anytime.) Hence urban areas tend to be improved and peripheral areas become less attractive to sprawl development. George saw a strong moral argument for shifting from the conventional property tax levied on both land and improvements to one based on land alone. The argument was quite simple: the tax as it stood penalized people who improved their property and rewarded people who held vacant parcels for speculative gain. It rewarded those owners who let their holdings go to wrack and ruin, often those who bought up parcels to use as rental property without investing in the maintenance to ensure that they would continue to be attractive and livable — slumlords.

The Georgist approach to taxation had many names: his contemporary Thomas Shearman wrote two books calling it the “natural tax,”⁴¹ and more recently it has been referred to as the “incentive tax”⁴² and ground rent.⁴³ It should be noted once more that, by whatever name, the “land tax,” “site value tax,” or “single tax” to which George covered a far wider scope than simply locational sites, even though today this is the base that is given the most attention. It covered any natural factor element that humanity chose to put into service. Today, some of these parts of nature which have come to be “owned” by private corporations (at least insofar as their license to such use have become entitlements) are worth millions. The electromagnetic spectrum that has been parceled out to the communications industry has sometimes been “auctioned” for one-shot revenue gains, is now for all practical purposes a freehold title in the hands of those industries.⁴⁴ Were those spectrum bands retained by governments and “rented,” the revenue would likely be far greater. Whatever increased value now results accrues to these private owners instead of to society.

41. Thomas G. Shearman, *Natural Taxation; an Inquiry into the Practicability, Justice and Effects of a Scientific and Natural Method of Taxation*, 2nd Edition, Garden City: Doubleday, 1911.

42. Incentive Taxation is the name of a newsletter published by the Center for the Study of Economics, a Georgist research organization based in Columbia, MD.

43. See, for example, John C. Lincoln, *Ground Rent, Not Taxes: The Natural Source of Revenue for the Government*, New York: Exposition Press, 1957. John C. Lincoln was the founder of Lincoln Electric Co., and the benefactor of the Lincoln Foundation and the Lincoln Institute of Land Policy, based in Boston, MA.

44. Despite the fact that one often hears it said that the public owns the airwaves, their auction prices demonstrate that they have for all practical purposes been captured by private interests. See “Digital Christmas,” by Jennifer Nix, Salon Online Magazine at <http://www.salon.com/april97/media/media2970404.html>; and “FCC Moves on Digital Radio; Two Companies win Spectrum Auctions,” by Joseph Palenchar, April, 1997, Community etown News at <http://community.etown.com/news/articles/dar040797jpt.html>: “American Mobile Radio (AMR) and CD Radio emerged as the winners in FCC auctions for [the] S-band spectrum

set aside for satellite-based digital audio radio (DAR) service with respective bids of \$89.9 million and \$83.3 million.” The New York Academy of Science together with the Robert Schalkenbach Foundation sponsored a conference on “3G Wireless Cellular Telecommunications and Spectrum Panel” on April 24, 2003 the summary of which is available from the foundation. It showed that there are significant gains in efficiency and productivity by government rental of the spectrum rather than by its sale, apart from the argument that the public is the rightful owner of this asset. For a discussion of how this component of “land” could finance world government, see Alanna Hartzok, *Financing Planet Management: Sovereignty, World Order and the Earth Rights Imperative*, January, 1994, 2nd Edition Printing - January 1995, at <http://www.enviroweb.org/earthrights/docs/fpm.html>.

So also in the case of the auctioning of “pollution credits” or tradeable permits, what in fact constitute the right of power industries to treat the air as a dump to the full extent which environmental tolerances allow.⁴⁵ These “credits” are now “owned” by the private sector and traded back and forth among corporations, even though all people experience the consequences of its treatment. Airport landing slots, “prime time” broadcasting, and many other time-sensitive dimensions have all been handed over to the private sector with nominal benefit to the public. London Mayor Ken Livingstone has been a strong supporter of renting the landing slots at Heathrow and Gatwick Airports, and is at this very time exploring a rent recovery scheme to pay for the upgrade of components of the Jubilee tube line.⁴⁶

45. Peter Barnes, “The Pollution Dividend,” *The American Prospect*, No. 44 (May-June, 1999), pp. 61-67; and his subsequent *Who Owns the Sky?: Our Common Assets and the Future of Capitalism*, Washington: Island Press, 2001.

46. Several articles on the subject are printed recently in *Land & Liberty*, the publication of the Henry George Foundation of United Kingdom, www.henrygeorgefoundation.org.

In the Georgist view, this economic rent is the public’s birthright,⁴⁷ and the failure to collect it and to use it to pay for the general costs of government services is a moral as well as a public policy lapse. Georgists regard the private confiscation of public wealth as mistaken policy if not actually an immoral transgression — in a word, theft! He himself was an advocate of the public owning and protecting “the commons” and what is today often called “natural capital.” Studies have shown that if economic rent were collected in full as well as other appropriate revenues such as user fees and green taxes, the total income would likely be enough to pay not only the costs of all government services but provide a citizens’ dividend of significant amounts as well.⁴⁸ Statistical data is difficult to compile, but what studies have been attempted to date indicate that economic rent in all its forms and from all its sources comprises approximately a third of the economy as it is currently calculated.⁴⁹ Arrangements such as these are to the followers of Henry George a far more efficient and moral system of public finance.

47. Earth Rights Website at <http://www.enviroweb.org/earthrights/>; Bearthright: The Economics of Freedom, at <http://www.geocities.com/RainForest/3046/>; Earth Sharing: Geonomics for Newcomers, at <http://www.earthsharing.org.au/geonomic.html>; An International Declaration on Individual and Common Rights to Earth, at <http://www.enviroweb.org/earthrights/docs/declaration.html>.
48. This is an area of significant research at the moment, and it is being done by macro-economists of Georgist persuasion in several nations. Some of the most significant work is that of Michael Hudson, and his work will be published shortly. Provisionally, see “How Rent Gets Buried in the National Income Accounts,” Presented at the Council of Georgist Organizations, Evanston, IL, (1995); “Where Did All the Land Go? The Fed’s New Balance Sheet Calculations,” unpublished manuscript (1997), New York: Robert Schalkenbach Foundation; with Kris Feder, “**REAL ESTATE AND THE CAPITAL GAINS DEBATE, WORKING PAPER NO. 187** (1997), Annandale -on-Hudson, New York: The Jerome Levy Economics Institute, Bard College. See also, Ronald Banks (ed.), *Costing the Earth*, London:Shephard-Walwyn, 1989, and Robert R. Schultz, *The \$30,000 Solution: A Guaranteed Annual Income for Every American*, Santa Barbara; Fithian Press, 1996.
49. "How Much Revenue Would a Full Land Value Tax Yield?" by Steven Cord, *American Journal of Economics and Sociology*, Vol. 44, No. 3 (July, 1985), pp. 279-293.

Georgist Economics: Agendas

The Georgist main agenda, as earlier noted, is economic justice. If one searches the term “economic justice” online, the first site that will appear is the Georgist website, progress.org. The starting point is that people are entitled to what they earn, but only to what they earn.⁵⁰ The fruits of the commons generated in rent might also be distributed to citizens equally if not used to finance the general services of government. In practice this means the abolition of those taxes that represent an unjust capture of one’s personal property — taxes such as income, sales, and other nuisance taxes. It accepts, to be sure, the need to collect user fees, Pigouvian taxes, and perhaps sumptuary (sin) taxes. It argues aggressively for the collection of economic rent in support of government and, for any remaining surplus, its distribution as a citizens’ dividend. The justification for the collection of rent has several grounds:

- the first is to preclude the entitlement of windfall gains to those who have unfairly captured monopoly control of parts of what are rightfully the public commons.
- A second reason is to enhance the efficiency of economic productivity which the failure to collect rent prevents. It is not just that monopoly control of commons sites drives less attractive and less valuable land into production because the primary choices are unavailable; it is also that the use of alternative taxes leads to a deadweight loss in the economy which reduces the wealth of

every citizen except the monopoly titleholder. The proper collection of land rent leads to increases in economic efficiency in a way that wages are not artificially depressed and more opportunities arise in the labor market.

The result of these factors leads to a greater equality in the income of each person.

50. People would still, however, be entitled to unearned income insofar as it did not derive from economic rent — from the stock market, for example, or from inheritance beneficences.

The collection of land rent has other consequences for the smooth and effective functioning of the economy as well. With respect to the configurations of land use in urban areas, the collect of land rent neutralizes, and even reverses, the centrifugal forces which the current real property tax (i.e. that on both land and improvements) exerts on the values of locational sites. In fact one eminent economist argues that a tax on land sites is “better than neutral,” because it fosters activity in the highest value areas and removes the factor of adverse timing that often stalls economic investment.⁵¹ This all leads to the economic vitality of high-land-value cities, simply by virtue of concentrating activity in central areas instead of peripheral and remote regions. It discourages the extravagant and careless development of land sites, thereby also fostering development densities conducive to community welfare and to the success of public transit services.⁵² Experts agree that the minimum density necessary to make public transit services economically viable is 10 to 12 households per acre; without this, there is little prospect of altering private automobile dependency.⁵³ And given the widespread environmentally and socially destructive consequences of motor vehicle dependency, collecting rent is half the answer toward the goal of engendering livable urban areas. (The other half — see below — is pricing motor vehicle use at its true marginal cost to society.)

