Contemporary Property Rights, Lockean Provisos, and the Interests of Future Generations

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Members of the current generation have property rights in the resources of the earth, but it may be that these resources will be needed by future generations whose currently nonexistent members cannot ask us to protect their interests. Clearly present property rights are morally significant. But how can the fundamental interests of future persons be weighed against current fundamental rights? The question is of immediate importance. Current environmental legislation often restricts individuals' right to develop property or to exploit resources. In Michigan, developers who legitimately own crucial wetlands regions have been denied the legal right to drain and build on their land. In Arizona, there is considerable pressure on the legislature to protect fragile desert ecosystems by prohibiting certain kinds of development. How can we measure the importance of current property rights against the interests of people who don't even exist yet?

Some theories imply that this is an easy question. Because rights have a special moral status, claims based on rights simply "trump" claims of need, utility, or interest.[1] And while it is arguable that future

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1. See, e.g., Ronald Dworkin, *Taking Rights Seriously* (Cambridge, Mass.: Harvard University Press, 1978); Judith Jarvis Thompson, *The Realm of Rights* (Cambridge, Mass.: Harvard University Press, 1990). See also Robert Nozick, *Anarchy, State, and Utopia* (New York: Basic, 1974); and Loren Lomasky, *Persons, Rights, and the Moral Community* (New York: Oxford University Press, 1987).

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persons have some rights,[2] it seems clear that they do not have current property rights, for they have no present opportunities to acquire special rights like the right to property.[3] But then what is the status of their claims on currently owned resources? The question, we will find, is not an easy one. In spite of the fact that future persons do not have property rights, they have morally significant claims on some resources owned by present persons, and these claims are at least as fundamental as the property rights with which they sometimes conflict. When conflict arises, current rights will not always take priority. I will argue that the status and validity of current property rights depends importantly on the way in which the institution of private property is likely to influence the welfare of future persons. To see why, we need to reconsider the genesis and the normative structure of our rights in crucial natural resources.

THE STRUCTURE OF PROPERTY RIGHTS AND THE PROBLEM OF INITIAL ACQUISITION

Since Hohfeld's pioneering work, it is widely recognized that rights are conceptually complex and can be analyzed into more basic constitutive elements.[4] To show that a person has a property right in an object it is first necessary to analyze the elements of property rights in general and to articulate the more basic normative relations that constitute such rights. Then an independent argument must be given in support of each of these basic relations. Fortunately, we need not start at the very beginning of this process, since there is wide agreement on many of the fundamental constituents of property rights.[5] In a recent article,

2. It has sometimes been argued that they do not. See Richard T. DeGeorge, "The Environment, Rights, and Future Generations," in *Ethics and the Problems of the 21st Century,* ed. K. E. Goodpaster and K. M. Sayre (Notre Dame, Ind.: University of Notre Dame Press, 1979); Hillel Steiner, "The Rights of Future Generations," in *Energy and the Future,* ed. Douglas MacLean and Peter G. Brown (Totowa, N.J.: Rowman & Littlefield, 1983); and of course Derek Parfit, *Reasons and Persons* (New York: Oxford University Press, 1984).

3. The law of inheritance and the law of contingent remainders may seem to contain exceptions to this rule: one might make provisions in a will for children or grandchildren if any. But those named in wills do not now own what they may later inherit.

4. W. N. Hohfeld, *Fundamental Legal Conceptions as Applied in Judicial Reasoning* (New Haven, Conn.: Yale University Press, 1919).

5. The famous analysis by A. M. Honoré, "Ownership," in *Oxford Essays in Jurisprudence,* ser. 1, ed. A. G. Guest (Oxford: Clarendon, 1961) was preceded by Henry Sidgwick, who argues in chap. 5 of *The Elements of Politics* (London: Macmillan, 1908) that property rights include the right to use, to exclude others from using, to deteriorate or destroy, and to alienate. Honoré's analysis has been expanded and defended by Laurence Becker in *Property Rights: Philosophical Foundations* (New York: Basic, 1977), and "The Moral Basis of Property Rights," in *Nomos XXII: Property,* ed. Roland J. Pennock and John W. Chapman (New York: New York University Press, 1980) as well

Stephen Munzer provides a concise list. According to Munzer, property rights include "claim-rights to possess, use, manage, and receive income, powers to transfer, waive, exclude, and abandon; liberties to consume or destroy; and immunity from expropriation without compensation."[6] In addition to the elements listed by Munzer, Honoré and Becker both include absence of term, a prohibition on harmful use, liability to execution for debt, and residuary rules governing the reversion of abandoned property.[7] Of course, not all property rights include all of these claims, liberties, powers, liabilities, and immunities. Some property claims are far less extensive than rights of full-blown ownership.

All property rights, however, include claims against interference: the "liberties to use and possess" an object cannot constitute a property right unless they are accompanied by claims against the interference of others. This exclusive feature of property rights was clearly articulated by Locke, who notes that the legitimate assertion of a property right to what previously was owned communally "excludes the common right of other men."[8] Kant and Sidgwick, despite their important differences, both regarded this exclusive claim against interference as the essential element of property and ownership.[9] Some writers have assumed that the exclusive aspect of property rights is universal and unconditional. That is, it embodies a claim against all others and the priority of this claim in no way depends on the circumstances in which it is asserted. Such absolute negative rights sometimes play a foundational role in libertarian conceptions of justice.[10] As I hope to show, these assumptions cannot survive careful analysis. To see why, we need to reconsider the genesis of property rights and the influential theory of John Locke.

