

Hegeler Institute

THE MORAL FOUNDATIONS OF INTANGIBLE PROPERTY

Author(s): James W. Child

Source: *The Monist*, Vol. 73, No. 4, Property Rights (OCTOBER 1990), pp. 578-600

Published by: [Hegeler Institute](#)

Stable URL: <http://www.jstor.org/stable/27903211>

Accessed: 16/10/2014 10:26

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Hegeler Institute is collaborating with JSTOR to digitize, preserve and extend access to *The Monist*.

<http://www.jstor.org>

THE MORAL FOUNDATIONS OF INTANGIBLE PROPERTY*

John Locke believed that each person has a natural right to hold property, particularly the fruits of his own labor.¹ It is through the mixing of one's own labor with land and its products that a right to appropriate and own property arises. But that right, as we all know, was subject to what Robert Nozick called—and what has since become familiar as—“Locke's Proviso.”² Thus, an integral part of Locke's defense of private property turned on its omnipresent availability for appropriation in the state of nature. That is, there must be unclaimed land, as well as the produce of land, free for the taking. The original appropriation of property by one person can be just only if “enough and as good” is available to the rest of humanity.³

“Enough and as Good”: The Proviso in the State of Nature

What did Locke mean by his Proviso? More specifically, how egalitarian was it meant to be? For the more egalitarian its purpose was in the state of nature, the less it would seem able to justify unequal property rights under conditions of scarcity.⁴

Locke puts forward his proviso in at least three places in his famous Chapter V. In the first appearance, he says:

(1) For this labour being the unquestionable Property of the Labourer, no man but he can have a right to what that is once joined to, at least where *there is enough and as good* left in common for others.⁵ (emphasis added)

In the second, he says:

(2) Nor was this *appropriation* of any parcel of *land* by improving it, any prejudice to any other man since there was still enough and as good left; and more than the yet unprovided could use.⁶ (emphases in original)

The third version is much less often identified and discussed, but is nonetheless a clear formulation of the Proviso. A “Man” could appropriate property by mixing his labor with it:

(3) . . . so that it was impossible for any Man, this way, to entrench upon the right of another, or acquire, to himself, a property, to the prejudice of his neighbor who would still have room, *for as good and as large possession* (after the other had taken out his) as before it was appropriated.⁷ (emphasis added)

Do these three formulations imply that individuals in the state of nature must be equal in property holdings, however we interpret “property holdings”? Some writers suggest that a condition of equality in the stock of land (and produce of the land) must exist after an appropriation. (In all cases, hereafter, I mean by an “appropriation” of land a Lockean appropriation performed by mixing one’s labor with it.) Alan Ryan follows other contemporary commentators and translates the Proviso as requiring “as much and as good” being left to others,⁸ even though Locke never uses such a formulation. Vincent Barry requires that in the state of nature, two conditions exist: (1) “the supply of land is inexhaustible” and (2) “individuals are equal,” where this second condition clearly refers to some sort of equality of resources.⁹

Could Locke have meant by “enough and as good” that equal amounts of property must be available to each person to appropriate in the state of nature? Could he have meant that people actually must appropriate and thereafter own equal amounts of property? For, if either requirement were part of Locke’s starting point, equality of resources looms far larger as a desideratum for Locke than we might otherwise think. This, in turn, might weaken a broadly Lockean commitment to strong property rights in post-state-of-nature conditions of relative scarcity—i.e., where the Proviso does not hold. This is precisely the direction taken by Virginia Held, Vincent Barry, and others, as we shall see.

What, then, could Locke have meant by “enough and as good”? “Enough,” whatever else, cannot mean “an equal amount.” It refers to some other characteristic of what is left and not its comparative quantity to that held by he who has already appropriated land (or goods of the land). It seems to compare what others have *before* an appropriator (call him A) appropriates and what those same others have *after* A’s appropriation, and whether their position has been worsened. It could mean that there must be enough left that those who have not yet appropriated land do not have so little left as to make them suffer physical deprivation for lack of property. But there is no textual evidence for this.

A more demanding requirement would be that others are *no worse off* for the appropriation. This, I believe, is clearly what Locke means. In the

second formulation of the Proviso, (2), Locke adds a strong conjunct to “enough and as good.” That is: there must still be more left than *those who have not yet appropriated could use*. So if they had more than they could use before an appropriation and more than they could use after, then relative amounts as between the appropriator (A) and those yet to appropriate are irrelevant.¹⁰

The third formulation gives added credibility to this reading because it requires “as large a possession” left to be appropriated. And, clearly here, Locke means *not* as large as that appropriated by A but as large as was there before the appropriation. But how could as large a possession be left after some of it had been appropriated? Obviously, only if the amount of land and its produce was practically unlimited, so that a single appropriation makes no practical difference to the amount still available. Indeed, Locke tells us just this in a passage following the second formulation:

So that in effect there was never less left for others because of his enclosure for himself. For he that leaves as much as another can make use of, *does as good as take nothing at all*.¹¹ (emphasis added)

A few lines later he compares such “enclosure” of land to taking a drink out of a river. Does it make any practical sense to say that there is less there for others to drink?

What could Locke mean by “as good,” which appears in all three formulations of the Proviso? It cannot mean “as much” as A has appropriated, since then the force of “enough,” or “as large” in the third formulation, would be nugatory. The preposition ‘as’ must compare *ex ante* and *ex post* situations of those having not yet appropriated (all those except A). It seems a simple requirement that the *quality* of the land which is left be the same. This makes an important point, because Locke believes in the enormous multiplicative effect of labor upon land. One reason why the Proviso can plausibly be effective in the state of nature in addition to the vast amount of land available is that mixing labor with land so increases its value and the rewards reaped from it.

Locke begins by saying labor can increase the value of land tenfold, then a hundredfold,¹² and, at one point, a thousandfold.¹³ The point is that the value produced by labor is a far greater source of inequality than any slight discrepancies in size of original appropriation. If you appropriate two acres while I appropriate only one and we both leave our land unimproved, you have twice what I do.¹⁴ But, if I get maximum value out of my land by great industry and application of reason, I might end up with *500 times* your wealth while owning only half your original amount of property. Locke,

however, makes clear that he is totally indifferent to even such radical disparities in wealth, so that equality *per se* must be completely irrelevant to him.¹⁵

The remarkable power of labor to produce so vast a multiplication of wealth might help explain the force of “as good.” Locke clearly thinks of property in Chapter V as real property and its products. Thus, he must require that the acreage left is as responsive to labor inputs as it was before an appropriation, else the overwhelming force of labor inputs to create wealth could be lost. I submit, then, by that “as good” he means abstractly providing the same ratio of original value to labor improved value. Concretely, for agriculture he means “as fertile and arable.”