51. T. **NICOLAUS TIDEMAN**, “Taxing Land is Better than Neutral: Land Taxes, Land Speculation, and the Timing of Development,” in Kenneth C. Wenzer (ed.), *Land Value Taxation: The Equitable and Efficient Source of Public Finance*, New York: M.E.Sharpe, 1999, pp. 109-133.
52. See the author’s “Value Capture as a Tool in Transportation: An Explanation in Public Finance,” *American Journal of Economics and Sociology*, Vol.60, No.1 (January, 2001), pp.195-229; and Laurence S. Moss (ed.). *City and Country* (Malden, MA: Blackwell Publishers, 2001) online at www.urbantools.net/pdf/ValueCaptureAsAPublicFinanceTool-BillBatt.pdf; “Stemming Sprawl: The Fiscal Approach,” in *Suburban Sprawl: Culture, Ecology and Politics*, Hugh Bartling and Matthew Lindstrom (eds.) New York: Rowman and Littlefield, September, 2003; and “Modeling Land Rent and Transportation Costs in the United States,” presented at the Third Annual Global Conference on Environmental Taxation,

Woodstock, VT, April, 2002; and printed in Larry Kreiser and Janet Milne (eds.), *Readings in International Environmental Taxation*, May, 2003.

53. *Transit and Urban Form*, Report 16, Portland: Parsons Brinkerhoff, National Academy Press (sponsored by the National Research Council's Transportation Research Board), 1996.

The more cohesive the development of communities is, the greater the synergy exists among its members. Sprawl development not only increases the cost of transportation and other infrastructure needed to service these sites, it also reduces the extent to which people are accessible to one another. There is considerable indication that American society is losing this elusive quality of community. When Harvard professor Robert Putnam published his celebrated article *Bowling Alone* in January, 1995, it was remarkable as much for the resonance that it generated throughout the nation as for the message itself. David Broder of the *Washington Post* pronounced *Bowling Alone* the most important academic article that year. Putnam argued that our communal relationships are declining, and that an ever smaller proportion of the population is involved in social activities of a cooperative and communal nature.⁵⁴ We used to be a nation of joiners; increasingly now we're a nation of loners. As Tocqueville noted 150 years ago, affiliative groups used to be the unique strength of American society.⁵⁵ Several hypotheses were offered in this and subsequent studies to explain the decline in the civic engagement of Americans — various demographic changes, technological innovations such as television, the changing role of government, the cultural revolution, and so on. The land-use and transportation patterns that have evolved in the post-war period are a factor as well. The concepts of neighborhood and community today no longer mean the same thing as they did in the past.

54. Robert D. Putnam, "Bowling Alone: America's Declining Social Capital," *Journal of Democracy*, Vol. 6 (January, 1995), pp. 65-78. His argument has just been published as a book: *Bowling Alone: The Collapse and Revival of American Community*, New York: Simon & Schuster, 2000.
55. See, for example, the suggestive articles of Charles Leroux and Ron Grossman, "[Low Turnout] Numbers Reflect Growing Loss of Community," *Chicago Tribune*, November 17, 1996; Ellen Goodman, "Lack of Civility, Backbone Plagues America," *Boston Globe*, September 8, 1996; and Fox Butterfield, "Values Guard Against Violence, Study Finds," *New York Times*, August 17, 1997.

Saying hello to your neighbors today, if indeed you know them, means tooting your horn as you meet them coming and going.⁵⁶ Urban areas need instead to be designed to engender healthy community life. Restoring the balance between accessibility and mobility so that human exchanges— of all sorts— can occur efficiently and simply is a central element of Georgism. As author Kirkpatrick Sale has said, we need to

restore *Human Scale*.⁵⁷

56. Studies show that there is an inverse correlation between the ability of a street to move — and to park — cars and trucks, and the amount of social interaction between neighbors on that street. One such study compared three similar residential streets, with different levels of traffic volumes, in San Francisco. Residents on the different streets were asked to indicate on the base maps of their streets where friends and acquaintances lived. Those living on streets with the least traffic volume had three times as many friends and twice as many acquaintances as those living on the streets with heavy traffic volumes. Donald Appleyard, *Livable Streets*, Berkeley: University of California Press, 1981.
57. Kirkpatrick Sale, *Human Scale*. New York: Coward, McCann & Geoghegan, 1980.

Much of the loss of scale communities is due to the fact that transportation planners have reconfigured the urban areas of the country to serve the automobile.⁵⁸ It stems from a fundamental confusion between what geographers call accessibility and mobility. This distinction is explained particularly well in a recent text, *The Geography of Urban Transportation*:

Accessibility refers to the number of opportunities, also called activity sites, available within a certain distance or travel time. Mobility refers to the ability to move between different activity sites (e.g., from home to a grocery store).⁵⁹

58. See F. Kaid Benfield, Donald D. T. Chen, and Matthew Raini, *Once There Were Greenfields: How Urban Sprawl is Undermining America's Environment, Economy, and Social Fabric*, New York: Natural Resources Defense Council, 1999.
59. Susan Hanson, Editor, *The Geography of Urban Transportation*, Second Edition. New York: Guilford Press, 1995, p. 5. See also K.H. Schaeffer and Elliott Sclar, *Access for All: Transportation and Urban Growth*, Baltimore: Penguin Books, 1975.

Recent days have witnessed a profound and growing awareness of the problems due to sprawl development. In fact one opinion poll marked sprawl as the highest current concern among American voters.⁶⁰ The answers being offered, however, don't address the root causes of the problem. The most talked about panacea is the institution of urban growth boundaries, but these have failed to be demonstrably successful even in the two communities most often cited (Portland and Boulder) where they were instituted over twenty years ago.⁶¹ Solutions such as these reflect the penchant of policy makers to rely upon so-called "command-and-control" (CAC) approaches to government rather than "pricing" approaches. The extension of government reach and weight to impose policies deemed appropriate is burdensome, expensive, and inefficient.

60. Brad Knickerbocker, "Forget Crime — But Please Fix the Traffic," *C. S. Monitor*, February 16, 2000.

61. H. William Batt, "Solving the Problem of Urban Sprawl," Presented at the Conference of Georgist Organizations, Portland, OR, July 29-August 2, 1998.

Such means reflect a lack of understanding and imagination according to authors David Osborne and Ted Gaebler, who urge adoption policies of "steering rather than rowing."⁶² As long as drivers personally are able to pass off to others the true costs of their travel, it guarantees, along with the failure to collect land rent, that sprawl development will continue. One 1993 study concluded that "when the full range of costs of transportation are tallied, passenger ground transportation costs the American public a total of \$1.2 to \$1.6 trillion each year. This is equal to about one-quarter of the annual GNP and is greater than our total national annual expenditure on either education or health."⁶³ Japan, by way of comparison, spends an estimated 10.4% to satisfy all its transportation requirements, although the figure might be a bit low because not all externalities are included in the calculation.⁶⁴ One reason we are spending so much on motor vehicle transportation is that our public policies encourage it. Road user fees represented about \$33 billion in 1991 but the true costs to society were ten times that;⁶⁵ put another way, drivers pay only 10% of the true costs of their motor vehicle use.⁶⁶

62. David Osborne and Ted Gaebler, *Reinventing Government: How The Entrepreneurial Spirit is Transforming the Public Sector*, Reading MA: Addison Wesley, 1992; See Ch. 1, "Steering Rather than Rowing."
63. Peter Miller and John Moffet, *The Price of Mobility: Uncovering the Hidden Costs of Transportation*. New York: Natural Resources Defense Council, October, 1993. This is somewhat more than the US Department of Transportation's own calculation. The latter uses only direct measurable pecuniary costs, and estimates the figure was in the neighborhood of \$1 trillion for the year 1992, about 17 percent of GNP----- converted to GDP would make it somewhat higher. Since it fails to include externalities such as pollution, accidents, and other associated costs, it seems a reasonable estimate. See *Transportation Statistics, 1994*, U.S. Department of Transportation, Bureau of Transportation Statistics, pp.4-5.
64. Walter Hook, *Counting on Cars, Counting out People*. New York: Institute for Transportation Development Policy Paper, Winter, 1994, p. 28. Another author puts the figure at 9.2% of personal expenditure in Japan versus 22% in the United States. Michael Replogle, "Improving Access for the Poor in Urban Areas," *Appropriate Technology*, Vol. 20, No. 1 (1993), pp. 21-23.
65. James J. MacKenzie, et. al., *The Going Rate: What It Really Costs to Drive*, Washington: World Resources Institute, 1992. Just the costs resulting from automobile crashes alone represents a figure equal to 8 percent of the American GDP. In 1988, a study by the Urban Institute calculated that \$71 billion were borne in out-of-pocket costs, another \$46 billion in lost wages and household production, and \$217 billion in pain, suffering and lost quality of life. Translated into vernacular, the total of \$334 billion in lost property, worktime, and injuries and deaths. T. Miller, et al, *The Costs of Highway Crashes*. The Urban Institute, Washington, D.C., October, 1991. It is important to realize that, in the

100 years since the first automobile death in New York City, five million Americans have died in automobile crashes. "One Hundred Years of Car -nage," *Auto-Free Times*, #17 (Spring, 2000), p. 14, and www.rememberbliss.org and www.lesscars.org.