The main lines of Locke's theory of appropriation are familiar: individuals have property rights in their own bodies, which impose duties of noninterference on others. Self-ownership is supposed to

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as by Stephen R. Munzer, *A Theory of Property* (Cambridge: Cambridge University Press, 1990), esp. pp. 22–27.

6. Stephen Munzer, "Kant and Property Rights in Body Parts," *Canadian Journal of Law and Jurisprudence* 6 (1993): 320.

7. Becker, "The Moral Basis of Property Rights"; and Honoré.

8. John Locke, *Two Treatises of Government,* ed. Peter Laslett (New York: Cambridge University Press, 1963), p. 329.

9. Kant writes, "Something *external* would be mine only if I may assume that I could be wronged by another's use of a thing [without my consent] even *though I am not in possession of it.* (*The Metaphysics of Morals,* trans. Mary Gregor [Cambridge: Cambridge University Press, 1991], p. 68). In *The Elements of Politics,* Sidgwick writes, "It is not, however, the mere right of unhampered use which constitutes the most essential element in the Right of Property, as commonly conceived: but the right of *exclusive* use" (p. 68).

10. For example, Nozick.

imply ownership of one's labor, so when people "mix" their labor with external objects, they acquire valid claims to property.[11] Few accept this account without serious reservations. There have been objections to the notion of self-ownership as well as Locke's claim that private property rights arise when one mixes one's labor with things in the commons. About the former, Proudhon writes "to tell a poor man that he has property because he has arms and legs . . . is to play upon words, and to add insult to injury."[12] And regarding the latter, Nozick suggests that mixing what we own with what we don't might as easily be a way of losing property rather than gaining it.[13] John Sanders suggests that Locke's "labor mixing" criterion may be as arbitrary as the suggestion that "one justly acquires title to whatever land one can cover with little chocolate Easter-bunnies."[14] As the subsequent discussion should make clear, I believe that these critics overlook important features of Locke's own argument. It is not my primary purpose here to defend Locke from his critics but to gain an understanding of the elements of property and legitimate acquisition. However, I hope that the view articulated here is "Lockean," in that it grows from defensible elements of Locke's own theory.

According to Locke, two additional conditions govern legitimate appropriation by labor mixing.[15] First, a person may not rightly appropriate more than she can use before it spoils. This prohibits, for example, hoarding ripe tomatoes and allowing them to rot. Second, appropriation by labor mixing is justified when "enough and as good" is left for others. For our purposes here, it is the second condition which is crucial, and I shall refer to it simply as "the proviso." Locke includes

11. See esp. Locke, *Second Treatise of Government,* pp. 328–29.

12. P. J. Proudhon, *What Is Property?* (New York: Howard Fertig, 1966), p. 61 (cited in Judith Jarvis Thompson, "The Labor Theory of Property Acquisition," *Journal of Philosophy* 73 [1976]: 664–66). For further discussions of self-ownership, see John Christman, "Self-Ownership, Equality, and the Structure of Property Rights," *Political Theory* 19 (1991): 28–46.

13. "If I own a can of tomato juice and spill it into the sea so that its molecules (made radioactive, so I can check this) mingle evenly throughout the sea, do I thereby come to own the sea, or have I foolishly dissipated my tomato juice?" (Nozick, p. 175).

14. John Sanders, "Justice and the Initial Acquisition of Property," *Harvard Journal of Law and Public Policy* 10 (1987): 390–91.

15. 'Appropriation' is sometimes used to mean "the assertion of a property claim" and at other times used in a normative sense to mean "the assertion of a valid property claim." When the term is used in the latter sense, to say that 'acts of appropriation yield property rights' will be tautological, and the question of "justified" or "unjustified" appropriation does not arise. As I use the term, however, I stipulate that appropriation (the assertion of a property claim) may be justified or not, depending on whether the claim is valid or not. If not, no property rights are created by appropriation. I believe that this usage comports well with natural language usage, though others may adopt a different convention.

the proviso in the first statement of his labor theory of property acquisition. He writes: "Whatsoever then [one] 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*. . . . For this *labor* 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 for others.*"[16]

Here, as elsewhere in the *Second Treatise,* Locke includes the proviso almost as an afterthought.[17] The central point is the highly questionable argument from self-ownership. While the proviso is often interpreted as a necessary condition for legitimate appropriation, the context here implies that Locke regards its satisfaction as sufficient, not necessary, for appropriation by labor mixing: such appropriation is *at least* justified when the proviso is satisfied.[18] But if we understand the proviso as sufficient rather than necessary, we find that important portions of Locke's argument can be defended against many common counterarguments. "Mixing labor" with an unowned object creates at best a prima facie claim on that object, and some have argued that claims that arise in this way will be relatively weak. Such a claim can be defeated or rebutted only by another's comparable competing claim. It is not simply that an appropriator has mixed labor with an object—by itself, that might have little more relevance than covering the property with chocolate Easter bunnies. Nor is it simply that labor adds value to things removed from the commons, though Locke also makes this claim. On the most plausible interpretation of Locke's theory, labor mixing is neither necessary nor sufficient for legitimate appropriation. Mixing labor with an object merely supports a presumptive claim to appropriate. The proviso functions to stipulate conditions in which this presumptive claim will be undefeated, or overriding, and will therefore impose duties of noninterference on others. But Locke's proviso stipulates only one possible set of circumstances in which the presumptive claim to appropriate will be undefeated, and Locke leaves open the possibility that there may be other such circumstances.[19]

16. Locke, *Two Treatises of Government,* p. 329; emphasis added.

17. See also ibid., p. 333.

18. Locke writes that appropriation by labor mixing is justified "at least where there is enough and as good left for others" (ibid., p. 329). I submit that 'X at least where Y' is properly read 'Y is a sufficient condition for X.' One reason to regard the proviso as a sufficient rather than a necessary condition is that this interpretation is consistent with Locke's text. Another reason is, as I hope to show, that this interpretation yields a more plausible understanding of Locke's theory.

