



MORE AND BETTER: Resources Defined Through Property and Exchange

By Art Carden

Department of Economics, Finance, and Quantitative Analysis
Brock School of Business
Samford University
800 Lakeshore Drive
Birmingham AL 35229
art.carden@gmail.com

Independent Institute Working Paper Number 81

May 5, 2017

ABSTRACT

Whether something is a “resource” emerges from its ability to satisfy wants, which in turn emerges from appropriation and exchange. Without taking an object out of the commons, assuming a right over it, and experimenting, we can’t know how much is “enough, and as good.” Appropriation brings objects into a knowledge-generating process that helps us know what “enough, and as good” means. Egalitarian objections to appropriation are also overstated in that the latecomers rather than the original appropriators are the ones who get to enjoy the cornucopia that a society based on private property and exchange has produced.

I am grateful to my colleague William Collins and our students in a Jan Term 2016 special topics course at Samford University for conversations and discussions that motivated this paper and to Michael Munger, James Otteson, David Schmitz, and participants in the “Future of Classical Liberalism” conference at the University of Chicago Law School in May 2016 for comments and suggestions. Seminar participants at Hampden-Sydney College, Geoffrey Lea in particular, also provided useful comments, and students in the 2017 version of the aforementioned Jan Term course provided useful comments as the final version of the paper neared completion. All errors are mine.

I. INTRODUCTION

John Locke’s famous principle of property acquisition by first-user appropriation came with a proviso specifying what had to be left for others. Some of Locke’s critics have suggested that the proviso—that one can withdraw an object from the commons as long as one leaves “enough, and as good” for others—is self-contradictory because to remove an object from the commons necessarily leaves less for others to appropriate. Appropriation and the ensuing social process creates abundance that does not impede another’s ability to obtain property. Furthermore, private property rights help us determine through experiment and exchange which objects are actually goods. Finally, rental income to land and natural resources is very small as a percentage of national income, so if there was an injustice in appropriation of rights by first users it is reflected in a very small share in national income today.

First-user appropriation does not merely leave “enough, and as good.” It contributes to a positive-sum process that generates “more, and better.”¹ First-user appropriation does more than this, though. By bringing objects into the realm of property and exchange, first-user appropriation contributes to a process by which we can determine whether or not an object is a *resource* in that we can identify ways to use it to satisfy wants. More important than the mixture of labor with objects withdrawn from the commons is the mixture of knowledge with those objects. Institutions encouraging voluntary cooperation and market exchange—classical liberal institutions—comprise a set of mechanisms that allow us to harness knowledge we ourselves do not have, stored in minds that are not ours, and acquired for purposes we do not ourselves know. The knowledge-harnessing capability of these institutions is rooted in private property. By drawing objects into the processes that make this possible, first-user appropriation specifically and property rights more generally fulfill Locke’s proviso that we must leave “enough, and as good.”

II. ORIGINAL APPROPRIATION LEADS TO MORE AND BETTER

Vernon Smith (2008, 17) defines “property” as “that over which an individual human, or association of humans, exercises some priority of action with respect to other humans.” There is a large and well-documented literature on how private property rights are essential for prosperity; indeed, Smith (2008, 18) writes as much, noting that

property rights are necessary for “self-sustaining economic development and the reduction of poverty.” Smith’s “priority of action” is similar to North’s (1981, 21) statement that “(t)he essence of property rights is the right to exclude.” Property rights are an essential element of economic freedom, and the literature on the salutary effects of economic freedom is summarized by Hall and Lawson (2014).

The study of property rights and how they develop is central to the problem of explaining economic change over time. North (1981, 21) put it this way:

For the economic historian, the key problems are to explain the kind of property rights that come to be specified and enforced by the state and to explain the effectiveness of enforcement; the most interesting challenge is to account for changes in the structure and enforcement of property rights over time.

