JOHN LOCKE AND THE LABOR THEORY OF VALUE

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It is taken for granted by most economists and political philosophers that John Locke was in some sense a precursor of the labor theories of value of the nineteenth century British Classical School and of Karl Marx, yet there is a wide divergence of opinion on how Locke's work anticipated and influenced the work of later political economists. In large part this difference of opinion stems from a disagreement among historians of economic thought over how to interpret Locke himself on the subject of labor and economic value. The only point of agreement is that, in his major political essay, the Second Treatise of Government,[3] Locke developed a theory of property which showed some relationship between labor and economic value. Historians of economic thought cannot agree on the significance of this relationship or on how Locke's ideas on labor and value are related to his supply and demand theory of market price in his economic writings. It has been argued, for example, that Locke had the beginnings of a theory of the exploitation of labor, that he provided a labor theory of value in the long run to supplement his supply and demand theory of price in the short run, that he presented the "metaphysical justification" for the nineteenth century labor theory of value, and that he had no labor theory of value at all.[3]

What is characteristic of these and most other evaluations of Locke's statements about labor and economic value is that they are generally brief mentions of this aspect of Locke's thought in the context of larger works on much broader topics. There has been no detailed analysis to discover whether or not Locke can be said to have had a labor theory of value in any sense of the term. While in the history of ideas, what a man actually said may not always be as important as how he was later interpreted, we must discover the former in order to accurately understand and appreciate the latter. Hence, in the following pages I will attempt to supply the missing detailed analysis of John Locke's "labor theory of value".

It is not surprising that there should be such a variety of interpretations on the subject of Locke and the labor theory of value. On the one hand, Locke himself was ambiguous about what he meant by both value and labor in the Second Treatise (as we shall see below), and on the other, there is no uniform agreement among economists as to what constitutes a labor theory of value and who, if anyone, ever espoused such a theory.[3] It seems appropriate, then, to define how the term labor theory of value will be used in this paper.

There are three possible meanings of a labor theory of value that are relevant to Locke's writings: a labor theory of value may identify labor as the source of use-value or utility (the reason people desire a good in the first place), it may attempt to explain the determination of relative prices (the exchange value of goods) based on some measure of labor inputs, or it may claim that labor provides the only justifiable claim to receiving the exchange value of the goods it produces. A labor theory of value in the first sense states that the usefulness of goods and services demanded and consumed by individuals is created either exclusively or principally by the labor that goes into producing them. Almost all economists would identify labor as the source of use-value or utility (the reason people desire a good in the first place), it may attempt to explain the determination of relative prices (the exchange value of goods) based on some measure of labor inputs, or it may claim that labor provides the only justifiable claim to receiving the exchange value of the goods it produces. A labor theory of value in the first sense states that the usefulness of goods and services demanded and consumed by individuals is created either exclusively or principally by the labor that goes into producing them. Almost all economists would identify labor as the source of use-value or utility (the reason people desire a good in the first place), it may attempt to explain the determination of relative prices (the exchange value of goods) based on some measure of labor inputs, or it may claim that labor provides the only justifiable claim to receiving the exchange value of the goods it produces. A labor theory of value in the first sense states that the usefulness of goods and services demanded and consumed by individuals is created either exclusively or principally by the labor that goes into producing them. Almost all economists would identify labor as the source of use-value or utility (the reason people desire a good in the first place), it may attempt to explain the determination of relative prices (the exchange value of goods) based on some measure of labor inputs, or it may claim that labor provides the only justifiable claim to receiving the exchange value of the goods it produces. A labor theory of value in the first sense states that the usefulness of goods and services demanded and consumed by individuals is created either exclusively or principally by the labor that goes into producing them. Almost all economists would identify labor as the source of use-value or utility (the reason people desire a good in the first place), it may attempt to explain the determination of relative prices (the exchange value of goods) based on some measure of labor inputs, or it may claim that labor provides the only justifiable claim to receiving the exchange value of the goods it produces. A labor theory of value in the first sense states that the usefulness
two thousand years, when most economists discuss a labor theory of value, it is as a theory in the second sense. That is, a labor theory of value most often means a theory about the relationship between the relative value of one commodity to another and the quantity of labor which has gone into producing each of them. Such a theory tries to establish an exclusive relationship between the effort (or time) of the laborer and relative price of the commodity he produces. The most obvious (and perhaps only) example of a pure labor theory of exchange value is found in Adam Smith's beaver–deer example in the Wealth of Nations, where in the absence of scarce land and capital, the exchange rate of a beaver and deer is equal to the inverse of the labor time which has gone into hunting them. It is also possible to construct a labor theory of value that admits capital as a productive agent but still shows changes in relative prices to be determined by changes in labor as, some argue, did David Ricardo.15

The third sense in which a labor theory of value is often understood is different from the other two, being normative rather than positive. A normative labor theory of value might hold, for example, that two goods which take the same amount of labor to produce should exchange for each other, and any pattern of prices that deviates from this norm is unjust. Or, it might instead attempt to define the just reward for the services of the labor that goes into producing a product, where the just reward depends upon the price at which the product is sold. While the ethical questions of the just price and the just wage are not unique to labor theories of value, these ethical questions have been closely associated with Locke and the labor theory of value in both the economics and political philosophy literature. Indeed, it is this normative form that most non-economists mean when they speak of a labor theory of value, or (b) that he did not connect the determination of price in either the long run or the short run with the labor used to produce a product, and (c) while he did hold a labor theory of value in an ethical sense, his definition of labor was such that the ethical conclusions he arrived at were generally favorable to capitalism as he knew it and to the private property system upon which that capitalism was based.