There is yet another way that labor improvement can make up for relatively slight inequalities in sizes of original appropriation. While there is no money and thus no sophisticated commerce, we can assume that there is barter, and there is some textual evidence of wage employment.¹⁶ Locke makes clear that the labor-mixing appropriators are net benefactors to the rest of mankind. Barter and wage labor are probably the mechanisms he has in mind.¹⁷ In a simple pre-money economy, barter allows some specialization to emerge, producing at least some gains from trade and the division of labor. This improves the lot of all.

It therefore seems clear that Locke’s concerns within the state of nature are Paretian. That is: “Am I better off or left the same after A appropriates his land, or does his appropriation make me worse off?” Locke’s concerns are not egalitarian. He is not concerned with the question: “Do I have as much as A?” This bears powerfully upon arguments which use the force of the Proviso outside the state of nature. Let us see how this is so.

A Moral Problem in the Acquisition of Property Outside the State of Nature

Needless to say, the state of nature is a fiction; in most societies there is no longer a frontier which constitutes such a source of unclaimed property. It would surely seem, then, that there is no source of unclaimed new property. If this is correct, we can only acquire property from some fixed, finite stock, all of which is already claimed by our fellows. It may seem that I can accumulate property (ultimately becoming wealthy) only by getting that additional property from others. The means of obtaining such increments of wealth may have to be somehow illicit. We shall investigate that possibility below. But ignoring that problem for the moment, it would still seem that such accumulation of property might deny others their “fair share,” i.e.,

access to “enough and as good.” Locke points out that after the invention of money, I can accumulate property beyond my own ability to use or consume it.¹⁸ So far as this accumulation of property might deny others “enough and as good,” as it appears it could without a source of free unappropriated property, it violates Locke’s Proviso.¹⁹

Indeed, this argument has been made both against the notion of private property as a right, and against capitalism as a system dependent upon that right. Virginia Held says:

Even more serious for this attempt to justify moral rights to property is the difficulty that the Lockean proviso, in the contemporary world of overpopulation and scarce resources, can almost never be met. Instead, *more property for some will almost always bring about less for other.*²⁰ (emphasis added)

Vincent Barry has taken the same position:

As they (capitalists) accumulate more and more property, there is less and less for others. The relative positions of the parties with respect to property is not equal, *for as one has gained the other has, of necessity, lost . . .* Perhaps Locke provided an adequate defense of property in a hypothetical state of nature *in which supply is inexhaustible and individuals are equal*, but that blissful Eden does not exist. And yet, modern capitalism seemingly operates as if it does.²¹ (emphases added)

Note the *zero-sum* nature of property accumulation assumed by both Held and Barry. I acquire more property only by taking property from you and all others. Similar positions, which suggest but do not explicitly state this argument, are taken by Laurence Becker²² and A. M. Honoré.²³

This analysis, if it can be maintained, constitutes a devastating moral argument against private property. If Held and Barry are correct, there are only two kinds of transfers of property. The first are the sort of justice-preserving transfers of entitlements to property envisioned by Nozick. However, for Held and Barry, these transactions must be for equal value and cannot explain the unequal accumulation of property. Thus, you swap something to which you are justly entitled for something of *equal value* to which your transactant is justly entitled.²⁴ Such transfers are zero-sum in the sense that neither of us gained or lost: i.e., gains and/or losses equalled zero.²⁵ The kind of transfers which Held and Barry describe are also zero-sum (the law calls the “conversions”). “More property for some brings about less for others,” Held tells us. “As one has gained, the other has lost,” says Barry. That is, I get something from you for nothing; they are zero-sum because I am ahead some amount and you lose an equal amount.²⁶

With the exception of the unusual case of an intentional gift, this kind of transfer is, by definition, wrongful, presumably carried out by force or fraud or, at least, exploitation of mistake or imprudence. Thus, any inequality in a free-market society—and there is undeniably a great deal—condemns the source of the inequality as the result of something morally very similar to theft. Thus, this line of argument proceeds, the system of property rights and the economic organization it underpins must constitute the source of this inequality. *Ergo*, the system is based upon immoral (or at the very least morally unjustified) conversions. One reason why it seems clear that Held and Barry assume this zero-sum theory is the one example adduced by both. Barry gives the enclosure movement as a case of capitalists getting rich by taking from others. It is the perfect historical example of their theory of inequality being produced by zero-sum transfer.²⁷ Indeed, that Barry chooses the enclosure movement as the primary example of property accumulation reveals how deep the zero-sum notion is in this view.

Let us set out briefly and roughly how the enclosure movement transpired.²⁸ Under feudal tenure, much of the land in a manor was “common.” That is, tenants could use it for pasturage, and in some cases for crops, subject to various feudal duties owed to the lord. All of the rights, duties, and privileges involved were deeply feudal in character. The peasants’ “rights” were either customary or practically enforceable only in the lord’s court.²⁹ As the notion of legal title evolved toward modern *fee simple*, the lord’s ownership became more absolute and less burdened with these customary peasant claims. At the same time, a huge market for wool developed. Thus, it became profitable for the lord to “enclose” these commons and run his own sheep, thereby ignoring the peasants’ customary rights.³⁰ Generally, the newly emerging law of property supported this revocation of old and often only customary rights. Indeed, during the eighteenth century, private acts of Parliament expedited the process.³¹

Note that it takes only a small abstraction from this example to reach something like a Lockean state of nature. Heretofore, the commons was owned “in common” (though with unequal privileges and benefits). Then, Lord Bad encloses (appropriates) the land as his exclusive property, denying its use to Peasants Good, Nice, and Kind. Antecedently, Bad, Good, Nice, and Kind had (let us say) 300 acres to use. Now, Bad is ahead 300 acres and Good, Nice, and Kind are out 300 acres (*ex ante* owned in common).

I think we must agree with Barry (if we assume custom can be a source of rights, which I do) that the enclosure movement, at least as here simplistically represented, constitutes a wrongful—as well as a zero-

sum—taking. But what would make Barry (and Held as well) believe that the enclosure movement is characteristic of capitalist property acquisition or accumulation? Indeed, *prima facie*, it seems dramatically atypical. Property usually changes hands for valuable consideration. How could they arrive at this conclusion? Let us see.

What is the nature of the wrong in such conversions as the enclosure movement? It may well be that the wrong is deontological in nature, a violation of a right to property. Where Nozick sees such conversions, this is the only reason for their wrongfulness, although, for Nozick, the class of wrongful conversions is much narrower than for Held and Barry.³² But there are at least two consequentialist moral objections as well as rights-based ones. First, such transfers will lead to relative inequality. This would be a problem for Held and Barry, but not for Locke, as we saw, nor for Nozick nor for the author.³³ Held and Barry are egalitarians with respect to transactions. Locke, Nozick, and the author are Paretians.