I am attempting nothing so ambitious as a complete accounting for the emergence and development of property rights; I am exploring how one theory of property and how it is established—specifically, Locke’s notion of original appropriation—is defensible because it kickstarts the processes by which goods emerge and by which we achieve Smith’s “self-sustaining economic development and the reduction of poverty.”

Locke begins with the assumption that everything is owned in common, but survival requires that people withdraw objects from the commons and deploy them for their own purposes, the most rudimentary of which will be food and protection from the elements. John Locke defended appropriation of objects out of the commons and transformation of those objects into *property*:

Though the earth, and all inferiour creatures, be common to all men, yet every man has a property in his own person: this nobody has any right to but himself. The labour of the body, and the work of his hands, we may say, are properly his. Whatsoever then he removes out of the state that nature hath provided, and left it in, he hath mixed his labour with, and joined to it something that is his own, and thereby makes it his property. (Locke 1690, 145–46).

There is a (possible) catch, what came to known as the “Lockean proviso”:

...this labour being the unquestionable property of the laborer, 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” (Locke 1690, 146, emphasis mine).

At first glance, the proviso seems like a contradiction. The universe contains a finite number of objects, and to remove an object from the commons means fewer objects are available for others. Schmidtz (2011, 149) summarizes several claims that the Lockean proviso makes property appropriation logically impossible. As he explains, it seems obvious to many critics of the Lockean proviso that those who come first are the truly lucky ones, and their good luck comes at the expense of those who no longer have access to the resources-cum-property. “If we take something out of the cookie jar, we *must* be leaving less for others. This appears self-evident. It has to be right.” Schmidtz continues: “But it’s not right.”

Why not? Schmidtz makes the important point that private property turns zero-sum or negative-sum tragedies of the commons into positive-sum opportunities for exchange. Appropriation does more than leave “as much and as good.” It makes *more and better* possible by establishing clear rights to *exclude* others from the use of an object and, therefore, the need to persuade others through deliberation or exchange to use an object in a certain way.

One might object that as a matter of justice the first appropriator is luckier than the one who comes after. This isn’t obvious, however. There is certainly a degree of luck to the initial allocations of property in land and other objects found in nature, but the first appropriator is now “lucky” enough to be responsible with turning a (superficially) disordered and chaotic plot of ground into something conducive to want satisfaction. Those who get the property *first* are not necessarily the lucky ones. Property is not autonomously productive. To use the simplest example, land is a stubborn servant that must be carefully tended if it is to be kept clear of the briars, thorns, and weeds that get in the way of nutritious foodstuffs. Plants growing on land that has been cleared, fertilized, and tended still require careful attention lest they be devoured by pests.

Property is necessary for economic growth because of the incentives it creates.² A property owner has the right to exclude others from its use and, therefore, the right to exclude others from what that property can be used to produce. She has, in short, the right to exclude others from all future output accruing to a piece of land or other

asset and, therefore, incorporates into her decisions the actions she takes that might compromise the fertility of the property. She has a right to the net present value of what the property can produce and therefore has an incentive to augment rather than consume the property’s productive capacity to the greatest extent possible. Secure property rights convert the commons with its attendant tragedies into resources people have strong incentives to use wisely.

III. GOODS DEFINED IN THE PROCESS OF THEIR EMERGENCE

A turn toward liberty and a widespread embrace of free markets, private property, and voluntary exchange have created a cornucopia in the world’s richest countries, and the diffusion of these institutions globally has led to a large-scale global exodus out of extreme poverty, with the share of the world’s population living on less than \$2 per day falling from year to year.³ Property is not only important in that it has contributed to the cornucopia. It is also important in that it has helped us define the cornucopia’s contents. Appropriation more than satisfies Locke’s “enough, and as good” proviso because it allows us to define which objects are, in fact, actually *goods*.

The concepts of “enough” and “as good” require reference points. Enough—of what? As good—as what? “Enough” and “as good” have meaning with reference to individual wants, and it is by experience with objects withdrawn from the commons that we are able to ascertain the relationship between the objects’ attributes and our wants.