LOCKE'S LABOR THEORY OF PROPERTY

All discussions of Locke's "labor theory of value" ultimately refer to the theory of property he develops in Chapter V of the Second Treatise. It is there that Locke presents his famous justification for private ownership of goods and land on the basis of the effort or labor which individuals expend to produce goods or to cause the land to produce goods of value to human beings. The structure of Locke's defense of private property is undoubtedly familiar to most readers. In the state of nature before governments had come into existence, men all had common access to the earth and the fruits thereof which God had provided for their use. However, although God had given all men an equal right to use the earth's resources, in order to survive, individual men had to appropriate some of these resources to feed, clothe and shelter themselves. [p. 304]

It was Locke's problem, and the problem of seventeenth century political philosophers in general, to explain how these appropriated resources became legitimate private property which excluded other men from having any claim upon them. Grotius and Pufendorf had both argued that private property was established in the state of nature by the consent of all mankind who once shared in the original communistic ownership of these resources. Such a theory of property implied, however, that since property only existed at the consent of society, this consent could be withdrawn or modified by the society which sanctioned it originally, a conclusion which Locke sought to avoid. Instead, he argued that private property was established in the state of nature not by the consent of mankind, but by natural law.
Natural law dictated that all men had common access to God's earthly resources, and that each man had a natural right to self ownership which, when coupled with his right and duty to survive, permitted him to create private property where none previously existed:

Though the Earth, and all inferior creatures be common to all men, yet every man has a property in his own person. This no body has any right to but himself. The labor of his body, and the work of his hands, we may say, are properly his. Whosoever then he removes out of the state that nature hath provided, and left it in, he hath mixed his labor with, and joyned to it something that is his own, and thereby makes it his property. It being by him removed from the common state nature placed it in, it hath by his labor something annexed to it, that excludes the common right of other men. For this labor being the unquestionable property of the laborer, no man but he can have a right to what that is once joyned to, at least where there is enough, and as good left in common for others. [pp. 305 -306]

Although the above passage seems to imply that private property is justified through hard work (this is the usual connotation of the word "labor"), Locke makes clear that he means "labor" to include any act of appropriation of natural resources, from the simple act of bending over and picking up acorns which have fallen to the ground, to the launching of a complicated process of production which involves owning the land itself. [pp. 308-309] Anytime any human effort, no matter how trivial, is expended in purposeful action, it is defined as labor. While this very general definition of labor was necessary to justify all types of acquisition of unowned resources in the state of nature, it had important implications for Locke's view of economic value.

LABOR AS THE SOURCE OF VALUE

Those who have interpreted Locke's labor theory of property as implying some kind of labor theory of value usually support their interpretation by citing Locke's many statements about the relative unimportance of land compared to labor in the production of valuable goods. Locke's basic premise is that nature by itself provides very little that is of value to mankind unless it is combined with labor:

For 'tis labor indeed that puts the difference of value on every thing; and let anyone consider, what the difference is between an acre of land planted with tobacco, or sugar, sown with wheat or barley; and an acre of the same land lying in common without any husbandry upon it, and he will find, that the improvement of labor makes the far greater part of the value. [p. 314]

Locke repeats this theme of "unassisted nature" providing very little that is valuable again and again, as when he says, "For whatever bread is more worth than acorns, wine than water, and cloth or silk than leaves, skins or moss, that is wholly owing to labor and industry", and he concludes that "labor makes the far greatest part of the value of things we enjoy in this world". [p. 315]

The question now arising is the nature of the value which labor creates. Although there is some ambiguity in his usage, when Locke speaks of value created by labor, he usually means some kind of objective utility, an "intrinsic value, which depends only on [something's] usefulness to the life of man". [p. 312] He also refers to this kind of value as the "real use and necessary support of life". [p. 318] It is objective in the sense that there is implied a common standard of usefulness for all people, so that, for example, bread is objectively more valuable than acorns, and cloth than silk, because they provide for more of the "conveniences of life". [p. 317] It is this kind of value Locke has in mind when he characterizes gold and silver as being "little useful to the life of man", [p. 319] and rails against the desire men have for more than they need. [p. 312] Labor is primarily responsible for creating products which are more useful in this sense, and hence labor creates "most of the value" of things we enjoy in this world. Land, the common pool of resources, on the other hand, contributes almost nothing to value when compared to labor since land, by itself, can satisfy few of man's needs. Indeed, Locke pointedly refers to the Spanish practice of calling fallow land "waste" to emphasize the smallness of its contribution to value in his eyes. [p. 311] Thus, although he does not claim that land creates no value, the value it does create is minimal when compared to labor.

Locke's insistence on the overwhelming importance of labor compared to land in the production of valuable goods might be somewhat
puzzling in view of the common seventeenth century view of land and labor as co-equal sources of value. The puzzle evaporates, however, when one considers the context in which the discussion of land and labor takes place. In fact, Locke minimized the role of land in the creation of value because he was attempting to demonstrate conclusively to his readers how “the property of labor should be able to outbalance the community of land”. [p. 314] in an effort to make his theory of property more acceptable to his audience. Thus, while he argued that the right to own property apart from the common was a result of natural law which did not depend upon the consent of mankind for its legitimacy, he also took pains to point out the beneficial effects that flow from the institution of private property. In effect, he argued that while private property is the inevitable moral consequence of men laboring to support themselves, in this case, “right and conveniency went together”. [p. 320] Without the conscious application of labor to “worthless” natural resources, men would be living as savages. This is obvious when one considers that:

There cannot be a clearer demonstration of any thing, than several nations of the Americans are of this, who are rich in Land, and poor in all the comforts of life; whom nature having furnished as liberally as any other people, with the materials of plenty, i.e. fruitful soil, apt to produce in abundance, what might serve for food, rayment, and delight; yet for want of improving it by labour, have not one hundredth part of the conveniences we enjoy; and a king of a large and fruitful territory there feeds, lodges, and is clad worse than a day laborer in England. [pp. 314 – 315]

Thus, natural law guarantees one’s right to property, but in this case natural law is especially easy to comply with since it coincides with the self-interest of all mankind. Hence, when Locke says that labor makes the greatest part of the value of things we enjoy, his purpose is to emphasize these utilitarian implications of private property rather than to enunciate a theory of economic value.

While it is not difficult to accept that one should “own” the water one draws from a stream or the wheat one grows on otherwise fallow land, Locke perceived that it was more difficult to justify owning the land itself, although he claimed that the same principle of ownership applies: “As much land as a man tills, plants, improves, cultivates, and can use the product of, so much is his property. He by his labor does, as it were, inclose it from the common”. [p. 308] What makes ownership of the land itself palatable, however, are the external benefits accruing to mankind in general even when land ownership is limited to a few. In fact, Locke argues that “he that incloses land and has a greater plenty of the conveniences of life from ten acres, than he could have from an hundred left to nature, may truly be said to give ninety acres to mankind”. [p. 312] That is, when men choose to mix their labor with the earth, they need less of the common stock to provide for their support than if they merely lived off the products of “unassisted nature”, and there is then more common stock left over to support others. Thus, labor, the activity by which men acquire private property, is also the activity which makes the earth more supportive of human life, and thus, property is beneficial to everyone, including those who do not own land.

To recapitulate so far: it is obvious that Locke believed that labor was the primary source of use value. While land by itself was responsible for a small part of the use value of goods people consume, the products of land alone could not be enjoyed by humans without the application of labor, and once labor is purposefully applied to land, there is a dramatic increase in the usefulness of the products created. In this limited sense, then, Locke did have a labor theory of value.