However, most would agree, Held and Barry included, that there is a second and more serious consequential wrong in a world without the frontier, i.e., with a closed and finite stock of property. That is, *sufficient inequality might well lead to physical deprivation and suffering*, as it will not in Locke's state of nature, since sufficient land and its produce was always present there to prevent it. Thus, on this account, in the closed, finite property case, I can accumulate two more units of property only by denying them to you and to everyone else, on the assumption that antecedently you had their use and enjoyment. Think of the enclosure example, where great physical privation and poverty did result. If most property is denied you and very little—or none—left for you, then you might well have so little that you suffer. It is the physical deprivation and poverty that results from this kind of unequal distribution which virtually everyone finds objectionable. That Locke found it so is illustrated by his Proviso requiring *enough*—viz., at least, to avoid deprivation. While we interpreted Locke to mean something much stronger than this by “enough,” it certainly includes a prohibition on physical deprivation.

Let us now state their view explicitly and concisely:

The Held-Barry Thesis: The accumulation of property outside the state of nature in the hands of one person logically requires the denial of an equal amount of property to others, lessening their stock of property by the amount accumulated by the first person. This accumulation and denial, pursued far enough, will lead to deprivation and suffering.

The Real-Property Paradigm

The Held-Barry thesis logically depends upon what we might call a “zero-sum” characteristic of property. This zero-sum characteristic is best exemplified by real property: that is, land outside the state of nature (where there is no frontier). All of Locke’s thought seems to be based on the identification of property with land (and the agricultural products of land, although this distinction is not always made clear). Other early modern discussions of property also depend upon its identification with land.³⁴

What are the zero-sum characteristics of land as archetypal property? There are three salient, logical characteristics of real property. First, if I own a one-acre piece of property—Blackacre, let us call it—I have a right to prevent you (and all others) from owning or using *that specific parcel of land*. Second, without a practically unlimited source of property—i.e., a frontier—there is a finite and limited amount of land.³⁵ The amount is *fixed*: i.e., it will neither grow nor shrink. As my farmer neighbors in Ohio say, “They ain’t makin’ any more of it.” Third, from the first and second characteristics, it follows that my acquiring Blackacre reduces the total stock of land *by one acre* which is available to you to use or acquire without payment. These three characteristics together create a zero-sum conception of property. I gain one acre; you (and everyone else) lose one. That just *is* zero-sum in the very same sense as Lord Bad’s appropriation denied the appropriated land to Peasants Good, Nice, and Kind in the enclosure case set out above. Thus, it is your being excluded in this way from enough land, where there isn’t unappropriated land for you to acquire, which might lead to your suffering physical deprivation. The kind of transfers of property contemplated by Held and Barry, being based on the real-property paradigm, are zero-sum.

What logical prerequisites must exist in order to have private property characterized by the real-property paradigm? Any property that can be held in private must be *excludable*, as we saw with Blackacre above. That is, it must be possible to exclude others from its use and enjoyment. Indeed, economists frequently choose non-excludability as a necessary characteristic of pure public goods, those things that are not subject to privatization: e.g., clean air.³⁶ Excludability seems to be entailed by the very nature of the economic conception of private property. It is also central to the legal conception of private property.³⁷ Of course, the economist’s and the lawyer’s notions differ in that the former concerns the *practical physical ability* (and, therefore the cost) to exclude, while the latter has to do with the *normative power* to exclude.

As we saw above, there is a closely related but distinct characteristic entailed by the zero-sum conception of property, which is often confused with excludability. If I claim Blackacre as my own, excludability will insure that no one else can own, use or enjoy (without suitable permission) *that particular piece of land*, viz. Blackacre. But a conceptually separate thing happens as well as a result of that property claim. *The total stock of land available to be used or appropriated is decreased by one acre*. This notion is sometimes referred to as *rivalry of consumption*.³⁸ Yet, Held and Barry conflate my denying you Blackacre with my denying you one acre, lessening the stock available to you by one. That is, they treat them as the same thing.³⁹ In the real property paradigm, they *are* the same thing, but only within that paradigm.

Let us see if we can make these conditions explicit. Spelled out formally, we may say that the zero-sum characteristics of property are defined by:

1. The *exclusion condition*: Ownership of P (a specific, individually identifiable piece of property, i.e., 'P' is a *name*) by A implies that all others (those not A) are excluded from possession and use of P without the permission of A.
2. The *finitude condition*: There are only n things of type P (of which P is a token) in the world, where n is a practically finite number, i.e., small enough to offer genuine constraint (scarcity in the economist's sense).

From (1) and (2), we get (3):

3. The *zero-sum condition*: A's ownership of P implies that there exists only $(n - 1)$ other things of P's type for all others to own.

As one would expect, the real property paradigm using these three conditions works extremely well for land with no frontier (outside the state of nature). Indeed, the stipulation of "no frontier" or "outside the state of nature" just is the introduction of the finitude condition.

How well do these three conditions work for other sorts of property? Non-renewable resources are by definition finite in quantity, and that makes all tangible personal property—in some very abstract sense—limited. However, that finitude often makes little difference in dividing up the world, so to speak. The stock of many (though not all) non-renewable resources is indefinitely large, far more like land in the frontier case than in the modern non-frontier case. For, even on the frontier, there is a knowledge that the total amount of land is ultimately finite, even if practically unbounded.

Moreover, science, technology, and human ingenuity generally can multiply the effective quantity of a given resource many times, through more efficient use in production processes and product design. The market is an enormously effective mechanism for sending signals that a given material resource grows more dear. The consequent price increase then drives the aforesaid technology to find replacements or technologies which use less.

Nonetheless, there is the thesis, heard more often in the 1970s than today, that we are fast running through our non-renewable resources. Soon, if not now, we will find all these resources practically limited. If this is the case, then all tangible personal property manufactured from those resources is, or soon will be, practically limited in amount. For the reasons cited above, this claim may not be very realistic. Nonetheless, we shall assume that all tangible personal property is practically limited. This constitutes a very strong (and, I would say highly artificial) presumption in favor of Held's and Barry's use of Locke's Proviso. We shall make it for the sake of the argument. Thus, tangible personal property is subject to the objection that accumulation leads to deprivation, i.e., I can only get more by denying an equal amount to others.