66. *Road Kill: How Solo Driving Runs Down the Economy*. Boston: The Conservation Law Foundation (May, 1994), p. 7. This study is a summary of a larger study done by Apogee Research, Inc., funded by the Joyce Foundation. The most recent work compiling the American costs of driving is by Richard C. Porter, *Economics at the Wheel: The Costs of Cars and Drivers*, Academic Press, 1999.

Failure to collect land rent leads to speculation and the resulting boom-bust economic cycles that are so destructive to the general economy.⁶⁷ Henry George in *Progress and Poverty* (Bk V, Ch1) identified the "speculative advance of land values" as the "great initiatory cause of industrial depressions." Economic cycles can be linked to just about every downturn over the course of two centuries, the more so as the economy has come to be monetized. Frederick Lewis Allen, the great journalist gives a compelling account of how the Florida land boom (and later bust) antedated the Great Depression.⁶⁸ More recently a similar speculative bubble explains the Asian economic crash, particularly in Thailand.⁶⁹ When the Japanese economy was at its peak, the value of land in Tokyo alone exceeded that of the entire United States, and the appraised land value under the Imperial Palace was as great as all the real estate in California.⁷⁰ The most convincing study of the relationship between land value cycles and more general economic cycles is one done for Australia by a contemporary Georgist economist.⁷¹ There are some students of the American economy that believe that we are the cusp of a crash in land values that have been bid up over decades, and that this could well precipitate a market downturn that could be long-enduring. ⁷²

67. See "Economic Booms and Slumps: Their Cause and Cure," downloadable from the Henry George Foundation of Great Britain, at <http://users.charity.vfree.com/h/henrygeorge/publications/flysheets/index.htm>.

68. Frederick Lewis Allen, *Only Yesterday: An Informal History of the 1920s*, New York: Harper & Brothers, 1931, Ch. XI, available at http://www.geocities.com/Athens/Acropolis/5148/allen_only_yesterday.html; and William J. Frazer, *The Florida Land Boom: Speculation, money and the banks*, Westport CT: Quorum Books, 1995.

69. "Why are We in this Mess?" report of the J. Douglas Gibson Lecture delivered at Queens University, Ontario by Dr. Ammar Siamwalla of the Thailand Development Research Institute Bangkok Post, November 12, 1997; at www.bkkpost.samart.co.th. See also Walden Bello, *A Siamese Tragedy: Development and Disintegration in Modern Thailand*, London: Zed Books, 1999, and

70. "Tokyo" at www.richard-seaman.com/Travel/Japan/Tokyo/; and Ch 6, *The Sun Also Sets: The Limits to Japan's Economic Power*, by Bill Emmott, 1989, excerpted at www.ac.wvu.edu/~patrick/geo324/Chap6-EM.htm.

71. Bryan Kavanagh, *The Recovery Myth*, Melbourne: Land Values Research Group, 1994; and “Land Speculation: Cause of Industrial Depressions and theatre of political and economic ‘activity,’” <http://www.zip.com.au/~hgnsw/issues/landspec.html>
72. See, for example, the recent column of Dr. Dean Baker, Research Associate at the Center for Economic Policy and Research, and widely syndicated columnist, on May 9, 2003, “Bursting Bubbles: Why the Economy will go from Bad to Worse,” and other columns accessible at www.epinet.org. See also the writing of Professor **FRED FOLDVARY**, “The New Economic Realities,” at www.progress.org/archive/fold214.htm. This prospect is not beyond possibility; see, for example, “Life in the Upside-down World of Deflation: After Fed Warning, Economists Reexamine Certain Assumptions,” by Peter Gosselin, *Los Angeles Times*, May 18, 2003.

A Geogist agenda also calls for the regular auctioning of mineral extraction rights, fishing rights, and other access to natural resources in a way that their rent is returned fully and fairly to the public weal.⁷³ Competitively assessed royalties especially on the extraction of mineral capital could yield billions of dollars. **Alanna Hartzok** has offered compelling arguments why rent from locational sites should be reserved to finance the services of local governments, rent from natural resources identifiable within a nation’s boundaries should be captured to finance national governments, and rents of those resources beyond national borders should be used to finance world governments.⁷⁴

73. The Geogist economist who has worked most on this subject is Professor **MASON GAFFNEY**, of the University of California Riverside. In addition to being the primary source of the Alaska oil dividend system, one which automatically pays to each citizen of that state over \$1,000 every year, he has written extensively for many years on design of water rights, forestry and mineral rights, and other natural resource charges. See Professor Gaffney’s bibliography (until 1995) at http://www.enviroweb.org/earthrights/associates/gaffney_bib.html.
74. A. Hartzok, *Financing Planet Management: Sovereignty, World Order and the Earth Rights Imperative*, January, 1994, 2nd Edition Printing - January 1995, and at <http://www.enviroweb.org/earthrights/docs/fpm.html>.

Pricing resources of nature at their marginal rates is a clearly understood economic principle. To do otherwise fosters extravagant and wasteful use of such, or leads to inefficient use of their locations. Hence both a moral reason — the unjust windfall gain that otherwise befalls such monopoly titles — and an economic reason — efficiency — call for such practices. It is the compelling impetus of politics and not economic rationality that frustrates the implementation of such designs. With the advent of greater and more accurate data, as well as the increased power of computer analysis, there is every reason to argue for and anticipate the collection of economic rent from every source where it arises.

ECOLOGICAL ECONOMICS

Ecological Economics: Basic Premises

It is far easier to outline the basic premises of Georgist economics than it is to do so for the emerging field of ecological economics. Georgism is a tradition that grew out of a clearly formed tradition of 19th century classical economics and has been refined further for the past century. It was neoclassical economics that diverged from the reigning orthodoxy. The differences between the classical tradition as represented and defended by Henry George and the emerging neoclassical school were vividly portrayed from their earliest divergence, even to the staging of formal debates between George and the new orthodoxy's adherents.⁷⁵ In contrast, ecological economics along with other emerging heterodox schools is itself very much a reaction to the neoclassical tradition's insensitivities and failures. The differences between ecological economics and the floundering discipline of neoclassical economics are as much by way of the former's criticism of the latter as they are an enunciation of clear starting points.

To be sure, neoclassical economics emerged gradually over a period of some fifty years, and only reached its heyday, one might argue, with the arrival of Paul Samuelson. **Samuelson, the MIT economist whose text has gone through some 16 editions and has outsold all other text combined once said, "I don't care who writes a nation's laws . . . if I can write its economics textbooks."**⁷⁶ The neoclassical position developed ever greater abstract mathematical applications, with models ever more detached from "real world" market forces. This system of analysis now has reached a point of questionable utility due to its hermetic and Newtonian emulations.⁷⁷ Little by little, one premise and formula after another have been cast aside, to a point now that there is a broad recognition among economic theorists at least that the discipline faces an intellectual crisis.⁷⁸

75. This history is well chronicled in Mason Gaffney, *The Corruption of Economics*, London: Shephard-Walwyn, 1994, as well as in several biographies of Henry George's life.

76. Originally in *New York Times*, October 12, 1986, sec. 3; quoted more recently in "The Puzzling Failure of Economics," *The Economist*, August 25, 1997.

77. This is the criticism brought to bear on neoclassical economics by E.O. Wilson in *Consilience: The Unity of Knowledge*, New York: Knopf, 1998.

78. Economist Albert O. Hirschman of the Princeton Institute for Advanced Study begins one book, *Essays on Trespassing* (New York: Cambridge University Press, 1981,) page v, with a quote from the Russell Sage Foundation's current view:
. . . the discipline[of economics] became progressively more narrow at precisely the moment when the problems demanded broader, more political, and social insights. (From Russell Sage Foundation, Annual Report, 1979, New York, 1980, p. 12.)

Without enumerating further criticisms that have been levied against neoclassical economic thinking, something that has been done far better elsewhere than is possible here, suffice it to say that some of the most compelling charges have been made by the ecological economists.⁷⁹ The most trenchant one as explicated by economist Nicholas Georgescu-Roegen is its violation of the basic laws of physics.⁸⁰ It assumes a continuing draw-down of the earth's store of energy, of which there is, of course, only a finite amount. If the economy continues to expand to include all elements of the earth, it will consume so many resources, particularly energy resources, that ultimately life itself is destroyed. One study calculated that if everyone in the world lived at the level of the average American, three "earths" would be necessary to accommodate us all. ⁸¹ The challenge, argue the ecological economists, is to structure economic analysis and the economy itself in such a way that markets are contained and that existence outside economic reach is respected and preserved. Whereas other studies of the environment within the framework of conventional neoclassical economics attempt to price nature in a way that its value is assured, ecological economists work from the conviction that such an approach is questionable if not futile, as it can never achieve any accurate and reliable market values for such existence.⁸²

79. See, for example, Herman E. Daly, *Beyond Growth: The Economics of Sustainable Development*, Boston: Beacon Press, 1996; John Gowdy and Sabina O'Hara, *Economic Theory for Environmentalists*, Boca Raton: St. Lucie Press, 1995; and Charles S. Hall et al, (ed.) *Quantifying Sustainable Development: The Future of Tropical Economies*, New York: Academic Press, 2000. An extensive treatment of the assumptions of the discipline of mainstream economics is to be found in the work of Robert H. Nelson, *Reaching for Heaven on Earth: the Theological Meaning of Economics*, Boston: Rowman & Littlefield, 1991, which is excerpted in places on the extensive website of Professor Jay Hanson at www.dieoff.org.
80. Nicholas Georgescu-Roegen, *The Entropy Law and the Economic Process*, iUniverse.com, 1999.
81. Mathis Wackernagel and William Rees, *Our Ecological Footprint*, New Society Publishers, 1995.
82. Benardo Aguilar, "The Implications of Ecological Economic Theories of Value to Cost Benefit Analysis: Importance of Alternative Valuation for Developing Nations With Special Emphasis on Central America," *Indian Journal of Applied Economics*, Vol.7, No. 3 (1998), pp. 367-420.