LABOR AS A MEASURE OF VALUE

Identifying labor as the source of use value is not the same thing as making it the measure of exchange value (or price) although the two ideas may be found in the work of one man. Ricardo, for example, claimed that labor was the source of value in all commodities that could be increased in supply and then attempted to develop a theory of value in which the quantity of labor necessary to produce a commodity explained its exchange value. Smith,
in contrast, did not identify labor as a source of value, but he did claim that labor was "the real measure of the exchangeable value of all commodities", and "the only measure by which we can compare the values of different commodities at all times and at all places". But did Locke, who identified labor as the primary source of use-value, also believe that labor could in some way be used to measure and compare the exchange value of goods? The problem is implied in a passage we have already quoted in part:

For whatever bread is more worth than acorns, wine than water, and cloth or silk than leaves, skins or moss, that is wholly owing to labor and industry. The one of these being the food and rayment which unassisted nature furnishes us with; the other provisions which our industry and pains prepare for us, which how much they exceed the other in value, when anyone hath computed, he will then see, how much labor makes the far greatest part of the value of things we enjoy in this world. [p. 315]

But how does one go about computing these values? Bread and wine may be more useful (or desirable) than acorns and water, but how much more valuable? In a world where creation of valuable goods also results in the creation of ownership rights, one would think it of vital importance to Locke to be able to measure how much value labor creates. How then does Locke propose to compare the value of goods produced by labor?

Evidence that Locke at least considered the problem of comparing the value of goods produced with differing amounts of labor is found in the following passage:

An acre of land that bears here twenty bushels of wheat, and another in America, which, with the same husbandry, would do the like, are, without doubt, of the same natural, intrinsic value. But yet the benefit mankind receives from the one, in a year, is worth 51, and from the other possibly not worth a penny, if all the profit an Indian received from it were to be valued, and sold here; at least, I may truly say, not 1/1000. Tis labor then which puts the greatest part of the value upon land, without which it would scarce be worth anything. [p. 316]

There are several interesting inferences that can be made from this passage about Locke's ideas on labor and economic value. Perhaps the most striking has to do with the way he contrasts the "intrinsic" value of land with the "benefit mankind receives" from it. As we have already noted, earlier in the Second Treatise, the intrinsic value of goods had been defined, in accordance with common usage, as depending "... only on their usefulness to the life of man...". [p. 312] This definition was also used in Locke's economic writings, with the further implication that the intrinsic value of something could (and often was) different from its market value. In the above passage, however, the intrinsic value of a thing seems to be only a potential it has to benefit mankind, while the actual measure of that benefit is the market price of the thing in question. Apparently, Locke is saying that if all the output from an Indian's land in America were sold at current market prices in England, the Indian would receive only 1/1000 of the income an Englishman would receive from the output of a comparable piece of land in England. For the Englishman had labored to make his land productive while the Indian did little more than gather the bounty of nature. If this interpretation is correct, then what Locke believes is that while labor creates the "greatest part of the value of things we enjoy in this world", the measure of that value is not the amount of labor which goes into producing it, but the market price at which it can be sold. The implication is clear: men labor to produce goods which men will value (and are willing to pay for); goods are not valuable simply because labor has gone into producing them. Therefore, from this passage at least, there is no reason to suspect that Locke believed there to be any causative connection between the amount of labor used to produce a good and its market price.

What makes this interpretation of Locke's view of labor and value so appealing is not only its internal consistency, but also the fact that it is consistent with the value theory he presents in his economic writings. It has been suggested by some writers that Locke presents two inconsistent value theories in his political and his economic writings, but close examination of both works suggests that the theory of economic value he developed in his economic writings also informed his discussions of value in his political essay.

Locke's major economic essay, "Some Considerations of the Consequences of Lowering
the Interest Rate and Raising the Value of Money",[15] was published in 1692 to oppose a bill before Parliament to lower the legal rate of interest from 6% to 4%. In order to support his contention that interest is a price, and that in general prices can not be dictated by law, Locke found it necessary to explain how prices were in fact determined in the marketplace. As a result, his essay deals more with the subject of market value and money than it does with the subject stated in the title, and we find Locke stating very clearly what he believes to be the relationship between intrinsic value and market price. He says, in a concise summary of his theory of value:

1. That the intrinsick natural worth of anything, consists in its fitness to supply the necessities or serve the conveniences of human life; and the more necessary it is to our being, or the more it contributes to our well-being the greater is its worth; but yet, 
2. That there is no such intrinsick natural settled value in anything, as to make any assigned quantity of it constantly worth any assigned quantity of another.
3. The marketable value of any assigned quantities of two or more commodities are pro his and nunc, equal, when they will exchange one for another...
4. The change of this marketable value of any commodity in respect of another commodity or in respect of a standing common measure, is not the altering of any intrinsick value or quality in the commodity... but the alteration of some proportion, which the commodity bears to something else.
5. This proportion in all commodities... is the proportion of their quantity to their vent. [pp. 66–67]

What we see in this passage is Locke grappling with a problem which had troubled economic thinkers at least from the time of Aristotle, who first formulated the question: what is the relationship between a good’s usefulness and its exchange value? Locke grants (as he also did in the Second Treatise) that goods have an “intrinsick natural worth” which depends upon their objective usefulness in supporting human life, yet he does not believe that this usefulness determines the price at which specific quantities of goods exchange. Locke perceives that there is a difference between stating, for example, that water is more useful than wheat in the abstract, and saying that one gallon of water is “worth” two bushels of wheat. He says that there is no “natural set-ted value in anything, as to make any assigned quantity of it constantly worth any assigned quantity of another”, but the logical question to ask is why not? Why doesn’t a gallon of water always exchange for two bushels of wheat if they are both useful and if their capability to support human life doesn’t change? Two centuries later, economists would finally be able to answer this question satisfactorily by distinguishing total from marginal utility. Locke only approached the correct answer by recognizing that the exchange values of goods depend not only on their usefulness in general, but also on the quantities which are available, quantities which are subject to change. Furthermore, the usefulness of something does help to determine its price, but only insofar as it affects the vent (or demand) for the product. “The vent of anything depends upon its necessity or usefulness, as convenience, or opinion guided by fancy or fashion shall determine”, [p. 46] but notice here that a thing’s usefulness is not invariable but is determined by the subjective evaluation of the individuals consuming the good. In addition, usefulness only guarantees that people want a good, not that they will be willing to pay a price for it:

What more useful or necessary things are there to the being or well-being of men, than air and water and yet these have generally no price at all, nor yield any money: because their quantity is immensely greater than their vent in most places of the world. But as soon as ever water (for air still offers itself everywhere, without restraint or inclosure, and therefore is nowhere of any price) comes anywhere to be reduced into any proportion to its consumption, it begins presently to have a price, and is sometimes sold dearer than wine. Hence it is, that the best, and most useful things are occasionally the cheapest; because, though their consumption be great, yet the Bounty of Providence has made their production large, and suitable to it. [pp. 63–64]

Given that the quantity of a good is sufficiently limited that people will pay some price for it, the price they will pay depends upon the quantity of the good proportional to its vent, or, as this is commonly interpreted, on the supply and demand for the good. The price, furthermore, increases as its quantity is reduced and decreases as its quantity increases. It is tempting to argue that Locke was saying that the greater the quantity of any good available, the less important the use which the additional
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unit will serve and therefore the lower the price people will pay for it, but imputing such a sophisticated understanding of diminishing marginal utility to Locke would be misplaced. Instead, Locke sidestepped the question of why the greater the quantity, the lower the market price, and just asserted that this is in fact the case. The market operates according to supply and demand: why this is so was not a question which Locke was directly interested in answering.\textsuperscript{18}

While it appears so far that Locke believed that the “benefit” mankind received from something, or its value, was measured by its market price and that the market price was determined by supply and demand, we still must question whether he also believed market price to be somehow influenced by the labor which goes into producing valuable commodities. (Recall that one interpretation of Locke is that he believed the labor used in production of a good measures its long run value.)\textsuperscript{19}

There are only two indications that Locke might have considered labor in some way to be related to the selling price of a product, and both are in the Second Treatise. The first is several statements that labor is responsible for 9/10, 99/100, or 999/1000\textsuperscript{20} of the value of the goods it produces. Did Locke have some actual numerical relationship between the contributions of labor and land and the price of the product in mind, or was he just resorting to hyperbole to emphasize the importance of labor to the creation of value? While the latter seems the more likely explanation considering the contexts of the statements, the idea of a relationship between labor and price cannot be airily dismissed. It is undoubtedly true that when he claims the value of things useful to the life of man is 99/100 due to labor, he means that when men expend productive effort, they produce things which people value more highly than the things offered by nature alone. Yet Locke has defined labor to be merely picking up acorns from the ground or drawing water from a stream. [p. 306] This means that no consumed goods can be the products of nature alone without any labor being expended. Is he not then implicitly saying that goods requiring more labor to produce command a higher market price than goods which require little labor? On the other hand, this is not at all the same thing as asserting a predictable relationship between the quantity of labor (or land) required to produce a good and its market price. It appears that all Locke intended to say with his numerical examples was that the greater the amount of labor mixed with land, in general, the more useful the resulting goods produced; the more useful the goods produced, the greater their vent (or demand) and the higher their price.\textsuperscript{21} Thus, labor does bear some relationship to price but only by creating utility reflected in demand for the goods it creates.

The second indication that Locke may have believed that labor could be used as a measure of value is in the penultimate paragraph of Chapter V where he is discussing the effect of the use of money on the distribution of property in society. This instance is to be taken more seriously than the previous one, for here Locke actually uses the term measure in connection with labor and value. In this disputed passage, Locke is arguing that the use of money allows wealth to be unequally distributed, but since men have agreed among themselves to use money, there is nothing inherently immoral in this result. He says:

\begin{quote}
But since gold and silver, being little useful to the life of man in proportion to food, rayment, and carriage, has its value only from the consent of men, whereof labor yet makes, in great part, the measure, it is plain that men have agreed to disproportionate and unequal possession of the earth, they having by a tacit, and voluntary consent found out a way, how a man may fairly possess more land than he himself can use the product of, by receiving in exchange for the overplus, gold and silver, which may be hoarded up without injury to anyone, these metals not spoiling or decaying in the hands of the possessor. [p. 319]
\end{quote}

This is the only place in his writings where Locke refers to labor as the measure\textsuperscript{22} (italics his) of value, and what he means by this is by no means clear. One is not sure if he means to say that labor is in great part the measure of the consent of men to use gold and silver, or if labor is in great part the measure of the value of the gold and silver men use. If the first reading is correct, he is saying no more than that the degree to which men consent to value gold and
silver is the degree to which they have labored to acquire property. Since Locke believed that one of the main reasons for forming civil governments was to protect the unequally distributed property resulting from the use of gold and silver as money, it is not unreasonable to assume that he believed men would consent to the valuing of these otherwise worthless metals in proportion to the degree to which they had labored to acquire property. This is a somewhat eccentric interpretation, however. The more common one is the second, that Locke held labor to be the measure of the value of gold and silver and not the measure of men's consent to value the metals. Yet in "Some Considerations", Locke has said that the value of money depends upon the goods that it can buy,[22] which leads us to believe that if labor measures the value of money, it must also measure the value of the things money can buy. If this is true, then he must have thought there was some relationship between labor and the market price of commodities. The problem with this interpretation is that there is no corroboration for it anywhere in the rest of his writings, and there is no way to determine what Locke thought this relationship might be. There is no way to know for certain what Locke meant by this strange passage, but even if we assume that the second interpretation with all of its tortuous reasoning is the correct one, it is obvious that there is not enough evidence in this one dependent clause to support the view that Locke had an analytic labor theory of value, even in the long run.[24]

A NORMATIVE INTERPRETATION OF LOCKE'S LABOR THEORY OF VALUE

We have identified a third way — an ethical sense — in which a labor theory of value can be interpreted. In fact, there are two kinds of ethical arguments on labor and value: the first is fundamentally a theory of the "just" price while the second is a theory of the "just" wage. The former holds that the real value of something is what it costs in terms of human efforts to produce, and therefore the prices of goods should equal these real costs. This obviously is not what Locke believed, given his insistence on quantity and vent as the only determinants of market price (the only kind of price he discussed), and given his view that the value of labor depends upon the market value of the goods it produces and not the other way around. We have already argued that there is no indication that Locke believed that prices should in any way reflect labor-time in either an analytic or ethical sense. The second possible ethical implication of a labor theory of value, however, may very well be applicable to Locke's thought. This is the argument that since labor creates the value of the output it produces, the laborer is entitled to receive the full value of the output as his just reward.