For the Lockean proviso to be logically impossible, something would already have to be identifiable as a resource before it is removed from the commons. An object is a resource if someone can use it to satisfy a want, but whether something is a resource or not is a function of human ingenuity, not the innate characteristics of the object (cf. Simon 1996). We take objects out of the commons on the expectation that they will be resources, and then trial and error shows us which objects are resources and which objects are not. Appropriation is not a barrier to “enough, and as good” for others. It initiates the process by which objects are defined as resources and goods—and the process by which we can learn what “enough” and “as good” mean.

A good, to adapt and combine definitions from Menger (1871) and Debreu (1954), is an object with physical,

temporal, and spatial characteristics suitable for the satisfaction of a want and available in sufficient quantity as to satisfy the want. In an abstract sense, objects in the commons can be defined in terms of their physical, temporal, and spatial characteristics—the what, when, and where of an object where the “what” is a description of its chemical structure and objectively measurable properties. For example, what we call “dirt” could be an amalgam of atoms and molecules of a given weight and taking up a specified amount of space with a location defined by a vector linking it to some stellar reference point. In the abstract, this is conceivable.

If we were armed with sufficient knowledge of chemistry and physics we could describe these properties of all objects in the universe. They would not, however, tell us anything useful about the relationship between the objects’ attributes and their suitability for satisfying wants. An object can only be a resource or a good if we have a reasonable expectation that it can be used to satisfy wants and if we are willing to consume time and treasure to obtain it. The relationship between an object’s attributes and want satisfaction is learned through experience, and by that experience the object comes to be defined as a good with reference to that experience. The appropriator learns from the experience and mixes this knowledge with the properties of the object in order to define it as a good with reference to his wants. Importantly, he need not know the physical, temporal, and spatial attributes of the good or the physical and chemical mechanisms by which it produces a particular effect when acted upon in a given way. He only has to believe that a good satisfies a want and be in a position to learn whether that belief is accurate, but that learning is crucial to defining an object withdrawn from the commons as a resource or a good.

Trial and error generates knowledge about the relationship between goods and want satisfaction. In our rudest states we want for food and protection from the elements, and hence we experiment by removing objects from the commons and asking “can I eat this?” and “will that protect me from the wind, the sun, and the rain?” Experience—sometimes very harsh experience—shows us which objects satisfy wants and which do not.

The idea that we know independent of experience and exchange the goods-character of objects in the commons is implicit in the objections to Locke’s notion of original appropriation discussed by Schmidtz (2011). As Buchanan (1982) wrote of order, the “good” is defined in the process of its emergence: appropriation, experi-

ment, and exchange together form a mechanism by which people ascertain an object’s capacity to satisfy wants. In this light, “enough” and “as good” are concepts embedded in social context. They are identified and given meaning as people appraise the objects they confront in the process of appropriation, experiment, and exchange.

As societies become more complex and as division of labor proceeds, we are able to refine our wants and move past our most basic needs for food and shelter. We cooperate with others, and as the division of labor proceeds and more transactions come to be mediated by market prices, our social experiments take the form of buying and selling while in principle revolving around the same question: “will this satisfy a want?” The wants are not as extreme—“will this cup of coffee provide me with more satisfaction than anything else I could get for \$2 at the moment?” is not as urgent a question as “will eating the berries on that bush keep me from starving?”—but the principles and processes surrounding their satisfaction are the same. We learn by trial and error.

Appropriation is a convenient mechanism for learning about and acting upon objects’ properties with minimal conflict. People enter the world with different skills that they can use to satisfy their preferences subject to scarcity (cf. Hume 1896, 514). Scarcity means that our ideas about what is to be done will almost inevitably come into conflict with one another as it is exceedingly unlikely that we will reach complementary conclusions about what is to be done with each object we encounter.