19. For example, on this view it is open to Locke to argue that appropriation that fails to leave enough and as good for others might still be justified if there is simply not enough *tout court* or if appropriation is necessary for self-preservation. While my understanding of Locke's proviso is different from Jeremy Waldron's, Waldron also has

Thus the proviso is sufficient, not necessary for appropriation by labor mixing or by any other process that supports a comparably weighty prima facie claim. An example may clarify this:

> *Two children:*—Two children are alone in an endless sea of identical, unowned or commonly owned marbles. Each needs a limited number of shiny marbles, but those underfoot are dull. The first child picks up one among the innumerable marbles underfoot and polishes it on her sleeve, so that it shines. Seeing the shiny marble in his companion's hand, the second child snatches it from her and puts it in his pocket.

Is this a robbery? Only if the second child had an obligation to respect the appropriation of the first. But in the circumstances described here, what legitimate reason could this second child have for grabbing the marble his companion shined, rather than picking up another and shining it himself? If polishing the marble improved it, then snatching it away deprived the first child of the fruits of her labor. If the labor made the marble worse,[20] or did not improve it, then only jealousy or spite could provide a reason for snatching it away. In neither case does the second child have a prima facie claim capable of overriding the first child's weak presumptive claim, based on the fact that she "mixed her labor" with it, and perhaps on the mere fact that she has it in her hand. Labor mixing creates at best a weak, presumptive claim to the object with which labor is mixed, but satisfaction of the proviso is sufficient to validate such a claim since it guarantees that no one else will have a competing claim strong enough to override or defeat this presumptive claim. If one has an undefeated prima facie claim to an object, one has a right to it.[21] So when the proviso is satisfied, such a claim constitutes a legitimate property right.

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argued that Locke's text provides no basis for the common view that the proviso represents a necessary condition for justified appropriation (see "Enough and as Good Left for Others," *Philosophical Quarterly* 29 [1979]: 319–28).

20. In *Anarchy, State, and Utopia,* Nozick imagines a person "spraying pink enamel paint on a piece of driftwood" (p. 175).

21. For discussion and defense of this conception of 'right,' see esp. Joel Feinberg, *Rights, Justice, and the Bounds of Liberty: Essays in Social Philosophy* (Princeton, N.J.: Princeton University Press, 1986), and *Freedom and Fulfillment: Philosophical Essays* (Princeton, N.J.: Princeton University Press, 1992). An important paper by George Rainbolt gives powerful arguments in favor of a similar conception. See his "Rights as Normative Constraints," *Philosophy and Phenomenological Research* 53 (1993): 93–111. This conception of rights is not universally accepted, and some have argued that Locke's conception of rights is stronger (and more contentious) than this conception. See, e.g., James Tully, *A Discourse on Property* (Cambridge: Cambridge University Press, 1980); and Joseph Raz, "Right Based Moralities," in *Theories of Rights,* ed. J. Waldron (Oxford: Oxford University Press, 1984). The best discussion of this problem may be in A. John Simmons's recent book, *The Lockean Theory of Rights* (Princeton, N.J.: Princeton University Press, 1990), chap. 2. Locke provides no analysis of the concept of a 'right', and it would be presump-

The argument from labor mixing is among the most widely criticized and widely repudiated features of the Lockean view.[22] But on this reading of the Lockean theory, the significance of labor mixing is negligible. The only role labor plays is to support a presumptive property claim (in this case it may be a rather weak one) on behalf of the appropriator. It is arguable that a presumptive claim of this sort (though perhaps an even weaker one) is created by mere physical possession; perhaps even covering an object with chocolate Easter bunnies would create a weak presumptive claim of some sort, though once again, such a claim might easily be overridden by others' competing claims. Locke himself hints at a range of other possible grounds for a presumptive claim to appropriate, including basic need, mutual benefit, tacit consent, added value, and even an argument from hypothetical rational consent.[23] The function of the proviso is merely to stipulate conditions under which presumptive claims created by labor mixing are not overridden by the competing claims of others.

But even if one agrees that Locke's proviso merely guarantees that others will not have a competing claim of overriding significance, it is still not clear that the proviso is a reasonable limitation on initial appropriation. For the earth is finite: we do not live in an endless sea of unappropriated goods waiting to have labor mixed in. Is it possible to appropriate land or other goods in the real world, and still to leave enough and as good for others? Locke seems to have thought so. Further, his reason for thinking this seems to have been a false belief that the world is far too extensive ever to be fully exploited by its human population: "For he that leaves as much as another can make use of, does as good as take nothing at all. No body could think himself injured by the drinking of another man, though he took good drought, who had a whole river of the same water left him to quench his thirst."[24] At any point in time, a river carries a finite amount of water, but the amount of water one might drink is just insignificant. There is effectively the same amount left after appropriation as before. But

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tuous to attribute to him the conception of rights as undefeated prima facie claims. However, I can find no instance in his work where the use of the term 'right' is not consistent with this conception.