The kinds of property most important to modern Western capitalism, however, are intangible. The traditional legal distinction between tangible and intangible property is that the former is "corporeal" and therefore "subject to physical dominion," while intangible property is "incorporeal and abstract."⁴⁰ Intangible property includes patents, copyrights, trademarks, common-law trade secrets, and the vastly important domain of financial assets such as stocks and bonds.

Now comes the central question in this essay: *Is it possible that for certain sorts of intangible property the exclusion condition may not entail the zero-sum condition* (and, thus, the attendant zero-sum conception of property)? Held and Barry implicitly answer this question no. Indeed, to sustain their thesis, they must. For they implicitly assume that all types of property outside the state of nature are characterized by the three conditions of the zero-sum notion of property which we set out above. This, they believe, necessarily causes the violation of Locke's Proviso. They reach this conclusion by ignoring the possible independence of the finitude condition (2) and, thus, by conflating the exclusion condition (1) with the zero-sum condition (3).

But, what if for certain sorts of intangible property, the excludability condition was independent of the finitude condition and did not by itself entail the zero-sum condition? Put the question in a different way: might there exist intangible property which is at once excludable but inexhaustible in

amount? If excludable, it could be private property, i.e., one could exercise control over it. If inexhaustible, it could meet Locke's Proviso. It would satisfy Locke's Proviso in that, never mind how much some have already, there exists "enough and as good" for all others. In other words, I might have a piece of property from which I can exclude you, but there being an unlimited amount of this kind of property available for your appropriation, you need never suffer privation. You merely go appropriate some for yourself. And this would be true regardless of how much I already have appropriated for myself. Thus, the Held-Barry thesis would fail for such a kind of property. The existence of an inexhaustible source of property would have vast moral implications for the justice or injustice of the institution of private property, the accumulation of property as wealth, and the distribution of that wealth. Let us see how this might be so.

The Patent Paradigm

The most obvious, if not the most important, example of intangible property of this sort is the idea.⁴¹ An inventor of my acquaintance holds seventeen patents. These patents are his property every bit as much as my house is mine. True, he holds rights to them for a term of years, and that makes his ownership a bit more like a leasehold right. But in all other relevant particulars, his patents have the salient earmarks of being his property.

The most interesting thing about my friend's ideas as property,—indeed, I consider it amazing—is that he created them *ex nihilo*. Property was created out of nothing but mental labor.⁴² He didn't even need raw materials—as the farmer needs land and seed, or the potter needs clay. Of course, he needed a pencil, paper, a drafting board, and a slide rule (my friend is an old-fashioned inventor). But these are more like tools. He needed no "stuff" with which to mix his labor.

Do my friend's patented ideas meet the *exclusion condition*, required of all private property? Yes, they do, for no one can use his invention without his approval, for which he will normally charge a fee (a royalty rather than rent, but logically identical to one). So exclusion is both practically possible and normatively effective. Indeed, the machinery of the patent law is created precisely to enable him to exclude others from the appropriation or use of any of an inventor's patented ideas. That is, his ownership of a particular idea precludes others' ownership, or use of *that* idea without his permission. However, even in virtue of his exclusion of me from his ideas, does it make sense to say there are fewer ideas out there which I now can think up, appropriate by a patent, and then use? Another way of asking this question is: do my friend's patents fit the last two parts

of the zero-sum conception of property? What about the *finitude condition*? Let us assume a simple-minded Platonism in which all ideas thought of and not yet thought of, appropriated through the patent law and not yet appropriated, exist. To be sure, there are seventeen fewer unappropriated ideas available for me to appropriate than before my friend started thinking. But has that lowered the stock of unthought-of and unappropriated ideas still to be thought up at all? Certainly not. The number of both not-yet-thought-of and not-yet-appropriated ideas is at least practically unbounded, if not infinite. It wasn't ever n and it isn't now $n - 17$, where n is some identifiable whole number, offering real constraint. Indeed, subtracting seventeen from the number of all the ideas which I could still think up and appropriate does not seem to decrease the total number. This makes the arithmetic of ideas seem very similar to the arithmetic of aleph zero.⁴³ Thus, the *finitude condition* is violated.

What about the *zero-sum condition* itself? Excludability is enough to ensure that I cannot appropriate and cannot use without permission any *presently extant* and patented ideas. Moreover, if I do receive a patent on an idea, there is one fewer idea out of the finite number already thought up and in existence for others to own and use. If we limit ourselves to the presently extant patented (appropriated) ideas, they behave exactly like Blackacre, i.e., in accord with the real-property paradigm. However, patented ideas are not like real property without a frontier, just because (as we have seen) there is a source of an infinite (or indefinitely large) number of new ideas which can be thought of and, thus, created (or discovered) and appropriated *ex nihilo*, merely by hard (and creative) thought. I do not have to pay anyone for those new ideas and, more importantly, when I come up with one, the number available to you is not thereby decreased. Thus, the *zero-sum condition* is not met. Perhaps most important, you are not *deprived*, so long as you remain able and willing to exert mental labor.

As it is with patents, so it is with copyrights and trademarks. Moreover, courts have decided that a number of other sorts of highly abstract things, unbounded in quantity or number, are property. One interesting example is a Supreme Court decision which held that Associated Press had a property right in the news it had gathered.⁴⁴ All of these kinds of property share the characteristic that, while I can exclude you from the use of mine, there is not thereby a smaller amount upon which you can draw to use or own. Moreover, as with Locke's real property in the state of nature, you have only to mix labor with it (here, the mental labor of thinking) to appropriate it. It is otherwise *free*, as it should be if there is an inexhaustible supply presently unclaimed.

Of course, issues of distributive justice, implicit in the concerns of Held and Barry, are not thereby solved, for not all of us are intelligent enough (or intelligent in the right way) to think up ideas of sufficient novelty and value to be worth protection by patent or copyright. Thus, we cannot all be equal in access to resources. What is even more disturbing for most of us, if ideas so construed are the only inexhaustible source of wealth produced by labor, is that some of us willing to “labor” might nonetheless have so little as to suffer physical privation. Held and Barry might also, quite rightly, point out that there are substantial transaction costs connected with obtaining patents and copyrights. Theoretically, this can be construed as part of the cost of *recording title* rather than the cost of actually creating and appropriating the property itself. From their perspective, however, it makes very little difference, since such transaction costs do represent a hurdle to the poor.

There is no simple answer to the Held-Barry challenge. The availability of intellectual property may favor the industrious, as Locke and the author prefer. But it also favors the intelligent, and that is not obviously fair. Moreover, as intelligence can be magnified by education and, as the transaction cost of recording title to ideas can be high, there is some tendency for such property to be more available to the rich or, at least, the well-off. There is a response, however, for there is another source of unappropriated property which seems to be even more available to all than intellectual property.