A central premise of ecological economics is a recognition that market prices do not reflect the value of commodities, particularly the resources and services of nature. Oscar Wilde first noted that a cynic was "a man who knows the price of everything and the value of nothing." ⁸³ But it is clearly not only cynics who hold such ideas today. The growing "commodification" of all things — the consequence of a gradual

and inexorable privatization of the whole world and the ever expanding attempts to include everything which humans touch in a market economy, where objects and services which lack a market price are thus treated as free goods — means either that ultimately everything must be priced or else that other means must be found by which to identify value. The subfield of environmental economics is based on just this view — that everything must be priced. To be sure, we cannot live without the natural environment, yet treatment of natural goods and services as free under the neoclassical economics framework leads inevitably to their total consumption and destruction.⁸⁴ The looming exhaustion of natural resources compels us to recognize that market prices have limited worth in signaling true value, whether those resources be the biota of the world upon which human beings also depend for their existence or mineral wealth in the form of fossil fuel energy which drives modern economies. If we do try in any way to price the goods and services provided by the environment, they are so far beyond counting that it becomes self-evident that our economic approach must change.⁸⁵

83. Oxford Dictionary of Quotations, Third Edition, p 573, #13; and “The Wit and Wisdom of Oscar Wilde,” BBC Online Network, http://news.bbc.co.uk/1/hi/english/uk/newsid_224000/224644.stm.
84. This is expressed well in a new book by Eric Davidson and George Woodwell, *You Can't Eat GNP: Economics as though Ecology Mattered*, Perseus Press, 2000. Ecological economist Herman Daly quotes two neoclassical economists to point up their trivialization of nature as a factor of production George Gilder, for one, wrote “The United States must overcome the materialistic fallacy: the illusion that resources and capital are essentially things, which can run out, rather than products of the human will and imagination which in freedom are inexhaustible,” further adding that “Because economies are governed by thoughts, they reflect not the laws of matter but the laws of mind.” Julian Simon is then quoted as saying that “in the end, copper and oil come out of our minds. That’s really where they are.” Herman E. Daly and John B. Cobb, Jr., *For the Common Good: Redirecting the Economy Toward Community, the Environment, and a Sustainable Future*, Updated and Expanded, Boston: Beacon Press, 1989, 1994, p. 109. See also Brian Czech, *Shoveling Fuel for a Runaway Train: Errant Economists, Shameful Spenders and a Plan to Stop Them All*, Berkeley: University of California Press, 2000.
85. One widely quoted paper calculated that “the total value of 17 global ecosystem services and natural capital . . . at an average of thirty-three trillion US Dollars per year, which amounts to almost twice the global GDP.” Robert Costanza et al., “The Value of the World’s Ecosystem Services and Natural Capital,” *Ecological Economics*, April, 1998, pp. 3-15.

If land and land rent are the strongest determinants to Georgists, energy is its closest counterpart to ecological economists. Just as land rent can be measured fully in terms the relative surplus it produces in any given socio-economic context, energy can be traced and calculated in calories, BTU’s or joules. Land rent is completely a human product — there is no rent where there are no people, as land has no market value. On

the other hand, energy exists regardless whether people are present or not, as it is a component of nature itself. But not all energy is now recognized as relevant in economics; only that energy which is employed in the human economy, and we assume that the human economy is necessarily bounded. Wind, sunlight and lightening are as yet unpriced and are peripheral today even in ecological economics. Attention is given more to those natural resources potentially procurable or otherwise relevant to human dependency, and energy certainly is primary. So rather than regard energy as a free good and largely outside the economy as neoclassical economics assumes, energy will likely continue to be central — even the driving force — in ecological economics.

Indeed just about all other factors of production are essentially convertible from energy. Besides that used in households, industry, and transportation sectors, agriculture — at least linked to developed economies — is essentially energy driven. As Martinez-Alier has shown,⁸⁶ modern agriculture is essentially unfeasible without reliance upon applied energy forms, and the diets of modern societies are heavily reliant upon energy in the forms of intensive fertilizer use, intensive application of machinery, and animal protein-fed farmers. By way of contrast, in pre-modern agricultural societies one could argue that human and animal energy account for all the foodstuffs produced, and were used in turn to assure the continuance of the agricultural cycle. Unlike modern societies they are in energy equilibrium. Hall⁸⁷ argues that energy is the determining factor in the development success of all economies, posing momentous challenges for the future as projected shortages of fossil fuel sources loom on the horizon.

86. Joan Martinez-Alier, *Ecological Economics: Energy, Environment and Society*, London & New York: Basil Blackwell, Ltd., 1987.

87. Charles A. Hall, Cutler Cleveland and Robert Kaufman, *Energy and Resources Quality: the Ecology of the Economic Process*, New York: Wiley, 1986. For further discussion of this line of thinking, see the website <http://dieoff.org/>, and the archived listserves at <http://www.egroups.com/community/energyresources> and <http://www.egroups.com/group/RunningOnEmpty>.

The regard for steady-state socio-economic dependence upon the natural environment raises profound questions about the extent to which human activity is possible without continuing depletion of the earth's energy resources, mainly fossil fuels. On the one hand are those that believe that contemporary society's reliance upon intensive energy has become so embedded that continued sustainable life is impossible.⁸⁸ Among these are noted ecologist writers such as Paul and Ann Ehrlich who envision the continued boom and ultimate collapse of all civilized nations.⁸⁹ The other view includes the majority of ecological economists who hold out hope that it might be possible to shift

in time to renewable energy sources before damage to the ecosystem is irreversible. This view is exemplified by those who could be called the “steady-staters,” and who believe that there is still time to bring economic practices into an equilibrium state and avoid the doomsday scenario. Among the latter are Herman Daly, one of whose books is entitled *Steady State Economics*.⁹⁰ An interesting discourse is unfolding among this community, perhaps as reflective of personal temperament as much as it is due to research interest and disciplinary background. At the moment it is a focus of intensive and increasing research and interest.⁹¹

88. This camp includes ecological economists such as Cutler Cleveland and Charles Hall. For Cleveland, see http://webct.rpi.edu:8900/SCRIPT/84065/scripts/student/serve_page?882560079+Bios/Cleveland.htm. For Hall, et al., *Quantifying Sustainable Development: The Future of Tropical Economies*, note 66; and http://webct.rpi.edu:8900/SCRIPT/84065/scripts/student/serve_page?882560079+Bios/Hall.htm.
89. Ehrlich, Paul R., and Ann H. Ehrlich, *Betrayal of Science and Reason: How Anti-Environmental Rhetoric Threatens Our Future*, Washington: Island Press, 1998.
90. Washington: Island Press, 1991.

The heart of ecological economics is ecological carrying capacity and the premise of economic sustainability. Although this term has to some extent become a mantra and widely abused, its most popular definition remains that first enunciated by the 1987 Brundtland Commission Report: *“development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”*⁹² Principle 3 of the 1992 UNCED Rio Declaration: *“The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.”*⁹³ At various times scholars have sought to improve upon this definition; one offered by adherents of the ecological economics school reads as follows:

1. For renewable resources (fish, trees, etc.), the rate of harvest should not exceed the rate of regeneration.
2. The rate at which we allow economic activity to generate wastes that must be passed into the environment should not be allowed to exceed the environment’s ability to absorb them.
3. The depletion of nonrenewable resources (oil, coal, etc.) should not be offset by investment in and development of renewable substitutes for them.⁹⁴

91. Several articles reflecting a pessimistic view are to be found at <http://dieoff.org>, and in a listserve initiated February 10, 2000 and catalogued at <http://www.egroups.com/community/energyresources>. A closely-related site on March 3, 2000 is catalogued at <http://www.egroups.com/group/RunningOnEmpty>.

92. World Commission on Environment and Development (commonly referred to as the Brundtland Report), *Our Common Future*, New York: Oxford University Press, 1987, p. 43.
93. "Earth Summit Approves Agenda 21," *UN Chronicle* 29.3 (Sept. 1992) 66.
94. Thomas Prugh, et al., *Natural Capital and Human Economic Survival*, Solomons, MD: ISEE Press, 1995, p. 47.