22. See Sanders; Nozick; and Jeremy Waldron, *The Right to Private Property* (Oxford: Oxford University Press, 1990), chap. 6. But for a recent defense of the labor-mixing criterion, see Stephen Munzer, "The Acquisition of Property Rights," *Notre Dame Law Review* 66 (1991): 661–86.

23. Regarding 'basic need' as supporting a presumptive claim to appropriate, see secs. 27, 28, and 30 in the *Two Treatises of Government,* where Locke urges that exclusive private appropriation must be possible, else we would "starve, notwithstanding the plenty God had given." For somewhat more ambiguous references to mutual benefit and tacit consent, see secs. 36, 37, and 50.

24. Ibid., p. 21.

is it possible that Locke could have believed that the same analogy applied to land? Infamously, Locke writes: "I dare boldly affirm, that the same rule of propriety, (viz.) that every man should have as much as he could make use of, would hold still in the world, without straitening any body; since there is land enough in the world to suffice double the inhabitants."[25]

Locke seems to have believed that the amount of land in the world was so extensive that we could never use it all. But it is far from clear that Locke's pronouncement is still true of our world, if indeed it could ever have been true. Since the earth is finite, any appropriation at all makes the sum total of unappropriated land smaller, so there is less for others to appropriate. This leads to a "zipper" argument, which threatens to undermine the possibility that the conditions of the proviso could ever obtain, since eventually there will be no way to leave "enough and as good" for others. The ultimate illegitimacy of later appropriation "zips back" to make the first act of appropriation similarly illegitimate. Nozick's version of this argument is perhaps the most familiar:

> Consider the first person Z for whom there is not enough and as good left to appropriate. The last person Y to appropriate left Z without his previous liberty to act on an object, and so worsened Z's situation. So Y's appropriation is not allowed under Locke's proviso. Therefore the next to last person X to appropriate left Y in a worse position, for X's act ended permissible appropriation. Therefore X's appropriation wasn't permissible. But then the appropriator two from last, W, ended permissible appropriation, and so, since it worsened X's position, W's appropriation wasn't permissible. And so on back to the first person A to appropriate a permanent property right.[26]

Since there will be some point after which appropriation would not leave enough for others, no initial appropriation is consistent with the proviso. But if no initial appropriation was justified, then our actual claims, as descendants of prior illegitimate takings, cannot be justified either. The problem may be even worse than Nozick recognizes when we consider how many "others" there are for whom enough and as good must be left: "Is it just the presently living members of your society? All presently living people? Why one choice rather than another? What about future generations? Perhaps there is no need to consider the unborn, . . . but this position requires some defense if justice demands that other people be left 'enough' land after you have mixed your labor with some of it. What possible argument could at

25. Ibid., sec. 36, p. 335.
26. Nozick, p. 176.

the same time require that the present generation have scruples about leaving enough for one another while shrugging off such concern for future generations?"[27] According to John Sanders, author of this quote, there are no good reasons for excluding future generations from the class of persons the proviso protects. The strongest argument in favor of the proviso is that it is necessary if initial appropriation is to avoid unjustifiably harming others. Since future generations are among those who might be harmed, justified initial appropriation must leave enough and as good for them as well.[28] But the proviso was already in trouble without this additional strain. If, as Nozick's argument suggests, it is impossible to leave enough and as good for a finite number of currently existent persons, how can we possibly hope to leave enough and as good for a potentially infinite number of future persons as well? Sanders believes that this will be impossible. He argues that there are no good reasons for excluding future persons from the protection of the proviso, but no way to satisfy the proviso if future persons are included. On this ground, he argues that the proviso is too stringent a requirement. We have no alternative but to abandon it altogether.

REHABILITATING THE PROVISO

At this point, prospects for a Lockean theory of property may seem grim. However, the arguments considered so far fail to recognize two important features of the institution of private property. The first of these is that appropriated resources may be productive. If I use what I appropriate in a way that produces benefits for others, then they may be better off than they would have been otherwise. Cultivated land is usually more valuable to nonowners than it would be if it were left uncultivated. Locke clearly recognized this. He writes, "Let me add, that he who appropriates land to himself by his labour, does not lessen, but increase the common stock of mankind: for the provisions serving to the support of human life, produced by one acre of inclosed and cultivated land, are (to speak much within compass) ten times more than those which are yielded by an acre of land of an equal richness lying waste in common."[29] When those who appropriate real-

27. Sanders, p. 377. Sidgwick explicitly considers what might be necessary to protect future generations from current appropriation (see chap. 5, secs. 2–3).

28. I note in passing that my discussion here skirts Derek Parfit's nonidentity problem, discussed in *Reasons and Persons,* p. 351. For lack of space, I must assume here that future persons can, *pace* Parfit, be harmed by our present behavior. Fortunately, few accept Parfit's important arguments, though many find them perplexing. For a response to Parfit, see Mathew Hanser, "Harming Future People," *Philosophy and Public Affairs* 19 (1990): 47–70.