Ownership in Business Enterprises

There is no doubt that the notions of the patent or the copyright constitute a different paradigm of property from that of real property in a non-frontier situation. There also is no doubt that it fits the Lockean notion, including the Proviso, far better than the real-property paradigm does in a non-frontier situation. Thus, the Held-Barry Thesis fails with respect to it. Yet we assumed, *for the sake of argument only*, that other kinds of tangible property, at least in theory, fit the real property paradigm better. The numbers of bulldozers or bicycles or beer bottles are not unbounded in quite the same way as is intellectual property.⁴⁵

Certainly, patents and copyrights are important in our economy, but are they more important than all forms of tangible property, both real and personal? No, they are not. But ownership shares in business enterprises (e.g., common stock in corporations), along with many similar kinds of property, constitute the single most important kind of property interests in our economic system.⁴⁶ At the very least, they constitute the sort of property which capitalism *must* have in order to be capitalist, i.e., which allows us

to accumulate and exchange capital. I wish to claim that the patent paradigm characterizes these most important kinds of property in modern capitalism far better than the real-property paradigm.

For the sake of brevity, we shall limit our discussion to common stock of corporations, although I believe a similar analysis could be made of any financial asset. An ownership interest in an enterprise is abstract and intangible in the way required by the patent paradigm. There is excludability in the sense necessary for all private property. That is, there are a finite number of ownership shares of corporations presently extant; further, if I acquire one share of stock, my having it denies ownership of that share to any other. Thus, if I own all the stock of XYZ Corporation, then neither you nor anyone else can own any of it. If I own nine thousand of the ten thousand shares outstanding, then you can own—at most—one thousand. But, of course, the salient feature of the patent paradigm is that, even as I exclude you from ownership of XYZ Corp., there are not fewer shares of enterprises in general out there for you to own. Why not? Because in an exactly analogous way to patented ideas, you can create your own business enterprise through your own efforts and thereby create property *ex nihilo* (or you can purchase the shares of someone who has done this.)

To see how this is so, we have only to trace the evolution of such an enterprise. Let us assume that you open a hot-dog stand. You use none of your own money; instead, you rent all of the fixed assets and borrow from a bank to finance the working capital. You are your sole employee. On day one, you have zero equity in the business. You have a bit of luck with your location and build a large and faithful clientele. You work hard, selling many hot dogs. At the end of a year of work, you have made a profit of \$10,000 after paying yourself a meager salary. You then plow all the profits back into the business (probably by making principal payments on the bank loan or by buying some of the fixed assets).⁴⁷ In the second and third year, you make \$20,000 per year profit, again putting it all back into the business. At the end of three years you have property worth \$50,000.⁴⁸ Where did this property come from? From your original idea, your efforts, and your entrepreneurial activity as much as the ideas covered by the patents came from my friend's head. Moreover, your \$50,000 in property did not, nor does it, lower the stock of the total worth of enterprises out there to be built by others (or the value of any other property they may hold).

From here, one can take the story in a variety of directions. Our entrepreneur might sell his business and then hold \$50,000 in cash or passive investments. He might expand and soon have a business worth \$100,000. Whatever the *dénouement*, we have seen that Held and Barry are wrong for

this case. More property for our entrepreneur did not mean less for anyone else. He has gained and no one has lost. His greater stake of property has come from some source which, if we have not yet shown that it is inexhaustible or unlimited, was unappropriated and did not obviously detract from opportunities others might have for obtaining more property. It is not zero-sum in character.

But how does this “creation” of intangible property work? Does it really bring such property within the ambit of Locke’s Proviso? Let us see. An extremely simplified (and somewhat simplistic) version of the contemporary microeconomic account of how this “creation” of value occurs might run something like this. We assume you didn’t misrepresent your product or defraud your customers—by using cheap fillers, for example. Thus, each time you sold a hot-dog you made a customer better off to the extent that their use value for the hot-dog was higher than (or, at the limit, at least as high as) the exchange value you set on it (the price). So long as you keep answering needs or wants for hot-dogs at a lower price than what peoples’ use values for hot-dogs are, but that remain higher than your costs, you are making a profit by making other people better off.⁴⁹

This account may seem to describe a mysterious process, but a moment’s reflection will show that it does not. It does, however, require a commitment to a subjective theory of value.⁵⁰ If I value something you have more than something I have and you attribute reciprocal values to the two things, the potential for a trade exists in which we are both better off (and no one else is worse off), thus creating a Pareto improvement. The exchange of one hot-dog with one customer at a price both you (the hot-dog entrepreneur) and she (the customer) find acceptable is just such a transaction. Such transactions are the paradigm market phenomena of modern microeconomics.⁵¹

Profit, then, occurs when the entrepreneur-producer takes his share of the gain from trade, his part of the Pareto improvement. As he accumulates these gains, he measures profit in his business. Wealth in the form of intangible property (the ownership of a company) is just the accumulated profit. Indeed, modern accounting makes this point explicit by identifying the “net worth” of this company with its “earned surplus” or “retained earnings”.⁵²

Conclusion

Business profit and business growth is (or can be, if business is transacted ethically) *value creating*, which, as shares of business enterprises, means property creating.⁵³ We have an inexhaustible “frontier” from

which we can continue to appropriate such property without denying anything to our fellow human beings. Indeed, the accumulation of wealth in this manner can (and should) be a Pareto-improving process, in that it makes some better off while making no one worse off. As regards the most important kinds of property in a capitalist economic system, Locke's Proviso is completely satisfied. Contrary to the Held-Barry thesis, nowhere does the accumulation of this kind of property by some necessarily require less property for others.

James W. Child

Bowling Green State University

NOTES

1. John Locke, "The Second Treatise of Government," *Two Treatises of Government* (Cambridge: Cambridge University Press, 1960), Chapter V.

2. Robert Nozick, *Anarchy, State and Utopia*, (New York: Basic Books, 1974), pp. 174–82.

In fact, Locke really provides two "provisos" which limit appropriations. The first, identified by Nozick, requires that "enough and as good" be available to all. The second, set out in Locke, sec. 32, p. 332, prohibits the accumulation without use of goods which will spoil. No one has a right to waste the bounty of the earth, for "Nothing was made by God for Man to spoil or destroy," *ibid.* See Ellen Frankel Paul's discussion of both provisos in *Property Rights and Eminent Domain* (New Brunswick, NJ: Transaction Books, 1987), ch. 3, especially pp. 202–07.

As we shall see, the invention of money obviates much of the limiting effect of this second proviso. Hereinafter, we shall mean by "the Proviso" Locke's requirement that enough and as good be available to others.