Implicit in all this is the argument that manufactured capital (i.e., that created by human beings), and natural capital (those resources provided by nature) are not substitutable, as well as the belief that current practices portend irreversible consequences for the earth's environmental stability. Nor can the various components of natural capital alone be regarded as interchangeable goods. Natural gas might in some instances be a substitute energy source for coal, and chicken an alternative protein source to beef. But fundamentally each element is to a significant extent unique in nature — fulfilling its own special niche in what ecologists call lexicographic uniqueness.

Conventional thinkers argue that these two classes of natural and man-made capital are mostly substitutable, in what ecological economists have called “weak sustainability.” But the contrary, “strong sustainability,” is at the heart of ecological economics, going even further than many authors of the Brundtland Commission Report would have accepted by recognizing the lexicographic character and place of each and every element of the biota.⁹⁵ There is no definitional consensus, however. The Clinton-Gore administration, for example, established a President's Council on Sustainable Development on June 15, 1993, and adopted the Brundtland Commission's language. But it carefully avoided any detailed definition of what was meant by sustainability.⁹⁶ Subsequent executive orders and press releases have been equally vague as to what definition of sustainability is being used,⁹⁷ and to this day the matter remains unsettled.

95. This premise forms the basis of what has come to be known as the Gaia hypothesis, originally put forward by British writer Sir James Lovelock, who is now the principal leader of the London-based GAIA Society, at <http://ibc.uel.ac.uk/gaia/>, after writing *Gaia: A New Look at Life on Earth*, Oxford University Press, 1987.

96. <http://www.pub.whitehouse.gov/uri-res/I2R?urn:pdi://oma.eop.gov.us/1993/6/15/2.text.2>

97. <http://www.pub.whitehouse.gov/uri-res/I2R?urn:pdi://oma.eop.gov.us/1999/5/4/37.text.1>

Ecological Economics: Moral Premises

If Georgist economics takes a moral stance primarily focused on justice, ecological economics makes a much wider sweep. From its standpoint the very survival of the world is at stake, so that matters of distributive justice, so central to Georgists, tend to get lost in debate. Many ecological economists and environmental economists would

claim that theirs is not a moral stance at all; rather it is a simple empirical reality. One philosopher writing in the journal *Environmental Ethics* sets forth a view reflective of many:

I do wish to point out that this ‘holistic’ view of the Earth’s ecological systems [i.e., the natural world as an organism] does not itself constitute a moral norm. It is a factual aspect of biological reality, to be understood as a set of causal connections in ordinary empirical terms.⁹⁸

98. Paul W. Taylor, “The Ethics of Respect for Nature,” in *Environmental Ethics*, Vol. 3, No. 3.(Fall, 1981), pp. 197-218); reprinted in Michael E. Zimmerman, et al (ed.), *Environmental Philosophy*, Englewood Cliffs: Prentice Hall, 1998, p. 77.

Living within the laws of nature would seem to be axiomatic in the development of any ethical system, and it is a mark of degree that our ethics have so ignored such realities that a corrective is called for. Only in 1967 Professor Lynn White noted in a now famous article how much the Judeo-Christian tradition has been used to explain and justify practices of exploitation and domination of our natural environment.⁹⁹ Mistaken or not, this view of man’s place in nature is generally accepted as conventional wisdom throughout western culture. The ecology movement constitutes a revolutionary and very unsettling outlook to this prevailing view, a radical shift in thinking from even mainstream environmentalism and conservation ethics half a century ago. In this view other species, both plants and animals, are as much entitled to life and well being as is homo sapiens. Theodore Roosevelt a century ago could never have subscribed to the views of contemporary environmental ethicists, as much of a conservationist as he was. The earliest clear manifestation of modern thinking at least in western thought appears to be Aldo Leopold’s *Sand County Almanac*, a work only published in 1949!¹⁰⁰ Ecological economists accept this so much as given — that human beings are of the earth and its bio-system rather than on the earth to dominate it — that further refinement of this basic orientation is almost beside the point. This was simply prudent care and planning to Leopold; he fully recognized our total dependence upon nature.

99. Lynn White, Jr., “The Historical Roots of Our Ecological Crisis,” *Science*, Vol. 155, No. 3767 (March, 1967), pp. 1203-1207.

100. Aldo Leopold, *A Sand County Almanac: And Sketches Here and There*, New York: Oxford University Press, 1977 (orig., 1949).

Not only are human beings co-equal with other living beings of the earth, so also are beings yet born entitled to an existence. The Iroquois Indians of New York State are often quoted to the effect that “In our every deliberation, we should consider the impact of our decisions on the next seven generations.” ¹⁰¹ Several contemporary

environmental organizations have adopted the Iroquois “Great Law of Peace” so that it has become the vernacular equivalent of the Brundtland Report’s definition of sustainability. Sustainable economics, or 7th generation planning, also requires Daly’s “steady state” economy, ¹⁰² where (as if natural resources constitute “capital”) one lives only on interest and not principle. Daly contrasts two notions of economic practice: growth and development. The former may momentarily increase economic productivity and wealth, but is in the long term a fatal course of policy. It increases quantity but not quality. Development, rather, is what should be aspired to, an increase in quality, efficiency, and fulfillment through minimal uses of energy and material resources. For development, the value-added dimension comes from treading lightly on the earth, from the use of mental capital rather than physical capital.¹⁰³ Daly in still another article talks about three parameters of sustainability: “allocation, distribution, and scale,” which will lead to an economy which is “efficient, just and sustainable.” ¹⁰⁴

101. “For the Seventh Generation,”

<http://www.physics.helsinki.fi/whale/intersp/essay/7th.html>,

<http://www.indians.org/welker/onondaga.htm> and

102. H. E. Daly, *Steady State Economics*, 2nd Edition, Washington: Island Press, 1991.

103. Daly, *Beyond Growth*, note 67.

104. Herman E. Daly, “Allocation, Distribution and Scale: Toward an Economics that is Efficient, Just and Sustainable,” *Ecological Economics*, 1992, pp. 185-193.

One exponent of ecological economics suggests five axioms to measure the degree of “ecosystem health:” ¹⁰⁵

105. Costanza, et al, *Ecosystem Health*, note 84, pp. 6, 24.

- The Axiom of **Dynamism**: Nature is more profoundly a set of processes than a collection of objects; all is in flux. Ecosystems develop and age over time.
- The Axiom of **Relatedness**: All processes are related to all other processes.
- The Axiom of **Hierarchy**: Processes are not related equally but unfold in systems within systems, differing mainly along the temporal and spatial scale on which they are organized.
- The Axiom of **Creativity**: The autonomous processes of nature are creative and represent the basis for all biologically based productivity. The vehicle of that creativity is energy flowing through systems which in turn find stable contexts in larger systems, which provide sufficient stability to allow self-organization within them through repetition and duplication.

- The Axiom of **Differential Fragility**: Ecological systems, which form the context of all human activities, vary in the extent to which they can absorb and equilibrate human-caused disruptions in their autonomous processes.

Elsewhere ecosystems are measured according to their relative health, a metaphor deliberately taken from the field of medicine. What constitutes ecosystem health is still very much an open discussion, but it has been defined in terms such as integrity,¹⁰⁶ diversity, stability and resiliency.¹⁰⁷ These are all concepts which presume a level of depth, span and integration, and see the living environment not as things and instruments, but rather as elements of interdependent processes requiring respect, sometimes even management. It often also presumes respect for the environment not just for instrumental reasons but for aesthetic and moral reasons. The reality of ecological economics entails valuation of nature according to criteria beyond just market value. After all, this nature is a central part of the “commons” or “natural capital.”

106. See Laura Westra (Editor), *Perspectives on Ecological Integrity*, Dordrecht: Kluwer Academic Publishers, 1995.

107. The Resilience Alliance can be accessed at <http://landscape.acadiau.ca/resilience/frontpage.htm>, and the Resilience Network can be accessed at <http://www.emory.edu/COLLEGE/ENVS/rnet/RNETMAIN.html>

One interesting article considers whether ecological economists must necessarily be moral individualists or moral holists. The former reflect the ethical tradition drawn from classical liberalism and utilitarianism wherein the satisfaction of individual needs is measured according to standards of distributive justice. Ethical individualism presents problems insofar as there is little or no protection to any existence beyond members of the human community. There is no basis for moral claims by elements of nature — animals or plants — inasmuch as they lack consciousness and the capacity to suffer. Yet environmental holism, reflected in the thinking of Leopold, suffers from liabilities as well. Continuing the argument, this thinking fails because

- 1) there is no biologically coherent notion of “community” robust enough to ground either contemporary scientific theory in community ecology or environmental ethics;
- 2) it is not possible to safeguard the “rights” of biological communities;
- 3) in relying on natural-selection mechanisms to deliver it from relativism [its defenders’] evolutionary ethics has lost its normative dimension; and
- 4) [this] version of ethical holism appears to sanction what [is elsewhere called] “environmental fascism.” ¹⁰⁸

108. Kristin Shrader-Frechette, “Sustainability and Environmental Ethics,” in John Lemons, et al. (eds.), *Ecological Sustainability and Integrity: Concepts and Approaches*, Dordrecht: Kluwer Academic Pub, 1998.