In addition to material and temporal constraints—there are only so many objects, and decisions and deliberation consume valuable time—we are bound by moral and cognitive constraints. “The qualities of the mind,” according to Hume (1896, 494), “are *selfishness* and *limited generosity*.” Hume’s friend Adam Smith (1759, 1776)—and almost two centuries later, F.A. Hayek (1948)—would emphasize the cognitive constraints. These unhappy imperfections are remedied by the fact that we can participate in society:

In man alone, this unnatural conjunction of infirmity, and of necessity, may be observed in its greatest perfection. Not only the food, which is required for his sustenance, flies his search and approach, or at least requires his labour to be produc’d, but he must be possess’d of cloaths and lodging, to defend himself against the injuries of the weather; tho’ to consider him only in himself, he is provided neither with arms,

nor force, nor other natural abilities, which are in any degree answerable to so many necessities.

'Tis by society alone he is able to supply his defects, and raise himself up to an equality with his fellow-creatures, and even acquire a superiority above them. By society all his infirmities are compensated; and tho' in that situation his wants multiply every moment upon him, yet his abilities are still more augmented, and leave him in every respect more satisfied and happy, than 'tis possible for him, in his savage and solitary condition, ever to become. (Hume 1896, 485)

Property and exchange are the stuff of a commercial society in which people are competing with one another for the privilege of using goods in the ways they see fit. As Smith emphasized at the beginning of *The Wealth of Nations*, the particular attribute of the kind of society in which, in Hume's words, "all his infirmities are compensated" and "his abilities are still more augmented" is the division of labor. Mises (1920) and Hayek (1945, 1948) would later show that a complex division of labor requires prices for—and therefore private ownership of—the means of production. Hayek (2002, 13) argues that "Which goods are scarce, however, or which things are goods, or how scarce or valuable they are, is precisely one of the conditions that competition should discover."

Prices emerge as substitutes for direct apprehension and experience as the division of labor deepens and grows more complex. People have different talents, tastes, expectations, and capacities for mental, physical, and moral effort. Economic rivalry, which Lavoie (1985, 22) defines as "the clash of human purposes," can be resolved in a system of private property rights as it helps us reconcile our different talents and tastes and negotiate our way to coordination of otherwise mutually-incompatible plans. It "is a necessary component of the entrepreneurial market process [that] leads to a beneficial coordinating process that makes complex capitalist production in a monetary system possible" (Lavoie 1985, 22). Competitive bids and offers for labor, consumption goods, capital goods, and natural resources capture people's ever-evolving beliefs and expectations about the wants that can be satisfied by using and combining objects that have been revealed as resources.

Smith (2008, 7) identifies an important problem with respect to how we theorize about social systems: "The personal knowledge that underlies specialization and exchange at any time is dispersed, private, and therefore

asymmetric in all social systems." The problem applies to how we theorize about property. Appropriation and exchange are processes whereby we identify heretofore undiscovered attributes of objects previously in the commons, but those attributes are context-dependent, emerging from their interaction with the "artifactual structure" they confront when removed from the commons.⁴ The attributes conducive to want satisfaction are revealed in experiment and exchange, and they are in this sense inseparable from the social process. Appropriation and exchange allow us to care for one another without necessarily caring about one another in more than an abstract sense. By economizing on knowledge and transmitting it through the price mechanism, property and exchange help us transcend our moral and cognitive limitations.

IV. APPROPRIATION SATISFIES EGALITARIAN CRITERIA

Is appropriation objectionable on the grounds that it reduces the range of potentially appropriable objects available to others? I don't think it is for several reasons. First, by bringing objects into the realm of exchange, appropriation leads to more and better; it doesn't simply leave "enough, and as good" (cf. Schmidtz 2011). Second, appropriation brings objects into a private property system that makes use of everyone's social knowledge without privileging the knowledge of a surrogate who arrives late on the scene. Third, we identify the relationships between objects' attributes and our wants via appropriation, experiment, and exchange. Continuing on, appropriation is defensible in other ways, as well.