3. Locke, ch. V, sections 27, 33.

4. We shall consider one such argument that turns on this point below.

5. Locke, sec. 27, p. 329.

6. *Ibid.*, sec. 33, p. 333.

7. *Ibid.*, sec. 36, p. 334.

8. *Property and Political Theory* (Oxford: Basil Blackwell, 1984), p. 17.

9. *Moral Issues in Business* (3rd ed.; Belmont, CA: Wadsworth Publishing, 1986), pp. 86–87.

10. Nozick, p. 175, makes a distinction between two versions of this reading of the Proviso. There are two possible things that could be as large after as before an appropriation. The stringent requirement is that there is as much land for others *to appropriate*. The weaker requirement is that there is as much land *to use* where this means use in the state of nature, i.e., without mixing one's labor or improving or cultivating the land. For his own purposes, Nozick interprets Locke as specifying the weaker one. I believe the text of versions (1) and (2) of the Proviso squares with

Nozick's interpretation. In (1), Locke talks about as much being left "in common for others," i.e., unappropriated by mixed labor and, thus, held in common. In (2), he specifically refers to amounts available "to use." However, in (3), a version not cited by Nozick, Locke specifically says "as large a *possession*" must be available for "the neighbor" after (a single) "Man" (our friend, A) has appropriated his portion. So the textual evidence is mixed and it is probable that Locke was confused on this point.

As the reader shall see, unlike Nozick, we can live with the stringent requirement. It gives the strongest cards to those whose arguments about problems outside the state of nature we wish to defeat. We can give them those cards and still beat them. This is true in large measure because we shall demonstrate that there exists a situation *outside* the state of nature, wherein all can have as much property *to appropriate as their own* as they can while leaving a practically unlimited amount available to all others for their *appropriation*.

11. *Ibid.*, sec. 33, p. 333.

12. *Ibid.*, sec. 37, p. 336 and sec. 40, p. 338.

13. *Ibid.*, sec. 43, p. 340.

14. Obviously, I am using a very un-Lockean kind of appropriation, perhaps by declaration of some kind. However, the point being made is not vitiated by this change. In the name of consistency with a purely Lockean form of appropriation, we might imagine the case in which each of us has only marginally improved our land by mixing our labor, just enough to come to own it. We might then compare that case to the one set out below in which one of us has intensively improved our land.

15. Locke has *no* patience at all with lazy persons, either indolent land-holders having done the minimum necessary for appropriation or those still in the state of nature who have not even done this. Those who possess "fancy or covetousness," presumably about other's wealth gained from hard work, makes them "quarrelsome and contentious," *ibid.*, sec. 34, p. 333. Such people wish to benefit from "another's pains."

16. In a famous passage in section 28, (*ibid.*, p. 330), he makes reference to his servant cutting hay for a horse. Obviously, this is deep water and I make these suggestions knowing that establishing them could be difficult. For an interesting discussion of possible protoeconomies, some of which require money, in Lockean near states-of-nature or early phases thereafter, see Andrew Reeve, *Property* (London: MacMillan, 1986), pp. 127–32.

17. Locke, sec. 37, p. 336, tells us that appropriators "increase the *common* stock of mankind." That is what *we all* hold.

18. *Ibid.*, sec. 45–50, pp. 341–45.

19. Virginia Held uses Locke's Proviso and its apparently redistributive consequences to criticize Nozick's more libertarian reading of Locke and Nozick's own theory of entitlement which issues from it. Virginia Held, "John Locke on Robert Nozick," *Social Research*, vol. 43 (Spring, 1976), 169–95.

20. Virginia Held, *Rights and Goods* (Glencoe, IL: The Free Press, 1984), p. 172.

21. Barry, pp. 86–87. (Cited in n9, above.)

22. *Property Rights* (London: Routledge and Kegan Paul, 1977, ch. 4, especially pp. 42–43).

23. "Property, Title and Redistribution," first published in Carl Wellman, ed., *Equality and Freedom* (Weisbaden: Franz Steiner Verlag, 1977), reprinted in Virginia Held, ed., *Property, Profits and Economic Justice* (Belmont, CA: Wadsworth, 1980), pp. 84–92, especially pp. 87–88.

24. Nozick, of course, places no requirement of equal value on these transactions. He only requires that they be free of fraud and force. For his treatment of entitlements and their transfer, see Nozick, pp. 150–82. I introduced the notion of "equal value"; Held and Barry do not. For reasons that will emerge below, however, I believe that their argument crucially depends upon a concept of equal (and, more basically, objective) value, very like a just price. Obviously, this opens up another line of counter-argument, one related to, but distinct from, that which we follow here. See also n25 below.

25. It may strike the reader that such a notion of economic transactions is radically at odds with modern microeconomics and provides the parties with no rational motive to transact. Both these charges are quite true. Nonetheless, this objective value/just price/ zero-sum theory of transactions lies at the root of both Aristotle's and Marx's theory of transactions and was never fully overthrown until the subjectivist revolution in the mid-nineteenth century. See Nicholas Georgescu-Roegen, "Utility and Value in Economic Thought," in *Dictionary of the History of Ideas* (New York: Scribners, 1973), vol. IV, pp. 450–58. As we shall see more clearly as we go forward, Held and Barry seem to presuppose such an objective value/zero-sum theory.

26. There is, of course, the possibility of hybrid cases of transfers for partial value. Yet, these also cannot be accounted for except as a partial conversion, also wrongful.

27. Barry, pp. 84–85.

28. I have used Lacey Baldwin Smith, *This Realm England*, 3rd ed'n. (Lexington, MA: Heath, 1976), ch. 4, and William B. Willcox and Walter Arnstein, *The Age of Aristocracy*, 4th ed'n. (Lexington, MA: Heath, 1983), chs. 3 and 9.

29. See J. H. Baker, *An Introduction to English Legal History*, 2nd ed'n.; (London: Butterworth, 1979), chs. 12 and 15. Not all peasants were so badly off. Those who held some sort of recorded legal title fared much better than those having only customary or copyhold estates. See Smith, pp. 71–72 and Baker, pp. 259–60.

30. See *Tudor England*, S. T. Bindoff (Harmondsworth, England: Penguin, 1950), pp. 22–24.

31. Willcox and Arnstein, p. 171. (Cited in n28, above.)

32. See n24 above.

33. Held says explicitly that she finds it morally problematic even if only the *relative positions* of the parties change due to the transaction, presumably because such change sacrifices equality. Thus, if A gains 2 units and B gains 1, each starting with O, this is relative inequality, though both are better off. Held finds such inequality objectionable. But she does clearly distinguish the case of change to relative inequality from the true zero-sum transfer, where one party is made absolutely worse off while the other party is made absolutely better off. Barry never explicitly confronts the problem of relative positions and inequality *per se*, although the general tenor of his discussion leads one to conclude that he would agree with Held that even relative inequality is objectionable.