29. Locke, *Second Treatise of Government,* p. 336.

ize profits from using appropriated land, they may be able to compensate others whose interests may have been set back by the initial appropriation of common resources. Provided that what nonappropriators get in compensation is enough, and is as good as what was initially appropriated, it may be possible to satisfy even the strictest interpretation of the proviso. If, as seems plausible, there are circumstances in which the commons is less efficiently productive than private enterprise, then there may well be circumstances in which appropriation and production is the only way to insure that others will have enough.

The second feature is that appropriation and propertization may sometimes encourage conservation. When resources are unowned or held in common, conservation and preservation may be impossible since it may be individually rational for each to get maximal advantages before the commons is destroyed. This is the "tragedy of the commons," described by Garrett Hardin, and it really is just a special application of the problem of public goods.[30] David Schmidtz cites a poignant example:

> The coral reefs of the Philippe and Tongan islands are currently being ravaged by destructive fishing techniques. Where fishermen once used lures and traps, they now pour bleach (i.e., sodium hypochlorite) into the reefs. Partially asphyxiated, the fish float to the surface and become easy prey. Unfortunately, the coral itself suffocates along with the fish, and the dead reef ceases to be a viable habitat. ("Blast fishing," also widely practiced, consists of using dynamite rather than bleach.) What goes through the minds of these fishermen as they reduce some of the most beautiful habitats in the world to rubble? Perhaps some of them think, quite correctly, that if they do not destroy a given reef, it will shortly be destroyed by someone else, so they might as well be the ones to catch the fish.[31]

All would be better off, Schmidtz observes, if no one practiced blast or bleach fishing, since then the reefs would remain a sustainable environment for the fish all islanders need. But since the reefs are being ravaged anyway, each individual has the strongest motive to get as much as she can before they are gone. Unfortunately, the best way to do this is to blast or bleach the reefs oneself. Unless something changes, there will soon be no reefs left for later generations, whose members will be unable to support themselves in the traditional ways. Nor will the reefs be there to attract an economy of tourism to the islands, cutting off yet another potential benefit.

30. Garrett Hardin, "The Tragedy of the Commons," *Science* 162 (1968): 1243–48, and also *Living within Limits* (Oxford: Oxford University Press, 1993).

31. David Schmidtz, "When Is Original Appropriation Required?" *The Monist* 73 (1990): 504–18; p. 513.

The underlying problem, Schmidtz argues, is that no one has private property rights in the reefs, and because of this, no one has a special interest in protecting them. The incentive structures that exist in the context of commonly owned and unowned resources may explain, as another writer puts it, why "whales and turtles, but not herefords and hogs, are becoming extinct."[32] It may be that the only way to protect the Tongan reefs is to institute property rights in them, so that individual owners will be motivated to protect their holdings. And perhaps the only way to insure that future generations will have "enough and as good" is to protect the reefs in this way. In such cases, Schmidtz claims that appropriation is not only permissible, but obligatory, since it is necessary to protect the interests of future generations.[33]

THE PARETIAN INTERPRETATION

These observations indicate that some appropriation will leave others no worse off. Since the proviso is intended to protect people from the appropriation of others, this suggests an alternative version of the proviso: perhaps appropriation is justified provided that no one is made worse off by it. This has seemed to many the most plausible way to develop a reasonable Lockean theory. Appropriation that makes no one else worse off seems harmless and inoffensive—if no one needs to be protected from such appropriation, it seems uncontroversial to present this requirement as a sufficient condition for appropriation. This interpretation has at least some support from Locke's text as

32. David Johnson, *Public Choice* (London: Mayfield, 1991), p. 304. Also "The Tragedy of the Oceans," *Economist* 330 (March 19–25, 1994): 21–24.

33. Schmidtz develops an increasingly sophisticated account of this in "When Is Original Appropriation Required?" *The Limits of Government* (Boulder, Colo.: Westview, 1991), and "The Institution of Property," *Social Philosophy and Policy* 11 (1994): 42–62. Under some circumstances, public ownership might be capable of accomplishing the same goals. But see Robert Taylor, "Economics, Ecology, and Exchange: Free Market Environmentalism," *Humane Studies Review* 8 (1992): 1–8 for arguments that they cannot. Advocates of "free market environmentalism" have argued, with uneven success, that private ownership will always be the best way to protect resources for the future. See Richard Epstein, "Justice across Generations," in *Justice between Age Groups and Generations*, ed. Peter Laslett and James Fishkin (New Haven, Conn.: Yale University Press, 1992); and Terry Lee Anderson and Donald R. Leal, *Free Market Environmentalism* (Boulder, Colo.: Westview, 1991). But see also Herman Daly's review "Free-Market Environmentalism: Turning a Good Servant into a Bad Master," *Critical Review* 6 (1992): 171–83; and papers by Michael C. Blumm ("The Fallacies of Free Market Environmentalism," pp. 371–90); and Peter S. Menell ("Institutional Fantasylands: From Scientific Management to Free Market Environmentalism") in a recent symposium in the *Harvard Journal of Law and Public Policy* 15 (1992): 489–510. In "Markets, Environmental Goods, and the Interests of Future Generations," in the forthcoming *Ethics and the Environment*, vol. 1 (1996), in press, I argue that free market policies are unlikely to be adequate to protect the interests of future generations.

well: Locke clearly thinks that appropriation is justified when it will not "straiten" anyone.[34]