Fourth, as Schmidtz (2011) points out, the appropriator is not the lucky one. The latecomer is. Eroding property rights erodes others' rights—the latecomers in particular—to benefit from one's use of property (Smith 2008, 17).

It is unclear what crime the first appropriator has committed against someone who shows up later and who was not "fortunate" enough to arrive on the scene before our ancestor's experience helped define the objects before him. The latecomer may not be able to appropriate his own land—hardly likely in our ancient past, however—but he benefits from the first appropriator's acquisition and use of property because he now has at his disposal all of our ancestor's knowledge embodied in the plants he is cultivating and the animals he is pasturing. He can harness this through exchange, which allows him to deploy our ancestor's knowledge—knowledge which the latecomer does not have—for his own purposes.

The latecomer has an opportunity to participate in a more extensive division of labor, and he had access to knowledge embodied in objects that was not available to the first appropriator and that, in fact, had to be created by that first appropriator and his trading partners. Someone who strikes oil while digging a backyard garden is fortunate because we now know the properties of oil conducive to want satisfaction. Someone who strikes oil while scratching the ground five hundred or a thousand or ten thousand years ago is not fortunate in the same way because, at the time, we had not yet discovered the characteristics of oil that make it valuable today. The first appropriator could make use of objects with at-the-time undiscovered properties. His descendants can make use of objects that embody the knowledge of the ages and that have become *goods*. If anyone is fortunate, it is the latecomer. He can deploy the wisdom of the ages. His ancestors had to create it.

Fifth, the initial distribution of land and natural resources does not, as such, matter that much as a determinant of national income. Moller (forthcoming) points out that the vast majority of income in the United States accrues to labor income, with rental income to land making up less than 5 percent of national income.⁵ Income accruing to ownership of natural resources *as such* is insufficient as a source of modern inequality. Moreover, the gains from industrialization went primarily to unskilled workers, not the owners of land and capital (Clark 2007, 230–258).

V. CONCLUSION

Locke's proviso that the property appropriator needs to leave "enough, and as good" is not the contradiction it seems. For reasons explored by David Schmidtz, appropriation converts a negative-sum war of all against all in the commons into a positive-sum game of cooperation and exchange. Second, it isn't at all clear what "enough, and as good" means apart from the experiments that emerge due to private property and exchange.

Property rights become especially important the more complex a society becomes and as the division of labor grows finer. When the size and scope of the market increase, the number of voices that have to be considered increases, as well, and it becomes even more difficult to identify the valuable attributes of goods and services without reference to prices formed in competitive markets.

That something is a "resource" is usually assumed by participants in debates over property rights, but for an object to be a resource we need to be able to identify ways in which it can be employed to satisfy wants. This can only happen when an object is removed from the commons and then subjected to trial-and-error processes of experiment and exchange. In short, property rights are prerequisites for the emergence of the knowledge required before we are to know whether something is or is not a resource.

Finally, appropriation is robust to egalitarian objections. The latecomer can take advantage of the knowledge obtained by the first appropriator and by all those who came before, and in a wealthier society in which the vast majority of national income comes from services, original appropriation does not appear to be an insurmountable barrier to those who wish to own land or other natural resources.

The future of classical liberalism as an intellectual program should explore the knowledge-generating properties of alternative property rights arrangements. As a political program, classical liberals should pursue reforms that bring more and more objects into the realm of private property and exchange so that they can be deployed in a process that makes maximal use of social knowledge. Private property is useful as a process characteristic when we consider the development of a Great Society, to borrow the language of Adam Smith. While individual situations might give us pause as to the degree to which we should have faith in others to use liberty and property wisely, the downstream consequences of interfering with individual choices—even bad ones—are difficult if not impossible to foresee.