Locke's theory of property is highly amenable to this kind of argument. So much so, in fact, that he has frequently been criticized by political philosophers and economists alike for not perceiving fully the implications of his theory of property for wage labor.[25] Locke argues that the act of creating property is responsible for creating economic value. Man mixes his body with God's resources to produce something new and uniquely his own. Does not this man have a right to everything he creates? The whole purpose of the Second Treatise, presumably, is to answer "yes" to this question, yet once production moves beyond the simple form of one man subduing nature to his will, it has appeared to some Locke scholars that he ignores the property rights of some men in favor of others. The problem arises when many people cooperate to produce a valuable good. In a production process that involves more than one laborer, who owns the final product and how is that ownership determined? It is evident that Locke expects his theory of property to apply to such situations, since he uses the fact of many laborers cooperating in the production of goods to illustrate the productivity of labor and the public benefits of property ownership. He tells us:

For 'tis not barely the plough-man's pains, the reaper's and thresher's toil, and the baker's sweat, is to be counted into the bread we eat; the labor of those who broke the oxen, who digged and wrought the iron and stones, who felled and framed the timber employed about the plough, mill, oven, or any other utensils, which are vast number, requisite
Yet, how does the labor theory of property apply in a society where production takes place through a division of labor? One might conceive of an organizing principle where at each stage of production, the individual producer sells his output for a price to the individual who is engaged in the next stage of production. Yet in at least some of these stages, more than one person must work to produce the good, and at least sometimes, there would be an employer and an employee. Who, then, creates value and owns the product created?

While Locke does not discuss ownership rights under the division of labor specifically, there are several indications that the problem would not have troubled him. In fact, we can infer that he would argue that in any production process, the owner of the output produced is the employer who directed the production. He states precisely this when he describes how men establish property in what was originally part of the common stock by referring to the medieval commons:

> We see in Commons, which remain so by compact, that "tis taking any part of what is common, and removing it out of the state nature leaves it in, which begins the property; without which the common is of no use. And the taking of this or that part, does not depend on the express consent of all the Commoners. Thus the grass my horse has bit; the turfs my servant has cut [italics mine] and the ore I have dug in any place where I have a right to them in common with others, becomes my property. . . . [p. 307]

In so far as servants can be taken to represent wage labor, Locke is saying that the fact that a laborer worked to produce a product does not lead automatically to the establishment of that product as the property of the laborer.

This passage has generated a good bit of comment in the literature on Locke's political philosophy as being evidence of Locke's view that wage labor was somehow inferior to employer labor. Pascal Larkin, for example, has complained that in the above passage Locke has put a human being on the same functional level as a man's horse and implies that the employer can therefore extract as much work for as little pay as he can get away with. In effect, Larkin argues, Locke gives wage labor no property rights at all. This is only partly true. Locke does put wage labor on the same functional level as a horse insofar as they are both factors of production (much the same as a modern economist would treat capital and labor as substitutable inputs), yet it is unfair to say that he neglects the property rights of wage labor. In another context later in the Second Treatise he discusses the limits of the power of an employer over the behavior of his employee when he explains:

> For a Free-man makes himself a servant to another, by selling him for a certain time, the service he undertakes to do, in exchange for wages he is to receive: and though this commonly puts him into the family of his Master, and under the ordinary discipline thereof; yet it gives the master but a temporary power over him, and no greater than what is contained in the contract between 'em. [p. 340]

Obviously, Locke sees the relationship between a laborer (or servant) and his employer as a contractual arrangement where the laborer is able to negotiate with the employer for a wage which represents his entire claim to the property created by his work. Although it is labor that creates property, labor refers to all effort, including the effort of those who in the past produced the capital goods used by laborers in the present and the effort of the one who directs the labor of others: each receives part of the value he creates, with the wage earner receiving a guaranteed wage rather than an unspecified portion of the market value of the product. Needless to say, this in no way implies consistent exploitation of wage labor at the hands of employers.

Locke's attitude toward the property rights of wage laborers would be more satisfying if he had addressed himself directly to the problem of wage rate determination in his economic writings. If it could be shown that Locke believed that wages depended upon something other than a two party contract between employer and employee, it would be easier to claim that Locke did not believe that wage earners were in danger of being "exploited" by employers. In the absence of a theory of wage determination, Locke is still open to Larkin's criticism that employers are entitled to pay employees as little
as they can get away with as long as the employee agrees to the wage rate. Of course, even if this is what Locke meant, it is upsetting to one's sense of justice only if one believes employees to be weak and inefficient bargainers relative to employers. It might just as correctly be argued that Locke's theory of property entitles wage earners to extract as high a wage as they can get away with, no matter what the consequences to the employer, yet sympathies so generally run toward the wage earner that this argument seems never to have occurred to anyone. For some reason, it is usually assumed that wage earners will almost always get the worst of any deal made with wage-payers, yet Locke himself did not make this assumption. There is some evidence that Locke actually believed wage contracts were constrained by a market rate which sometimes favored the employer and sometimes favored the employee.

There is no direct treatment of wages in "Some Considerations", but on three separate occasions Locke asserts that laborers live "from hand to mouth" or that they generally earn little more than a subsistence income. This is no "iron law of wages", however, since he gives no analytic reason why this should be so. Instead, he just accepts this typically mercantilist idea. Furthermore, the fact that wage earners earn little is not presented as the fault of their employers: wage earners, in Locke's essay are usually farm workers just barely worse off than their tenant farmer employers, who suffer from the vagaries of the marketplace and from the hardship caused by "brokers" or middlemen, a group whose usefulness Locke did not recognize. In addition, Locke describes at least one circumstance where farm workers in times of scarce labor could negotiate for ruinously high wages, thereby also injuring the suffering farmer. Wage earners of various kinds were portrayed as moving in response to higher wages, a fact that to Locke argued for the necessity of keeping England's money supply, and therefore wage rates, equal to other European countries to avoid suffering an emigration of English laborers. Thus, while there is no specific discussion of the determination of a market wage rate, wages are referred to as if they are market prices, just as interest and rents are analyzed as prices in Locke's economics. And while it is still technically true that both employer and employee are able legitimately to negotiate for as much of the property as they created by their joint labor, they are both constrained by a market wage. The crucial point, however, is that Locke described no just reward, either wage, rent, interest, or profit, which differed from that determined by the market.

**MARX ON LOCKE**

Although Locke certainly did not envision any consistent exploitation of poor wage earners by malevolent wage payers, Karl Marx nevertheless saw in Locke the beginnings of a theory of surplus value. To Marx, one didn't have to postulate the existence of evil employers in order for labor to be exploited; exploitation was inherent in the system which permitted unequal property ownership. For Marx, then, the relevant question was not whether employers are fair in their dealings with employees, but rather why the employer-employee relationship emerges in the first place. And to him, the fact that such relationship exists implies "capitalist expropriation" of what rightfully belongs to labor.