In this vein, Geoffrey Miller argues that justified initial appropriation is a two-step process.[35] First, each person's justified initial appropriation is limited to her pro rata share. That is, for a state of nature populated by N persons, each person is entitled to appropriate $1/N$th of the available resources. Were it not for the existence of future persons, this alone would be sufficient to avoid the zipper argument. According to Miller, appropriation of more than one's pro rata share is permissible provided that every person whose interests are set back by this more extensive appropriation is fully compensated for the loss. Miller claims that this interpretation is consistent with Locke's intention and also that it reflects the economic requirement of pareto efficiency: "The effect of the proviso is to require that the transfers of excess property (that is, property in excess of the appropriator's pro rata share) out of the commons into private hands is permitted if the state of affairs resulting from the transfer is pareto superior to that which subsisted before. Transfers will be permitted if they result in at least one person being made better off and no one being made worse off than he or she was before."[36] Miller further stipulates that transfers are forbidden by the proviso whenever some people will be worse off as a result. This leaves indeterminate the status of transfers that are neither better nor worse for anyone. But if the plausibility of the paretian interpretation stems from the Lockean conviction that appropriation which "straitens no one" is morally unobjectionable, then such appropriation should also be permissible.

Unfortunately, even this least-restrictive understanding of the paretian proviso is too restrictive to be accepted. The problem is not that the paretian interpretation permits harmful appropriation but that it prohibits appropriation that may be necessary for the prevention of harm. The paretian interpretation of the proviso would prohibit, for example, protective appropriation of the Tongan coral reefs, recommended by Schmidtz as the best and perhaps the only way to preserve these reefs for the future. For while those who bleach and blast may have no right to destroy the reefs, they would be worse off if the reefs were protected. This will be true either if there is not enough reef available for each person to appropriate a sustainable portion or if the deleterious economic effects of blast fishing will not strike until the following generation arrives. Under these conditions,

34. See esp. Locke, *Two Treatises of Government*, sec. 31.

35. Geoffrey P. Miller, "Economic Efficiency and the Lockean Proviso," *Harvard Journal of Law and Public Policy* 10 (1987): 401–10.

36. Ibid., p. 410.

appropriation and protection of this resource would be worse for blast fishers, and would therefore be forbidden by Miller's proviso.

It is possible to describe circumstances in which (1) appropriation and propertization are the only way to preserve renewable resources for future generations, (2) appropriation would leave some people worse off than otherwise they would be (those who would benefit in the short run from destruction of a renewable resource), but (3) none of those who would be worse off have a valid claim against those who would appropriate and protect the resource. If we accept the paretian interpretation of the proviso, then we are obliged to sit by and do nothing while the great ocean reefs are destroyed. Surely this suggests that this interpretation is just too strong. The fact that appropriation makes some worse off merely because they are no longer free to benefit from the needless destruction of a valuable renewable resource is not a good reason to prohibit it. Those who destroy the great reefs have no right to blast and bleach, and their wrongful behavior harms others who rely on this resource. In such circumstances, an adequate interpretation of the proviso should at least permit if not require appropriation to protect and conserve.[37] One moral is that some ways of making people worse off are irrelevant from the moral point of view. But can we determine which ways of making others worse off are relevant? Nozick takes a short, vague step toward a more adequate criterion. According to Nozick, a person cannot claim to be worse off in the relevant sense merely because she can no longer use freely (without appropriation) what once she could.[38] This helps, but it is not enough. We may agree that "being made worse off" is not a sufficient condition, but we still need to know what conditions would be sufficient.

THE PROVISO AS A HARM PRINCIPLE

Unless, like Sanders, we think that the proviso should be eliminated entirely, we must find an alternative version. An adequate interpretation of the proviso should tell us when appropriation is justified and should provide adequate protection against the potentially harmful appropriation of others. It should not prohibit appropriation that would safeguard the relevant interests of those the proviso protects. An acceptable account must accommodate the fact that many different

37. See Schmidtz, "When Is Original Appropriation Required?"

38. Nozick, p. 176. Nozick's version of the proviso has received exhaustive treatment in almost every major discussion of Lockean property theory. See esp. G. A. Cohen's discussion in "Self-Ownership, World-Ownership, and Equality," in *Justice and Equality Here and Now,* ed. Frank S. Lucash (Ithaca, N.Y.: Cornell University Press, 1986), and "Self Ownership, World Ownership, and Equality, Part II," in *Marxism and Liberalism,* ed. E. F. Paul et al. (Oxford: Basil Blackwell, 1986).

people, both current and future, have competing morally significant claims at stake. The solution to this problem is deceptively simple and is supported by a widely held and relatively uncontroversial moral principle: people should usually be left free to do as they wish provided that their actions are no harmful to others.[39] I suggest that the proviso is best interpreted as prohibiting only appropriation that is harmful to others.[40] So understood, the proviso reflects both necessary and sufficient conditions for appropriation:

> A's appropriation of an unowned resource X constitutes a valid property claim iff no other person is harmed by A's appropriation of X.

Clearly this is a minimal proviso, since it presents a strong presumption in favor of the right to appropriate and places a heavy burden on anyone who would show that a given appropriation is unjustified.[41] Not all setbacks of interest are harms in the sense appropriate here—harmful appropriation wrongfully sets back the interests of another person, is not excused or justified, and violates the rights of the person whose interests are wrongfully set back.[42] Appropriations prohibited by the harm principle clearly ought to be prohibited. Even those who reject positive obligations and positive rights accept the moral prohibition against harm to others. So basing the proviso on

39. See, e.g., John Stuart Mill, *On Liberty* (Indianapolis: Hackett, 1978); and Joel Feinberg, *Harm to Others* (Oxford: Oxford University Press, 1984).