34. The other signal example of a real-property paradigm with the zero-sum characteristics clearly delineated is in the work of Jean Jacques Rousseau. See "A Discourse on the Origin of Inequality," *The Social Contract and Discourses* (New York: E. P. Dutton, 1950), pp. 234–44. The real-property paradigm is still implicitly assumed in many contemporary discussions of property. See A. M. Honoré, "Property, Title and Redistribution."

35. The reader will note that we *do not* assume that all land is held in private hands. To make the Held-Barry picture of property accumulation at all plausible, we must assume that there is some land which is either held in common and subject to appropriation or genuinely unowned, in no one's title. That is why the enclosure movement is such a good example for their thesis. In fact, outside of cases of warfare and conquest (e.g., the Norman Conquest), it may be nearly the only example.

Note also, however, we *do not* assume that there is an *unlimited* amount of such land, as in Locke's state of nature or a true frontier. To take an acre of land in our case practically reduces what is left by an acre. To go back to Locke's example in the state of nature, (sec. 33, p. 333), it is *not* like taking a drink from a river.

In the more realistic case, where all land is in private hands, it is hard to see quite how illicit appropriation or accumulation occurs without unlawful force or fraud. Just where are these zero-sum conversions of property? This dearth of examples, in the most realistic case of a stable lawful order, constitutes a major point against the Held-Barry thesis. Perhaps they would make the move made by many critics of capitalism. That is: force and fraud are too narrow to capture the "real" ways that zero-sum conversions occur in capitalist societies. They might occur through subtle misrepresentation, manipulation of preferences, coercive offers, etc. Needless to say, the author would not agree, but a discussion would take us too far afield.

36. See Yew-Kwang Ng, *Welfare Economics* (New York: John Wiley and Sons, 1980), p. 188 and Robert Sugden, *The Political Economy of Public Choice* (New York: John Wiley and Sons, 1981), p. 23.

37. *Corpus Juris Secundum* defines property as (*inter alia*) ". . . . that dominion or indefinite right to use . . . generally to the exclusion of others." 73 *CJS*, 166. It holds further that an essential attribute of property is a "right of exclusion" which, it is frequently held, "may be exercised to the exclusion of all others, freely and without restriction." 73 *CJS*, 168–69.

Of the many, more theoretical, discussions of the legal conception of property ownership, one of the best is A. M. Honoré, "Ownership," *Oxford Essays in Jurisprudence*, A. G. Guest, ed., reprinted in Becker and Kipnis, eds., *Property* (Englewood Cliffs, NJ: Prentice-Hall, 1984), pp. 78–87. Honoré adduces eleven incidences of ownership. While the right to exclude is not one of them, it appears explicitly as a constituent of two: the right to possess and the right to security.

38. Ng, p. 187.

39. Economists may be as inclined to confuse these two things also. Compare Ng's definition of non-excludability of a public good with Jack Hirshleifer's in *Price Theory and Applications*, 3rd ed'n. (Englewood Cliffs, NJ: Prentice-Hall, 1984), p. 493.

40. See Roy Andrews Brown, *The Law of Personal Property*, 2nd ed'n.; (Chicago: Callaghan and Co., 1955), p. 13, and Crossley Vaines, *Personal Property*

(London: Butterworth, 1967), pp. 12–16. We now have introduced two pairs of legal terms referring to property:

<i>Real</i> land	<i>Personal</i> all other
<i>Tangible</i> corporeal and subject to physical dominion	<i>Intangible</i> incorporeal and abstract

All real property is tangible. Personal property comes in both tangible and intangible forms.

41. In patent law, ideas generally—especially purely abstract ideas and scientific principles—are not patentable. For an idea to be subject to patent protection it must incorporate a “product or a process.” That is, it must contain its own practical application. See Arthur Miller and Michael Davis, *Intellectual Property* (St. Paul, MN: West Publishing, 1983), pp. 18–19. We use this restricted notion of an “idea” in what follows.

It is interesting that A. M. Honoré in “Property, Title and Redistribution,” uses, as his example of property, the idea (and invention) of a fishhook in a primitive society. However, at no time does he discuss the crucial, logical differences between this kind of property and the real-property paradigm, much less the moral consequences which flow from those differences. He treats an idea exactly as if it were an example of the real-property paradigm.

42. This is, of course, not creation *ex nihilo* in the physical sense, for that would violate the law of conservation of energy (and perhaps the second law of thermodynamics). But it is surely creation *ex nihilo* in the sense of economic value.

43. This refers to transfinite arithmetic and the lowest order of infinity—namely, denumerable or countable infinity within that theory. A set is countable if it can be put in one-to-one correspondence with the natural numbers. Aleph zero, or the set of natural numbers, does not behave as does a finite number. Subtracting a finite number, here 17, from a denumerably infinite set does not change the number in the set. It is still denumerably infinite, i.e., the same size as the set of natural numbers.

44. *International News Service vs. Associated Press*, 248 U.S. 215 (1918).

45. While this last line is literally true, the reader must not underestimate the magnitude of the concession I make here to Held and Barry. There is a very real sense in which the uses to which tangible property can be put are unlimited. There is also an apparently unlimited number of ways in which tangible property can be blended, assembled, and reassembled to make new artifacts. All of this is guided by human ideas and human invention informing matter with value and use. All tangible property but the rawest of raw material is as much intellectual as physical property. This would include even plant and animal material which is the product of selective breeding. Maize, as raised today, is as much an artifactual product of human reason as is the automobile tire or the microprocessor. Indeed, both Ellen Frankel Paul and Israel Kirzner (in somewhat different ways) see the value we put upon *any* physical thing, however unimproved, as a human creation of mental process, so that *anything* which we designate as property is already human creation. See Ellen Frankel Paul,

Property Rights and Eminent Domain, pp. 224–39 and Kirzner, “Entrepreneurship, Entitlement and Economic Justice,” in *Reading Nozick*, ed. Jeffrey Paul (Totowa, NJ: Rowman and Littlefield, 1981).

I would add to their view that there is an unlimited feature of tangible property or that, if limited, it is only by the amount of matter in the universe. Still, there is a limitation on the creation of tangible property not existing upon intellectual property. I cannot go into my studio to sculpt a statue without stone (or some other material). The ownership of the stone is, at least, an issue. I take nothing when I go into my study to concoct an idea. There is no analogue of the stone, the title to which could be contested.