According to Marx, the source of exploitation in Locke's system is the unequal distribution of wealth that arose in the state of nature and was perpetuated in civil society. In the *Second Treatise*, we recall, Locke argued that all people had an equal right to mix their labor with common, unowned resources to create private property in the state of nature, both in consumable goods and in the land itself. The right to own private property was unlimited so long as two conditions held: that no one took more than he could use without allowing any of his property to spoil or go to waste, and that there were enough common resources of comparable quality remaining for anyone who wanted to create his own property. The first condition guaranteed that the second would obtain in the early stages of the state of nature. Even under these conditions of equal opportunity, however, Locke believed that some peo-
Max was correct, however, in calling a political invention. It is more in the origin of money, its evolution can hardly be. While there is an element of agreement in the role in Locke's state of nature in that it marks a transition period leading inevitably to a more complex economy and to the creation of civil government. Locke describes the origin of money as an "agreement among men to place an imaginary value on an otherwise worthless substance [precious metals]". [p. 318] Marx called the results of this agreement a "political invention" contradicting the law of nature on which private property was founded (Theories of Surplus Value, p. 365). Although Locke's use of the term "agreement" seems to imply a consciously formulated contract (and if so, it might possibly be a means by which men attempt to subvert natural law), Locke actually describes money as the result of an evolutionary process conforming exactly with natural law:

He that gathered a Hundred bushels of acorns or apples, had thereby a property in them; they were his goods as soon as gathered. He was only to look that he used them before they spoiled; else he took more than his share, and robbed others. And indeed it was a foolish thing, as well as dishonest, to hoard up more than he could make use of. If he gave away a part to any body else, so that it perished not uselessly in his possession, these he also made use of. And if he also bartered away plums that would have rotted in a week, for nuts that would last good far his consumption, he thereby gave his nuts for a piece of metal, pleased with its color; or exchange his sheep for shell, or wool for a sparkling pebble or a diamond, and keep those by him all his life, he invaded not the right of others, he used them before they spoiled; else he took more than his share, and robbed others. And indeed it was a foolish thing, as well as dishonest, to hoard up more than he could make use of. If he gave away a part to any body else, so that it perished not uselessly in his possession, these he also made use of. And if he also bartered away plums that would have rotted in a week, for nuts that would last good for his consumption, he thereby gave his nuts for a piece of metal, pleased with its color; or exchange his sheep for shell, or wool for a sparkling pebble or a diamond, and keep those by him all his life, he invaded not the right of others, he might heap up as much of these durable things he pleased; the exceeding of the bounds of his just property not lying in the largeness of his possession, but the perishing of anything uselessly in it.

And thus came in the use of money, some lasting thing that men might keep without spoiling, and that by mutual consent men would take in exchange for the truly useful, but perishable supports of life. [pp. 318 – 319]

While there is an element of agreement in the origin of money, its evolution can hardly be called a political invention. It is more in the nature of a convention depending upon social acceptance for its existence and continuance, but which arises out of an undesigned social process. Marx was correct, however, in believing that the use of money implies profound consequences for society. With the advent of an acceptable money-commodity, it becomes possible for the more industrious to increase their wealth relative to the less industrious without running up against the spoilage limitation to property ownership. As a result, the demand for common resources increases and resources finally become "scarce and of some value". [p. 317] Eventually, there is less and less of the common stock left for newcomers to mix their labor with, and disputes between property owners and non-owners become more frequent. It is at this point that men decide to enter into a contract to form civil government to protect and regulate their property. Hence money enables the inequality of wealth to perpetuate and increase in size, and government provides a means by which property owners protect themselves against the "quarrelsome and contentious" [p. 308] who would otherwise put the enjoyment of legitimate property in jeopardy.
illustrated the exploitation of the non-propertied class by the propertied (Theories of Surplus Value, p. 365). Locke, however, saw the matter differently. To Locke, interest and rents were market means of allocating resources from the less enterprising to the more enterprising. While both payments had their origin in unequal property ownership, they perform a function which operates to the mutual benefit of owners and borrowers, and to the benefit of society in general by increasing its productive output. Locke argues:

That he that has skill in traffick, but has not money enough to exercise it, has not only reason to borrow money to drive his trade, and get a livelihood; but as much reason to pay use for that money; as he, who having skill in husbandry but no land of his own to employ it in, has not only reason to rent land but to pay money for the use of it.

Borrowing money upon use is not only by the necessity of affairs, and the constitution of human society, unavoidable to some men, but that also to receive profit for the loans of money, is as equitable and lawful, as receiving rent for land...

While it appears that Locke saw nothing inequitable in the paying of interest and rent, one wonders if perhaps, in view of Locke's labor theory of property, Marx didn't have a point in his reading of Locke. That is, if labor is indeed the major source of value as Locke argues in the Second Treatise, how can he conclude that rents and interest are legitimate in his economic writings, since they "by compact transfer that profit that was the reward of one man's labor into another man's pocket"? ("Some Considerations", p. 55.) Does one rule of value creation and ownership apply in the state of nature and another in a politically and economically complex society? One could argue, as Locke did, that the unequal distribution of property which gives rise to interest and rent developed naturally and justly in the state of nature and became institutionalized as part of the social contract, but then what has happened to the labor theory of property? One is left to infer (the preceding quotation notwithstanding) that the same rules which apply to wage labor also apply to interest and rent payments. That is, they are contractual arrangements that permit non-property owners to enjoy the benefits of the property of others in return for a specified payment. This does not mean, however, that labor plays no role in the creation of the property that forms the payment to the "capitalist" or landowner. If we recall Locke's broad definition of labor, we remember that it includes not only direct labor, but all purposeful acts leading to the creation of goods useful to human life (and therefore desirable), and these include the activities of those who clear the land, who produce intermediate goods for sale, and who direct the productive activities of others. Hence interest, rents (and profits) are not deductions from the value created by direct labor, as Marx would argue (and as Smith on occasion argued), but component costs of production which represent payments to all those who have contributed at some time to the value of output.