In a series of articles in one edited volume, ecosystem health is defined by the extent to which there is diversity, hierarchy, complexity, resiliency, and both dynamism and homeostasis. All of these attributes taken together reflect a holistic view, and possess an integrity, it is argued, which has utilitarian, aesthetic and moral dimensions.¹⁰⁹ Ecosystem health has elsewhere been portrayed in terms of a capacity for unfolding openness to greater diversity and complexity — an evolution if you will — that fosters both further integration and hierarchy as well as richness and resiliency.¹¹⁰ Attempts in later chapters to operationalize these terms further — so as to better facilitate environmental management — ran head on into methodological and philosophical difficulties. This was partially due to the fact that benchmark measures for each dimension was less easily identified. Yet only six years afterward a second collection of essays includes a number of studies that show the relative condition of water resources, forests, and fisheries, as well as indicators of how the burden of human enterprises and their over-extension translates into environmental despoliation.¹¹¹ All this has led to discussion of natural resource management which means in most instances managing not nature so much as socio-economic behavior in order to maintain and ensure the viability and integrity of ecosystems.¹¹²

109. Mark Sagoff, “Has Nature a Good of its Own?”, Costanza, et al., *Ecosystem Health*, note 84, Ch. 3.

110. Malte Faber, Reiner Manstetten, and John Proops, “Toward an Open Future: Ignorance, Novelty and Evolution,” in Costanza, et al., *Ecosystem Health*, note 84, Ch. 4.

111. *Ecological Sustainability and Integrity*, note 99.

112. See, for example, Costanza, et al., *Ecosystem Health*, note 84, the subtitle of which is *New Goals for Environmental Management*, and James Kay, et al., *Ecological Integrity and the Management of Ecosystems*, Ottawa: St. Lucie Press, 1993. A third, following much these same lines, is AnnMari Jansson, et al. (Editors), *Investing in Natural Capital: The Ecological Approach to Sustainability*, Washington: Island Press, 1994.

This leads to still a third important dimension of ecological economics: the belief that human fulfillment in the final analysis comes not from consumption and exploitation of natural resources and material goods. Because the concept of an ecological footprint is so important, retreating to a less imposing and more respectful relationship with the earth leads to an interest in a lifestyle that has come to be known as “voluntary simplicity.”¹¹³ It grows from greater compatibility and appreciation of nature, an ability to live in harmony with it, and a capacity to enjoy community with the environment and its natural beauty. Higher levels of human realization and actualization arise from communal interaction, and from the pursuit of wisdom and relationships. It is no accident that ecological economics has made frequent reference to still another emergent tradition of economic philosophy now known as humanistic economics. This latter builds on the thinking of Abraham Maslow and the human

potential movement born of the 1970s.¹¹⁴ In that framework, material needs are gradually supplanted by social needs which are ultimately surpassed by moral needs and spiritual awareness.¹¹⁵

113. See, for example, the books of author Duane Elgin: *Awakening Earth: Exploring the Evolution of Human Culture and Consciousness*, Millennium Project, 1993; *Voluntary Simplicity : Toward a Way of Life That Is Outwardly Simple, Inwardly Rich*, Quill Books, 1993; and *Promise Ahead : Humanity's Journey from Adolescence to Adulthood*, New York: William Morrow, 2000.
114. Illustrative of this line of thinking is a collection of essays edited by Theodore Roszak, *Ecopsychology: Restoring the Earth, Healing the Mind*, Sierra Club Books, May, 1995.
115. See, for example, Mark A. Lutz and Kenneth Lux, *Humanistic Economics: The New Challenge*, New York: The Bootstrap Press, 1988; and Mark A. Lutz, *Economics for the Common Good: Two Centuries of Social Economic Thought in the Humanist Tradition*, London and New York: Routledge, 1999.

Ecological Economics: Agendas

There are now several books and essays offering policy outlines to address ecological challenges worldwide. Many are collaborative efforts as befits a newly emerging field of study. Two books serve particularly well as references for the agenda of ecological economics as the field is presently defined. Both are authored primarily by Herman Daly, a founder of the ecol-econ discipline. The first, *For the Common Good*, was first written in 1989, and has been republished in a second edition in 1994.¹¹⁶ It was awarded the New Options prize for being the “Best Political Book of 1989.” The second book is a collaborative effort of several adherents of the ecological economics approach, *Natural Capital and Human Economic Survival*, published in 1995.¹¹⁷ These two books reflect an explicit and comprehensive political agenda of concern to ecological economists. Significantly also several of the ideas expressed in these volumes have already crept into mainstream environmental policy discourse.¹¹⁸

116. The complete title is *For the Common Good: Redirecting the Economy toward Community, the Environment, and a Sustainable Future*, by Herman E. Daly and John B. Cobb, Jr, Boston: Beacon Press, 1989 and 1994.
117. Prugh, et al., *Natural Capital and Human Economic Survival*, note 82.
118. An example is a recent book by James Robertson, *The New Economics of Sustainable Development: A Briefing for Policy Makers*, New York: St. Martins Pr., 1999. Robertson is a long time and well known British public servant, and this book was a study commissioned by the European Community for its policy leaders. An instance in North America of a small book addressing constructive changes in tax policy and widely heralded is Alan Durning and Yoram Bauman, *Tax Shift: How to Help the Economy, Improve the Environment, and Get the Tax Man Off Our Backs*. Seattle: Northwest Environment Watch, April, 1998.

Daly and Cobb outline eight issues relating to the ecological economics perspective which call for clear public policy changes in their view. All relate to the American context: economic globalization, population, land use, agriculture, industry, labor, income policies and taxes, and national security policy. Put differently, there is no realm of policy outside of the reach of ecological economics; this is what makes it truly interdisciplinary. The second book focuses more directly on means by which to preserve natural capital, using what means governments have at their disposal. After first distinguishing between **“command-and-control” (CAC)** and incentive pricing systems, the authors continue by exploring the various ways that the latter, fiscal measures, can be engaged to alter the course of current economic practices in favor of more sound and environmentally sensitive ones. No short treatment can do justice to each class of proposals, but a quick summary indicates their general direction.

Underlying the whole agenda is a commitment beyond simple description to sustainable development economics and to Daly’s “steady state” economics. This entails the institution of environmental safeguards, protection of cultural and biological diversity, minimal resource use, and recycling. It further means protection of small countries and localities — of both ecosystems and populations — against all-encompassing economic units that preclude the possibility of their being able to survive independently. It presumes also that not just humans alive today have entitlements, especially privileged elements of wealthy countries; it recognizes rather the justice and moral claims of people and natural ecosystems yet to live to survive as intact and integral units. It recognizes that governments must take a hand in the preservation of such ecosystems, as markets forces left to themselves will wreak destruction on the most vulnerable parts of the earth and ultimately upon the earth itself. It accepts the fact that the carrying capacity of the earth is limited, and that we appear to have already exceeded that carrying capacity in our ignorance.¹¹⁹

119. One oft-cited article is that of Peter Vitousek, et al, “Human Appropriation of the Products of Photosynthesis,” *BioScience*, Vol. 36, No.6 (1986), pp. 368-373, available at <http://dieoff.org/page83.htm>. It calculates that consumption of earth’s resources is doubles at an ever increasing rate, and that humans have already appropriated 40% of terrestrial biological productivity. The most comprehensive collection of articles addressing this perspective is created and maintained by retired Cornell Professor Jay Hanson, at www.dieoff.org. The site name arises from his view that the world economy’s dependence upon fossil fuels faces an imminent end, and the earth will then be capable of supporting only about two billion people. Hence a looming dieoff.

The distinction between CAC approaches to environmental challenges as compared with pricing approaches is central to all this analysis. Daly’s shows a strong

preference for the latter. In what he calls “graded ecozoning,” for example, potential atmospheric impacts are divided into three areas.

- First, for emissions that do not cause significant damage and do not accumulate in significant concentrations, taxpayers would be charged a general fee.
- Second, in instances where incentives require altered behavior to address problems such as high ozone or carbon monoxide emissions in certain local areas, more targeted taxes would apply.
- Finally for those pollutants that have profoundly damaging impacts, regulation and perhaps criminal liability would be called for in cases of their release. These classes are labeled the “property rights zone,” the “incentive zone,” and the “regulatory zone” respectively. The model follows the growing interest and preference for pricing approaches over more heavy-handed and administratively inefficient CAC approaches.

Green taxes, sometimes also called corrective taxes or Pigouvian taxes, are their first candidates for consideration. This is because they can, if priced right, recover the costs of externalities in ways that allow individuals to use their own discretion about employing environmentally damaging practices. But the authors extend their thinking to cover goods and materials that may have negative ecological impacts although not yet conclusively demonstrated by science. The answer there is to rely upon a “precautionary polluter pays principle” based on the present value of the forecast impact should the worst case scenarios be borne out. **The annual cost of using a car in the early 1990s, for example, was \$51,656 according to their calculations.**¹²⁰ This would obviously entail an enormous imposition of taxes, far above the less than \$7,000 direct annual costs typically shouldered by drivers now,¹²¹ the rest of which are now passed on to society generally. Grave doubt exists about the potential impact of various externalities of driving, along with concern about the extent of damage which might possibly occur to the ecosystem; this warrants employment of the precautionary principle and calls for policy solutions to curtail this travel mode. Complete prohibition of certain materials and chemicals may be warranted in some cases.