REFERENCES

- Buchanan, James M. 1982. Order Defined in the Process of Its Emergence, in James M. Buchanan, David Gordon, Israel Kirzner, et al., "Readers' Forum, Comments on 'The Tradition of Spontaneous Order' by Norman Barry. Library of Economics and Liberty. Online: <http://econlib.org/library/Essays/LtrLbrty/bryRF1.html>>. Last Accessed May 6, 2016.
- Clark, Gregory. 2007. *A Farewell to Alms: A Brief Economic History of the World*. Princeton: Princeton University Press.
- DeBreu, Gerard. 1954. *Theory of Value*. New Haven: Cowles Foundation Monograph.

Hall, Joshua C., and Robert A. Lawson. 2014. Economic Freedom of the World: An Accounting of the Literature. *Contemporary Economic Policy* 32(1):1-19.

Hayek, F.A. 1948. *Individualism and Economic Order*. Chicago: University of Chicago Press.

Hayek, F.A. 2002. Competition as a Discovery Procedure. *Quarterly Journal of Austrian Economics* 5(3):9-23.

Hume, David. 1896 [1739]. *A Treatise of Human Nature*. Oxford: Clarendon Press.

Lavoie, Don. 1985. *Rivalry and Central Planning: The Socialist Calculation Debate Reconsidered*. Cambridge: Cambridge University Press.

Locke, John. 1824 [1690]. *Two Treatises of Government*. London: C. Baldwin.

McCloskey, Deirdre N. 2010. *Bourgeois Dignity: Why Economics Can't Explain the Modern World*. Chicago: University of Chicago Press.

Menger, Carl. 2007 [1871]. *Principles of Economics*. Auburn, AL: Ludwig von Mises Institute.

Mises, Ludwig von. 1949. *Human Action*. New Haven: Yale University Press.

Moller, Dan. 2017. Property and the Creation of Value. *Economics and Philosophy*, forthcoming.

North, Douglass C. 1981. *Structure and Change in Economic History*. New York: WW Norton.

North, Douglass C. 2005. *Understanding the Process of Economic Change*. Princeton: Princeton University Press.

Sala-i-Martin, Xavier. 2006. The World Distribution of Income: Falling Poverty and ... Convergence, Period. *Quarterly Journal of Economics* 121(2):351-397.

Schmidtz, David. 2011. The Institution of Private Property, in David Schmidtz and Elizabeth Willow, *Environ-*

mental Ethics: What Really Matters, What Really Works. New York: Oxford University Press. Reprinted in Jonathan Anomaly, Geoffrey Brennan, Michael C. Munger, and Geoffrey Sayre-McCord, eds. *Philosophy, Politics, and Economics: An Anthology*. New York: Oxford University Press, pp. 147-159.

Shleifer, Andrei. 2009. The Age of Milton Friedman. *Journal of Economic Literature* 47(1):123-135.

Simon, Julian. 1996. *The Ultimate Resource 2*. Princeton: Princeton University Press.

Smith, Adam. 1790. *The Theory of Moral Sentiments*. Library of Economics and Liberty. Online: <<http://www.econlib.org/library/Smith/smMS.html>>. Last Accessed May 6, 2016.

Smith, Adam. 1776 [1904]. *An Inquiry into the Nature and Causes of the Wealth of Nations*. Edwin Cannan, ed. Library of Economics and Liberty. Online: <<http://www.econlib.org/library/Smith/smWN.html>>. Last Accessed May 6, 2016.

Smith, Vernon. 2008. *Rationality in Economics: Constructivist and Ecological Forms*. Cambridge: Cambridge University Press.

ENDNOTES

1 cf. Schmidtz (2011).

2 McCloskey (2010) notes that while property rights are necessary for economic growth, they are not sufficient.

3 Sala-i-Martin (2008). See also Shleifer on “Age of Milton Friedman.”

4 The term “artificial structure” is from North (2005).

5 See the series “Rental Income of Persons” (without Capital Consumption Adjustment), available at <https://fred.stlouisfed.org/series/B049RC1A027NBEA>. Last accessed Thursday, February 16, 2017.