**SUMMARY**

In summary, the following can be concluded about Locke and the labor theory of value. While Locke did believe that labor was the major creator of economic value, the relative value or price of a thing was dependent upon its usefulness and scarcity and not the amount of labor it contained. Locke would have agreed completely with Archbishop Whately's famous dictum: "It is not that pearls fetch a high price because men have dived for them; but on the contrary, men dive for them because they fetch a high price." However, he would also have argued that diving made the pearls more useful to the life of men because it made them more readily available. Pearls on land are more useful and hence more valuable than pearls in the bottom on the ocean. The measure of the usefulness of a thing was the price it would sell for in the competitive market place. There is no indication that Locke believed there would be any relationship between the market price of something and the amount of labor that went into its production, either in the long run or the short run (concepts that were foreign to Locke's thought). As for the ethical arguments that labor should receive as its reward the value of the output it created, this was in fact the subject of all of Chapter V in the Second Treatise. Since individuals mixed their bodies in the form
of their labor with free resources, they created something new which was indisputably their property. This did not imply that wage labor created the whole value of the property, however, nor did it imply that there should be any specific relationship between the value produced and the reward to wage labor. Locke instead defined property-creating labor to be the labor of the person directing the value-creating endeavor, one might almost say the entrepreneur, rather than the labor of all who happened to work at some project. Wage labor was considered to be a contractual arrangement where the wage earner settled in advance the reward he was entitled to receive for his efforts, in exchange for giving up any property rights in the final product. The amount of the wage he received was most likely determined by the market as were all other prices in Locke's economic thought. Similarly, interest and rent, both payments originating in unequal distribution of property ownership, were treated as market determined rewards for past labor which served the purpose of allocating property to the most industrious user in a complex economy characterized by scarcity of resources. Needless to say, there was no theory of exploitation either stated or implied in Locke's writing on labor and value. If anything, Locke's labor theory of property implied an optimistic view of the possibilities open to all "industrious and rational" people in the emerging capitalist economy of the seventeenth century.

In a flash of tantalizing insight (which, unfortunately, he never elaborated upon), Marx epitomized Locke's philosophy as "the expression of the bourgeois concept of right as against feudal privilege", and claimed that it served as the "basis for all the ideas of the whole of subsequent English political economy". That short description can serve as a concluding statement here. In feudal society, one's status, privileges and, to a great degree, one's wealth were determined by a network of interlocking feudal obligations, ultimately tied to land tenure. But it was Locke's intent to present a theory of property which transcended the feudal limitations of wealth and station by means of the concept of property in one's own person. The concept of self-ownership is clearly not only a cornerstone of individualism and personal freedom, but also an invitation to social and economic mobility.

Commercial economy thrives on the transfer of resources to those who can make them most profitable. It was just this kind of resource mobility that Locke's labor theory of property and his theory of market value justified. In his system, one earned property through one's own efforts, but the value of that property was determined by the market. While land ownership could be an important source of wealth, land belonged by right not to a noble family but to the highest bidder, and ownership of capital could rival land as a source of personal wealth (and status). Furthermore, in a society characterized by resource scarcity, self-ownership implies that everyone has some basic property endowment, some stock of human capital, which provides him with a source of income. With this basic human capital, then, one doesn't need a pool of common resources or the benefits of gentle birth in order to acquire real property and wealth: one can do so through one's own efforts and the borrowed property of others who may not have as great a share of vision or ambition. Hence, in a commercial exchange economy based on Lockean property rights, resources are allocated through a system of merit rather than family, and can flow to those who are most able to use them for their own (and society's) benefit.

Where Marx saw self-ownership in terms of exploitation of workers forced to "alienate" their labor by selling it as a commodity on the market, Locke saw freedom, social mobility and improved economic opportunities for all, but especially for the talented and industrious. It was in this way, perhaps, that Locke, albeit imperfectly and incompletely, provided a philosophical justification for the economic liberalism of Smith and the British classical school more than a century later.

NOTES


3. That there is some doubt that anyone, except possibly Karl Marx, ever held a labor theory of value, despite the usual textbook accounts of the labor theory of value of the British Classical school, can be illustrated by two examples: Adam Smith and David Ricardo. While it is common to discuss the “labor theories” of both these major figures in Classical Political Economy, Samuel Hollander has recently argued persuasively, in *The Economics of Adam Smith* (Toronto: Heinemann Educational Books, 1973), pp. 116–117, that Smith’s labor theory of value in the early state was a “summary statement clearly designed as an introduction to the main case. The great attention paid to the labor quantity and labor cost theories of value in commentaries . . . is unjustified”. Similarly, almost twenty years ago, George Stigler argued in “David Ricardo and the 93% Labor Theory of Value”, *American Economic Review* (June, 1958), reprinted in *Essays in the History of Economics* (Chicago: University of Chicago Press, 1965), pp. 326–342, that David Ricardo never meant to espouse a true labor theory of value but rather had an empirical hypothesis about the major determinants of long run price. The most extreme position, however, is taken by Donald F. Gordon, “What was the Labor Theory of Value”, *American Economic Review* (May, 1959) pp. 462–472, who claims that “no major economist of the classical period held what would, by modern usage, be called a labor theory of value”.

4. Capital (New York: The Modern Library, nd), p. 45. “A use-value, or useful article, therefore, has value only because human labor has been embodied or materialized in it.” Ricardo, in *The Principles of Political Economy and Taxation*, Everyman’s Library Edition (London: J. M. Dent & Sons Ltd., 1911), on the other hand, claimed that “possessing utility (use value) commodities derive their exchangeable value from two sources: from their scarcity, and from the quantity of labor required to obtain them”. (p. 5)


7. This was especially true of Thomas Hodgskin. See Maurice Dobb, *Theories of Value and Distribution Since Adam Smith* (Cambridge: Cambridge University Press, 1973), p. 137.


10. It is interesting to note that Adam Smith echoed this idea in Chapter I of *Wealth of Nations*, where he says “. . . the accommodation of an European prince does not always so much exceed that of an industrious and frugal peasant, as the accommodation of the latter exceeds that of many an African king, the absolute master of the lives and liberties of ten thousand naked savages” (Cannan edition, N.Y.: Modern Library, 1937), p. 12. Cannan notes that the idea is also found in Mun and Mandeville.

11. Colin Macpherson, in his unorthodox treatment of Locke’s political philosophy in *The Political Theory of Possessive Individualism: Hobbes to Locke* (Oxford: Clarendon Press, 1962), has misinterpreted this important passage and thereby misunderstood the benefits Locke saw arising from property ownership. Macpherson argues that Locke’s statement about the supposed benefits of enclosure assumes “that the increase in the whole product will be distributed to the benefit, or at least not to the loss, of those left without enough land . . .” (p. 212). In fact, Locke’s argument, as we have seen, holds that the very act of enclosure releases more raw materials for the rest of mankind than had previously existed for their support. No “distribution” of the products of enclosed land need take place for society to benefit from private property.