40. While Locke's own proviso was intended only as a sufficient condition for justified appropriation by labor mixing, I advocate the harm principle as a necessary and sufficient condition for justified appropriation *tout court*. In *The Libertarian Idea* (Philadelphia: Temple University Press, 1988), Jan Narveson claims that the proviso prohibits only appropriation which violates the rights of others. If some right violations are not harms, then the interpretation I recommend here is even more permissive to appropriators than Narveson's. If not, then the two are identical.

41. I reserve one possible restriction on the scope of this minimal proviso: it is possible to describe circumstances in which the joint actions of many may create a situation which harms others, but in which no individual actor can be identified as having directly perpetrated a harm. When an act of appropriation is an element of a set of actions which combine to cause harm, it can be argued that the entire set should be prohibited, at least where such prohibition would not itself constitute a harm. See, e.g., the discussion of "public and collective harms" in Joel Feinberg's *Harmless Wrongdoing* (New York: Oxford University Press, 1988).

42. This is a technical sense of 'harm' which I believe to be uniquely appropriate as applied to this harm-based interpretation of the proviso. See Joel Feinberg, "Wrongful Life and the Counterfactual Element in Harming," *Philosophy and Social Policy* 4 (1986): 145–78, for a very strict account of 'harm' mostly consistent with the discussion here. Feinberg also includes a counterfactual condition, which I regard as unnecessary. Rejection of this particular analysis of harm in favor of another would imply corresponding changes in the theory of appropriation I offer here: stricter analyses of harm would imply a more permissive theory of appropriation, while less strict analyses would more frequently prohibit appropriation.

the harm principle should be acceptable even to the most parsimonious libertarian. And if this minimal proviso can be shown to provide adequate protection for the interests of others, then it should be acceptable to less parsimonious liberals as well. In what follows, I show that the interpretation I recommend does justify appropriation and I analyze the circumstances in which the appropriation of unowned resources will constitute a harm. I argue that this interpretation provides a conception of property much less extensive than the concept of full-blown ownership but a conception that is plausible in its own right and which has clear contemporary relevance. Finally, I argue that this conception of the proviso, and the implied limited conception of property, provides adequate protection for property owners as well as for those who need to be protected from the potentially harmful appropriation of others.

The harm principle allows some appropriation.—It is trivial to show that at least some initial appropriation can be justified if we interpret the proviso as a harm principle. To do so, we need only show that there are circumstances in which appropriation harms no one, because it either sets back no one's interests or violates no one's rights or because though it does these things, it does them justifiably or excusably. As interpreted here the proviso provides at least prima facie support for appropriation of the reefs described in Schmidtz's example, since the blast fishers whose interests are set back would not have their rights violated by this appropriation.

Needs and rights: When is appropriation harmful?—The second aspect of the defense of this interpretation, however, is both more interesting and more important: How can the appropriation of goods in which no one has any exclusive claim constitute a harm? Consider the situation of an early descendant of immigrants from East Asia, whose ancestors crossed into North America on the ice covering the Bering Strait. As the first human arrival in the fertile hills of what in the very distant future will become Kentucky, this immigrant decides to appropriate a valley of fertile pasture land from the unowned heath.[43] Other contemporary residents do not have their interests set back by this initial appropriation, since at this point in time there really is enough and as good for them to appropriate if they wish. No one had ever asserted prior claims on the fertile valleys of ancient Kentucky. Harm, in the sense employed here, implies the violation of rights, but in the absence of prior claims, how could such appropriation violate rights? It is no accident that discussions of original appropriation have inspired

43. There is evidence that the Native Americans had no concept of property in land until it was imported by Europeans. But perhaps the concept would have arisen once population pressures made land scarce.

desert-island examples, and often such examples seem silly.[44] But in this case, a brief, self-conscious excursion into desert-island ethics may help us to understand the problem more clearly, provided that we can draw connections between the behavior of these desert-island inhabitants and real choices we face:

> *Desert Island One.*—Thomas Hobbes and John Locke are alone and entirely destitute on a barren island. A crate washes ashore, and both simultaneously amble over to investigate. The crate, they discover, contains exactly enough food and supplies to keep both of them alive and comfortable over the course of their lives, but only if they divide the contents with precise equality. An unequal division could make one considerably better off, but the other would starve. (We stipulate that the probability that more goods will arrive is near zero.)
>
> Deciding that mere survival and comfort are not enough, Thomas is the first to speak up. He asserts a claim to five-eighths of the contents of the crate. Unfortunately for John, Thomas is big and powerful. He is able to enforce his claim. He enjoys a long and exceptionally happy life, while John dies in miserable destitution. Thomas suffers from regret about John's sad fate, but the happiness he enjoys more than compensates him for these regrets.