46. Keep in mind that such abstract, intangible property is represented not only by the common stock of corporations (and shares of partnerships) but by all evidences of the existence of indebtedness (or its availability) as well. These would include credit cards, personal checks, checking accounts, savings accounts, and promissory notes and bonds, including those of governments as well as corporations. Indeed, it includes paper currency. In modern capitalist economies, far more wealth is represented by such abstract intangible property than by all tangible property, both real and personal.

47. I have assumed that the entrepreneur has put no capital of his own into the business. This is simply for accounting convenience. However, it might be objected that this makes availability to entrepreneurial opportunity, and thus capitalist social justice, seem more fairly distributed than it really is. Three points should be made in rejoinder. First, starting a business without initial capital is not all that uncommon, especially where a bank knows the entrepreneur and his record of skill and reliability. In our example, perhaps our entrepreneur has worked many years for a successful hot-dog stand owner and has a record of managerial success. Remember also, the bank does not just give the entrepreneur a line of credit without security. It takes liens on his working capital (here, hot-dogs, buns, etc.) which secure the loan. Second, many small and relatively poor entrepreneurs can make some small amount of capital available through savings, personal borrowings, etc. Third, there is a vigorous venture-capital market available for entrepreneurs, at least in the United States. Of course, none of this obviates the fact that the rich have more access to capital than the poor, but it must ameliorate it to some extent. For probably half of the most successful entrepreneurs are self-made women and men who started on a shoestring.

48. Those versed in finance will notice that I have tacitly assumed that the market value of the business is identical with its book or accounting value. This is, of course, not always the case, but the assumption is harmless here.

49. Professor Hillel Steiner has pointed out in private correspondence that there is a potential inconsistency with my thesis in this “entrepreneurial success story.” In a purely competitive market, profit will tend to fall to zero. It is perhaps avoided here by the fortunate location the hot-dog vendor has chosen, giving him a sort of local monopoly. However, if this is true, the Proviso is violated for lack of a frontier, i.e., similarly fruitful entrepreneurial opportunities are finite and fixed in number. It is those finite opportunities which are zero-sum in character.

This is a trenchant point, one which I don’t have the space to answer completely. Indeed, candor requires that I admit that I am not sure that I *can* fully answer it. It surely deserves far more thought. However, a first pass at an answer is available.

To be sure, in any one market, at any one time, such temporary local monopolies and other bottlenecks (e.g., curable inefficiencies, etc.) are practically finite. Thus, among hot-dog stands in this area, this location might constitute a zero-sum opportunity. But over all markets and long periods of time, it is not clear that such opportunities are practically finite. Thus, if I am a would-be entrepreneur I have, in principle, available to me all possible entrepreneurial opportunities, a number which is at least indefinitely large, if not infinite. This sounds like an Austrian conception of the market as process and of the entrepreneurial function. To some extent it is. It is influenced by Hayek, Schumpeter, and Kirzner but also by Knight and Stigler, who are not Austrians.

See, for example, F. A. Hayek, "Competition as a Discovery Procedure," in *New Studies* (Chicago: University of Chicago Press, 1978), pp. 179–90; Israel Kirzner, *Perception, Opportunity and Profit* (Chicago: University of Chicago Press, 1979), chs. 1, 2, 3—and especially ch. 6, and *Discovery and the Capitalist Process*, chs. 2, 3, and especially 4; Frank Knight, *Risk, Uncertainty, and Profit*, (Chicago: University of Chicago Press, 1971), chs. VII and IX; G. J. Stigler, "Imperfections in the Capital Market," *Journal of Political Economy*, vol. 75 (June, 1967), 287–92.

One further way of answering Steiner is that profits tend to fall to zero only in the neoclassical or general equilibrium model. It is precisely the *dynamic*, discovery-oriented nature of the market which prevents this from happening. This is a key lesson the Austrian economists have to teach us. For our hot-dog vendor, this means that he will not continue to succeed unless he seeks more opportunities to modify or change his business and, thus, retain its profitability.

50. See note 26, above, on the relation of this sort of property to the theory of subjective value as compared to an objective theory of value and a zero-sum conception of economic transactions.

51. This presentation utilizes a very simplistic, but here untroublesome, analysis of exchange, using the antedated notions of use value and exchange value and presupposing the interpersonal comparison of utilities. It is more technically proper to deal with exchange using more advanced notions from microeconomics. Exchange is often explicated in terms of consumer and producer surplus. See William J. Baumol, *Economic Theory and Operations Analysis*, 4th ed'n. (Englewood Cliffs, NJ: Prentice-Hall, 1977), pp. 496–500. Even more common is the use of the Edgeworth Box and contract curve. See Kenneth Boulding, *Economic Analysis*, 4th ed'n.; vol. I, (New York: Harper & Row, 1966), pp. 627–29. However it is handled, two points remain. First, there is an *exchange surplus*. Second, the exchange is *Pareto improving*. Thus (excepting the limit), both transactants share the surplus and are made better off.

Note also that I have concentrated exclusively on the *gains from trade*. There may as well be *productive efficiencies*, which will contribute to the transaction surplus, providing our hot-dog entrepreneur with wealth and therefore property not taken from others (including his customers). Indeed, if competition drives the price of hot-dogs down, it will be the customers, not the entrepreneur, who will be the primary beneficiaries of his productive efficiency.

52. This identification of "net worth" with "retained earnings" is possible in our example only because the "initial capital" or "capital stock" with which our entrepreneur began was equal to zero. Remember, he contributed none of his own money. Had he done so, "net worth" would equal "initial capital" plus "retained earnings."

53. One crucial disclaimer is in order. Nothing in the argument contained herein constitutes a sanction for a notion of the absolute ownership of property thus created by the individual who created it. The individual (or individuals) who created this property did so against a social background. They learned from their society. They had the protection of property and person necessary to engage in intellectual or entrepreneurial activities. This might well justify a partial claim by society upon the proceeds of such property. Indeed, our society does make such claims. In the patent case, the inventor holds the patent rights for a term of years, after which it belongs to all, i.e., it is "in the public domain". Moreover, royalty income is taxed as is any other income. In the business enterprise case, income from the business is taxed and so is the "capital gain" at the time the business is sold (or the appreciation in capital otherwise realized). Indeed, on top of that, many states have an "intangible property tax," directly taxing the property itself.

This theory, then, is consistent both with a strict libertarian notion of near-absolute property rights or one inclined to a more welfare capitalist model. But, if property is *created* in this way and, following Locke's Proviso, denies nothing to others in its creation, property rights must garner substantial new moral weight.