13. *Wealth of Nations*, p. 31. In these passages, Smith apparently was (a) enunciating a real cost theory of value and (b) using labor as an index number to measure real wealth.

14. Another implication is that the marginal product of the worker is 999/1000 of the output. Of course, Locke had no concept of marginal productivity, but it is still interesting to note his attempt to compare the output of identical pieces of land with and without labor applied to it, to measure the “contribution” of labor.

16. Locke is quite insistent about the relativity and changeability of market price. He gives as reason for the impossibility of price fixing the following. "... that things must be left to find their own price; and it is impossible in this, their constant mutability for human foresight to set rates and bounds to their constantly-varying proportion and use, which will always regulate their value." "Some Considerations", p. 51.

17. Locke generally treated changes in quantity as shifts in supply although occasionally he described the effects of price changes on quantity supplied as well. While, as one would expect, the modern distinction between changes in a supply or demand curve and movements along that curve was foreign to Locke, he managed to explain price determination tolerably well without this distinction.


19. In addition to Sewall and Vickers already mentioned (note 2), this position is also implied by Lewis Haney, *History of Economic Thought* (New York: Macmillan, 1932), pp. 120 - 121.

20. I think it will be but a very modest computation to say, that of the products of the earth useful to the life of man, 9/10 are the effects of labour: nay, if we will rightly estimate things as they come to our use, and cast up the several expenses about them, what in them is purely owing to nature, and what to labor, we shall find that in most of them 99/100 are wholly to be but on the account of labor." (p. 314) See also p. 316.

21. James Bonar, *Philosophy and Political Economy* (London: George Allen & Unwin Ltd., 1922), p. 93, comes to a similar conclusion with respect to these passages. He interprets Locke as saying that labor adds to the intrinsic value of things by making them more useful but without making any connection between usefulness and exchange value.

22. In fact, the only other instance of Locke discussing a "measure of value" at all was in his second essay, "Further Considerations Concerning Raising The Value of Money" (1695) in *Several Papers Relating to Money, Interest and Trade*, etc., p. 21 where he calls money the "common measure" of the value of commodities. While finding an objective measure of value may have been a concern of Petty's, Locke was more interested in explaining what determines the economic value of goods as reflected in their money prices. Obviously, then, when we ask if Locke believed labor to be the measure of value, we are asking if he thought the prices of goods were related to the labor that went into producing them, not if he wanted to use labor hours to compare the economic value of two goods.

23. "Some Considerations", p. 14. "Gold and silver though they serve for few yet they command all the conveniences of life; and therefore in a plenty of them consists riches." Furthermore, the only measure of the value of money is its quantity (that is two ounces of silver is twice as valuable as one ounce). Locke says of gold and silver, "For they having as money no other value, but as pledges to procure, what one wants or desires, and they procuring what we want or desire, only by their quantity, tis evident, that the intrinsic value of gold and silver used in commerce is nothing but their quantity." p. 31.

24. In addition to the above arguments, there is some evidence that Locke's paragraph on labor as a measure of value has not come down to us accurately. See Laslett's comment on the text of the Second Treatise, p. 320.


26. It seems reasonable to conclude from this passage that Locke viewed capital goods as intermediate products and would subsume them under the category of "past labor" in anticipation of the classical doctrine. See my John Locke: Economist and Social Scientist, Chapter III.


28. On p. 34 and p. 92, Locke describes the laborer as living from "hand to mouth". On p. 34, the context is an attempt to estimate the average cash balances held by different groups in society where the laborer's condition was such that he spent all of his income between payment periods and therefore saved nothing. There is no implication that the laborers were particularly poor — only that they saved nothing. On p. 92, Locke is analyzing the effects of a sales tax. He argues that "the poor laborer and handicraft man" cannot bear the burden of the tax because "he just lives from hand to mouth already", implying that if prices rise, his wages must rise proportionately or he will not be able to support his family. The implication here is definitely that laborers lived at subsistence. On p. 115, Locke explicitly uses the term "bare subsistence" to describe the general level of laborers' incomes, implying that they are very poor.

29. "Some Considerations", p. 42. "... The multiplying of brokers hinders the trade of any country, by making the circuit which the money goes, larger, and in that circuit more stops, so that the returns must necessarily be slower and scantier, to the prejudice of trade. Besides that, they eat up too great a share of the gains of trade by that means starving the laborer, and impoverishing the landholder whose interest is chiefly to be taken care of, it being a settled unmoveable concernment in the commonwealth."

30. "For there being a want of day-laborers in the country, they must be humored, or else they will neither work for you, nor take you commodities for their labor." "Some Considerations", p. 37.


32. I deal with Locke's concept of just price and just profit at length in my *John Locke: Economist and Social Scientist*, Chapter V.
33. Marx's discussion of Locke is found primarily in his *Theories of Surplus Value* cited above, note 2.

34. "For this labor being the unquestionable property of the laborer, no man but he can have a right to what is once joined to, at least where there is enough, and as good left in common for others." *Second Treatise*, p. 306. "As much as anyone can make use of to any advantage of life before it spoils; so much he may by his labor fix a property in. Whatever is beyond this, is more than his share and belongs to others. Nothing was made by God for man to spoil and destroy." *Second Treatise*, p. 308.

35. The origin of money in Locke's system is a good illustration of an institution which arose, as Hayek would describe it, as the "result of human action but not of human design". That is, an institution which arose in a spontaneous but orderly process. See F. A. Hayek, *Studies in Philosophy, Politics and Economics* (Chicago: The University of Chicago Press, 1967), pp. 96–105. Nozick has more recently used the term "invisible hand explanation" to describe essentially the same idea (although he is understandably inaccurate in attributing a conventional theory of money to Locke). See Robert Nozick, *Anarchy, State and Utopia* (New York: Basic Books, 1974), pp. 18–22.

36. This is a very hasty summary of my interpretation of Locke's theory of the origin of the state. For a detailed analysis, see my *John Locke: Economist and Social Scientist*, Chapter IV.

37. Of course, to argue that current rewards to the descendants of those who labored in the past are also just requires a theory of inheritance, which Locke provides in the *First Treatise*, pp. 225–228. Here, he bases his argument on children's right, not only to a bare subsistence, but to the conveniences and comforts of life, as far as the conditions of their parents can afford. "Hence it comes, that when their parents leave the world, and so the care due to their children ceases, the effects of it are to extend as far as possibly they can, and the provisions they have made in their life time, are understood to be intended as nature requires they should, for their children." (p. 225).