120. Prugh, et al., note 83, p. 131.

121. This is the rough figure currently being used by Runzheimer International, a consulting firm that provides data to corporations and governments for purposes of mileage reimbursement and travel deductibility.

The authors would further impose the full costs, in the form of taxes, on the depletion of natural capital resources. This in turn would both discourage the improvident use of such materials and encourage their re-use and recycling beyond what economic arrangements now provide for. They also argue strongly for tariffs and trade barriers

that would foster linkages between existing local community enterprises, since they view economic globalization as a “race to the bottom” with respect to the exploitation of both resources (land) and labor. These tariffs would apply not only to protect the viability of certain social and political units but to ecological systems generally, so that their protection would be better guaranteed against the ravages of market exploitation.

With respect to arrangement of property rights, their classifications follow more conventional thinking, distinguishing ownership according the degree of access and by the extent of public protection warranted. Here they fall back more on legal and regulatory approaches than upon pricing. They see a continuum that runs from individual property rights to common ownership, ignoring the fact that any title to property constitutes a “bundle of rights” which can in principle be disaggregated and charged for in various ways.

The theme of economic justice runs throughout Daly’s work, evident of course in the title *For the Common Good*.¹²² But the formulations of justice are not explicit. One looks in vain for a statement of what if any entitlements people should possess by virtue of being human, or what nature or posterity is due in turn. Absent is anything that Harvard Law professor Mary Ann Glendon calls “rights talk.”¹²³ But it is clear that the ecological economists are struggling mightily with these questions. They are boldly posed elsewhere in the writing of Joan Martinez-Alier, a Spanish scholar who is widely known in the movement not just by his own writing but as editor of the journal *Ecological Politica*. In one article, he sees an ever-widening standing for environmental claims, as the environmental movement evolves from one based on the efficient and sustainable use of natural resources (the “gospel of eco-efficiency,” in the tradition of Gifford Pinchot), later to the “cult of wilderness” (in the tradition of John Muir and Aldo Leopold).¹²⁴ They are evident also in the work of Bernardo Aguilar, particularly with reference to north-south trade arrangements which essentially exchange natural resources for developed nations’ currencies.¹²⁵ As people come to understand their relationship and dependence upon their natural environment, he envisions an unfolding pattern of litigation to preserve the sanctity and protection of peoples dependent upon it. Distant corporate interests will be blocked from exploiting the lands of local populations who are otherwise left with the liabilities of their repair.

122. It should be noted that the co-author of this book by Daly is John B. Cobb, Jr, professor of theology and philosophy at the Claremont Graduate School. John Cobb’s son, Clifford, is a senior fellow of Redefining Progress and a leading Georgist. Clifford’s bio can be found at http://www.rprogress.org/org/fellows/fellows_bios.html.

123. Mary Ann Glendon, *Rights Talk: The Impoverishment of Political Discourse*, New York: Free Press /MacMillan, 1991.

124. Joan Martinez-Alier, “Environmental Justice, Sustainability and Valuation,” 2000.
125. Bernardo Aguilar, The Internationalization of the Costa Rican Economy: A Two-Edged Sword,” in Charles A. Hall (ed.) Quantifying Sustainable Development: The Future of Tropical Economies, New York: Academic Press, 2000.

POINTS OF SYNTHESIS OF GEORGIST AND ECOLOGICAL ECONOMICS

The commonalities of Georgist economics and ecological economics appear to be organizable into six general points:

- 1) preservation of the commons,
- 2) sustainable development,
- 3) appropriate valuation of natural capital,
- 4) ensuring social and biological community,
- 5) fostering individual self-realization, and
- 6) securing economic justice.

Implicit in all these points is the view that market activity needs to be circumscribed and juxtaposed to the non-human, biological realm. It appears that there is lots to be gained by some synthesis of the two fields of discourse.

Ecological economists worry about the encroachment, and even the elimination, of those elements of nature to which private property title has not been granted. In their concern about the need to protect the “commons,” they are torn between the view that only through privatization can all the world’s assets be preserved and the alternative view that any private appropriation of the commons constitutes a moral compromise. They fear a repeat of Garrett Hardin’s “tragedy of the commons.” Their argument often proposed is rather complex to explicate: it assumes that private property titles may perhaps provide the best incentive not to exploit the fruits of the earth and the earth itself.¹²⁶ To Georgists, on the other hand, the earth and all its resources are already in fact the birthright of all humanity; individuals are entitled to its use in return for the payment of rents. Further privatization is anathema. The key rather is in distinguishing the various components of ownership and getting prices right — mainly in the collection of economic rents.

126. See Terry Anderson, *Free Market Environmentalism*, Palgrave MacMillan, Dec., 2000; and Terry Anderson, *Property Rights: Cooperation, Conflict, and Law*, Princeton: Princeton University Press. Nov., 2000.

One must ask then whether there is some such means by which to accomplish the goal of environmental preservation — through either of the means by which government has at its disposal: command-and-control (CAC) approaches or pricing approaches. It has already been noted how difficult CAC approaches are to enforce, and how expensive they are both in terms of administration and economic inefficiencies.

Pricing on the other hand suffers from the difficult challenge of getting it “right,” something which typically must be resolved through formal public decisions, especially when and insofar as they involve public goods or common property.

And yet, for pricing to work at all, there must be both supply and demand; the lack of either results in there being no market price at all. Is it possible, perhaps, that policies might be developed where demand for certain resources are reduced to zero — and hence no price? To some extent this is how the Georgist economics approach works. It leaves certain realms of the commons unthreatened by exploitation for the reason that the attention of the market is focused elsewhere. By the collection of economic rent the prices of resources are effectively shifted, so much so that the market arena is profoundly altered. Resource prices are shifted in such a way that their use is curtailed and their consumption concentrated. It was noted earlier, for example, that collection of land rent tends to reverse the centrifugal forces of sprawl, actualizing demand at the core of urban areas and leaving remote regions uninhabited and intact. Economic rent accrues to sites that have high demand and frequent use; collecting that economic rent tends to concentrate their use in ways that discourages speculative practices, allocate their use to those who can best maximize their utility, and leave other sites and commodities in remote areas less affected by human activity. So also with charges for other public resources such as radio frequencies and airport landing slots. Pricing incentives are established in such a way that economic activity is intensified, concentrated, and integrated without the need of artificial CAC instruments such as zoning, urban growth boundaries, community land trusts, and other devices which are expensive to implement and have notable records of failure.¹²⁷

127. See Batt, “Solving the Problem of Urban Sprawl,” note 61.

On the other hand, collection of economic rent, whether it be from the use of land sites, fossil fuels, fishing grounds, solar and wind energy settings, electromagnetic spectrum frequencies, airport landing timeslots, and or even air sinks facilitates their highest and best use while leaving less attractive settings unaffected. Where there exists the possibility that environmentally sensitive sites or resources might otherwise be exploited, then is the appropriate time to institute focused CAC approaches, and with more attentive and efficient administration for all involved. The practice of concentrating economic activity in the more limited footprint that pricing creates is consistent with approaches taken in ecological economics. This is because the economy is recognized as only one component of human experience and the world system, not coterminous with it. Daly, for instance, draws concentric circles to illustrate the proper setting of the economic system — inside the social and cultural system which itself exists in a greater ecosystem. Collection of economic rent has a centrifugal and concentrating effect on human activity and hence upon the ecosystem

itself. It has a benign effect on ecosystems insofar as it effectuates a steep and identifiable market gradient between areas of heavy socio-economic activity and those that bring no price at all. And yet by facilitating closer contact between members of the human community, it also fosters exchanges of a nature that are outside the market economy — family relationships and neighborhood activity.

The consequences of collecting economic rent are to increase prospects for achieving sustainable development. This is because fiscal instruments constrain the use of natural resources more than do either CAC approaches or fiscal measures inspired by neoclassical approaches. Collecting full royalties by competitive auction for nature's harvests reverses the exploitation of nature that presently obtains. Establishing proper prices for such materials and services would likely reduce their appropriation. All this enhances efficiency and productivity in ways that are consistent with sustainable economics, and gives recognition and space to elements of the ecosystem so that it is less threatened with extinction and exhaustion. Site value taxation works to circumscribe the domain of economics relative to the natural world. Its greatest impact, presently evident in the consumption of energy and land area, is turned inward on itself. Space, time, energy, and nature are thereby conserved and spared insofar as their economic costs become dearer. The centripetal forces encouraged by the imposition of land value taxation and which induce the proximity of land use configurations have a salutary effect on the health and vitality of social community. Using Daly's language again, ¹²⁸ instead of mindless growth one encourages development, quality over quantity. Ecological economists have been in the vanguard of opposing the globalization of the economy, believing that its disruptive effects on local communities outweigh any gains in potential diversity, economies of scale, and competitive advantages that might obtain. Henry George himself was an ardent free trader a century ago, but this, as Daly points out, was before capital had the mobility that it does today. In Ricardo's time, capital remained largely within a nation's borders, not true today. Whatever competitive advantages localities might have had during the early industrial revolution are vitiated today by the speed with which money can be transferred in seconds from one nation to another. Notably, the late E.F. Schumacher was a strong supporter of both Georgist economics and of local currencies.¹²⁹

128. See *Beyond Growth*, note 79.

129. The Schumacher Center, based in Great Barrington Massachusetts, is the foremost resource library for local currency designs, and it holds all of the late economist's collection of books in the Georgist tradition. See <http://www.schumachersociety.org/>.

Recent years have witnessed a growing awareness of how urban sprawl has sapped community cohesion and creativity. In part it is the land use configurations themselves that have been responsible, fostered by the decisions of realtors and

developers to capitalize on the promise of speculative gain to be had by people who settle at the periphery of urban areas and then see their land values rise. But current reversals in public sentiment about suburban lifestyles suggest that community cohesion is once more appreciated. This reversal of preferences may favor measures that will foster development of landsites with the highest value, reducing motor vehicle dependency and infrastructure costs. It is no accident, perhaps, that rankings of the most livable cities in the country correlate most strongly with those that are most bicycle friendly.¹³⁰

130. Norman D. Ford, *The 50 Healthiest Places to Live and Retire in the United States*, Ballantine, 1991.

Greater proximity in development can lead to greater guarantees for the preservation of unsettled areas, leaving tracts of nature undisturbed by the inroads of human presence. This too may have the ironic effect of fostering greater community with nature. Certainly millions of backyards with gas grills and lawns to mow are a poor substitute for pastoral lifestyles. Ecological economics makes clear to people the interdependency between urban and rural, past and future, life and lore, far better than the conspicuous consumption fostered by conventional economic pursuits. Daly himself writes approvingly of land value taxation, even though he has little to say about Henry George or about collecting economic rent.¹³¹ Ecological economics hunts for a continuum between economic value and non-pecuniary value, without finding a clear boundary for either. Georgism, in contrast, encourages a precipitous fall-off in economic prices at the periphery of human presence, simply on account of the fact that rent recovery reverses the centrifugal impetus of conventional market forces. The continuum asserts itself.

131. *For the Common Good*, note 79, Ch. 13.

The grant of land sites and other natural resources to individuals and corporations in leasehold rather than freehold has an additional advantage beyond the revenue collected in rent to support the general purposes of government. This is the restoration of ownership of the earth to all people: what in Georgist terms and in classical philosophy is their birthright. Acknowledgment that the earth belongs to us all, and is both our entitlement and our responsibility, has the effect of enfranchising the people of the earth everywhere, perhaps ennobling them as well. At a time in human history when the incomes of the world's people are increasingly disparate, and where wealth is even more unequally distributed, it must be recognized that titles to the resources of the earth are the most unequally, and unjustly, distributed of all.¹³² Recognition of this truth may come as a revelation; indeed it may well be revolutionary in some circles. But restoration of birthrights to which all people have a just and proper claim may be

the single most important and effective means by which to facilitate and ensure sustainable economic policies worldwide.

132. New figures have just been compiled to dramatize the shifts in just the past few years in America and in the rest of the world. See Frank Ackerman, *The Political Economy of Inequality*, note 30.

All this leads to the likelihood also that personal growth can also be enhanced by the forgoing factors: greater community facility, greater identification with “the commons,” and greater access to nature all enrich human experience. Georgists argue that more intensive use of land sites, more efficient use of (and hence reduced consumption of) material resources, and greater regard for the value of time will add character to human life by encouraging mental capital more than by physical capital. Enjoyment from reading books or exploring the internet may finally trump snowmobiles and stock car racing. This value-added dimension of human awareness comports with the environmentalist argument that it is the lack of access to nature that frequently makes people regard it as an instrument.

The focus of Henry George’s inquiry, and of his disciples, is the pursuit of justice. Economic justice is an agenda which ecological economists also subscribe to, even though their immediate focus is concern about the earth’s survival at all, let alone the distribution of its fruits. Here, however, is where the Georgist tradition is able to contribute most to the environmental justice program. There is a broad appreciation, particularly among ecological economists that have worked in poorer nations, that natural resources are endangered every bit as much by the scarcity of basic necessities as by overpopulation. Urban elites usurp high value lands and retain land rents growing out of their production; poor people are marginalized and left to fend for themselves. They often survive by taking what little environmental resources are left on ravaged land sites, further reducing the resiliency of these local ecologies. Collection and redistribution of land rents, either in the form of public services or in the form of a citizens’ dividends, offers a way to restore equity without redistribution of land titles and without all the dislocations this might entail. Many third world leaders at the present time see solutions to poverty and economic inequality in the redistribution of land titles. Georgists argue that this is not necessary; all that is necessary is to recover the land rent and assure its equitable distribution to rightful claimants.

There is currently a renewed and worldwide interest in Georgist approaches, especially among former nations of the eastern block and in Cuba where Georgist scholars and advocates have been invited to visit several times.¹³³ Herman Daly appears by one of his most recent papers¹³⁴ to be ever more closely drawn to the Georgist position that the “from the point of view of equity it matters a great deal who

receives the prize for nature's increasingly scarce services. Such payment is the ideal source of funds with which to fight poverty and finance public goods."

133. For accounts of these visits, see the recent issues of the British Georgist Publication, Land and Liberty.

134. Address of Professor Herman Daly to the World Bank, April 30, 2002, "Sustainable Development: Definitions, Principles, Policies," online at www.earthrights.net/docs/daly.html.

Professor Daly goes on to say that

Value added belongs to whoever added it. But the original value of that to which further value is added by labor and capital should belong to everyone. Scarcity rents to natural services, nature's value added, should be the focus of redistributive efforts. Rent is by definition a payment in excess of necessary supply price, and from the point of market efficiency is the least distorting source of public revenue.

Appeals to the generosity of those who have added much value by their labor and capital are more legitimate as private charity than as a foundation for fairness in public policy. Taxation of value added by labor and capital is certainly legitimate. But it is both more legitimate and less necessary after we have, as much as possible, captured natural resource rents for public revenue.

The above reasoning reflects the basic insight of Henry George, extending it from land to natural resources in general. Neoclassical economists have greatly obfuscated this simple insight by their refusal to recognize the productive contribution of nature in providing "that to which value is added". In their defense it could be argued that this was so because in the past economists considered nature to be non-scarce, but now they are beginning to reckon the scarcity of nature and enclose it in the market. Let us be glad of this, and encourage it further.

I am not advocating revolutionary expropriation of all private property in land and resources. If we could start from a blank slate I would be tempted to keep land and minerals as public property. But for many environmental goods, previously free but increasingly scarce, we still do have a blank slate as far as ownership is concerned. We must bring increasingly scarce yet unowned environmental services under the discipline of the price system, because these are truly rival goods the use of which by one person imposes opportunity costs on others[2]. But for efficiency it matters only that a price be charged for the resource, not who gets the price. The necessary price or scarcity rent that we collect on newly scarce environmental public goods (e.g. atmospheric absorption capacity, the electromagnetic spectrum) should be used to alleviate poverty and finance the provision of other public goods.

The modern form of the Georgist insight is to tax the resources and services of nature (those scarce things left out of both the production function and GDP accounts) -- and to use these funds for fighting poverty and for financing public goods. Or we could simply disburse to the general public the earnings from a trust fund created by these rents, as in the Alaska Permanent Fund, which is perhaps the best existing institutionalization of the Georgist principle. Taking away by taxation the value added by individuals from applying their own labor and capital creates resentment. Taxing away value that no one added, scarcity rents on nature's contribution, does not create resentment. In fact, failing to tax away the scarcity rents to nature and letting them accrue as unearned income to favored individuals has long been a primary source of resentment and social conflict.

The justice in the Georgist tradition grows out of the premise that one is entitled to what one makes with one's own hands or mind, but one is not personally entitled to the gains that grow out of communal efforts. Those are owed to and should be returned to the community. The justice inherent in ecological economics, to the extent that it has solidified, involves a recognition that preservation of natural capital is in the interest of everyone. Both recognize and value the preservation of a world commons in nature. Both appreciate the diversity preserved in local community institutions and cultures. Both accept models based on self-regulating assumptions — in one case using the phrase “steady state” economics, in the other case the recovery of land rent in the pursuit of open and stable markets over monopoly control. There is great promise in the confluence of the two perspectives: they offer a solution to the age-old challenge of resolving what in the world ought to be public and common, and what else ought to be individual and private. It remains now for proponents of each perspective to continue exploring commonalities.

Alternatives that have been tried in the past, both classic capitalism and socialism, suggest that neither has served the interests of humanity well in the long term. Ecological economics has no theory of property as such, and Georgism here offers a proven course of application. To Georgists, ownership is linked to use and not to freehold title. Holding individual property under license of the community, and under terms which the community stipulates, is an idea with a long tradition, well accepted, and needing only to be revived in contemporary political, legal and economic discourse. Combined with the pricing device of collecting land rent, ecological economics will have a tool by which to circumscribe and even reverse the centrifugal forces of a new economic imperialism. This is truly the beginning of a “Third Way” when other theories seem to be moribund.

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