Prior to Thomas's claim, the contents of the crate are unowned. Is Thomas's claim a valid property right? Only if Thomas's appropriation is correlated with John's moral obligation to respect his (Thomas's) claim. But in this context, it would be absurd to suppose that John has an obligation to respect Thomas's claim, though he may be forced to respect it even in the absence of any moral obligation. Thomas's claim effectively dooms John to ultimate destitution and starvation, and his reason for doing so is simple greed. Thomas's claim to appropriate what he needs for basic comfort and survival is undefeated, since this claim comes in conflict with no comparably weighty claim of John's. But his claim to appropriate more is based on less weighty moral concerns. On the other hand, John's claim on the excess one-eighth of the supplies is based on the most fundamental of needs: without it, he will not have enough to survive.

Needs do not, of course, constitute rights, though they may provide the ground for a prima facie claim. In this case, any competing claims on the contents of the crate must arise out of Thomas and John's competing interests in the resources both need and want. To determine who has a right to what, in this case, we must arbitrate

44. On the relevance of abstract cases for concrete choice, see Stephen R. L. Clark, "Abstract Morality, Concrete Cases," in *Moral Philosophy and Contemporary Problems*, ed. J. D. G. Evans (Cambridge: Cambridge University Press, 1987).

among different claims all of which are based on need and desire. In this interest, it will be useful to distinguish among two different kinds of needs. In the first class, basic needs, there are things that it is necessary for us to have if we are to live adequately decent human lives. In the second class, which we may call adventitious needs, there are things that it is necessary for us to have in order to enjoy benefits beyond what is necessary to live an adequate and decent human life.[45] Norman Daniels provides an example: "If I appeal to my friend's . . . beneficence in requesting $100, I most likely will get a quite different reaction if I tell him I need the money to get a root-canal than if I tell him I need the money to go to the Brooklyn neighborhood of my childhood to smell pickles in a barrel."[46]

It is difficult to imagine a reasonable conception of what it is to live a "decent human life" on which Daniels's "need" to smell pickles is basic. However, one's conception of what it is to live a decent human life may be spare or flush.[47] It may be open for discussion whether human needs for arts and music, for example, are basic or adventitious. But as long as we can agree on at least some exemplars of both categories, areas of disagreement may not matter here. The claim I hope to support with this distinction may, I hope, seem trivial: when there are competing claims on unappropriated resources, and when claims to appropriate are based only on the different needs of the claimants (i.e., there are no other morally relevant sources for these claims), claims justified by reference to basic needs will defeat competing claims that are justified by reference to merely adventitious needs.

If John has an undefeated prima facie claim, then others have a corresponding obligation to respect that claim. This is what it means to say that such claims constitute rights. It follows that if Thomas appropriates something to which John has an undefeated prima facie

45. David Braybrooke coins this term in *Meeting Needs* (Princeton, N.J.: Princeton University Press, 1987). My usage here differs slightly from Braybrooke's. In a recent paper, Jeremy Waldron also suggests that the theory of property rights must be associated with the theory of needs ("Property, Justification and Need," *Canadian Journal of Law and Jurisprudence* 6 [1993]: 185–215). Martha Nussbaum, defending a similar conception of property claims as provisional and sensitive to the needs of others, argues that it derives from Aristotle. See esp. "Aristotelian Social Democracy," in *Liberalism and the Good,* ed. R. Bruce Douglas, Gerald R. Mara, and Henry S. Richardson (New York: Routledge, 1990). Locke also thought that property rights must be responsive to the needs of others and argued as much in the *First Treatise of Government* (in Laslett, ed.), secs. 42–43. Jeremy Shearmur discusses this passage in "The Right to Subsistence in a 'Lockean' State of Nature," *Southern Journal of Philosophy* 27 (1989): 561–68.

46. Norman Daniels, "Justice and Health Care," in *Health Care Ethics,* ed. Donald VanDeVeer and Tom Regan (Philadelphia: Temple University Press, 1987), pp. 298–99.

47. In "Aristotelian Social Democracy," Nussbaum suggests that any such account must be provisional and open to discussion.

claim, then Thomas has violated John's rights. Appropriation of resources in which no one has exclusive rights will violate the rights of others and harm them at least when the following conditions are (all) met:

1. The claim to appropriate is based only on adventitious needs. That is, the resources in question are not needed for survival and are not necessary to live a decent human life.

2. The claims of others are justified by reference to basic needs. That is, they need the resources in question to survive and to live minimally decent lives.

3. No other morally relevant claims on these resources exist.

In the general case for the violation of rights, we have the following principle:

> A's appropriation of an unowned resource X violates the rights of others iff (1) A's prima facie claim to appropriate is defeated by the relevant prima facie claims of others, but (2) in spite of this, A appropriates X.[48]

The three conditions above pick out a more specific set of circumstances in which the general principle applies. Another example carries the point further toward our relationship to future persons:

> *Desert Island Two.*—Thomas is alone and destitute on the same barren island. He knows, with a certainty very near one, that the moment he dies, John will arrive to live a lonely life on the same island. The island contains the same crate, with exactly enough food and supplies to maintain a long and comfortable life for both Thomas and John, provided only that Thomas consumes exactly half, leaving the other half in anticipation of John's arrival. The probability that more supplies will be available to John is near zero.
>
> Once again, Thomas decides that mere comfort and survival are not enough for him. He appropriates more than half of the contents of the crate. As before, Thomas suffers from regret that his actions will doom John to ultimate deprivation and starvation. But once again, the happiness he enjoys more than compensates him for these regrets.

If we accept the argument that Thomas's appropriation harmed John in the previous example, can we reject the same conclusion here? As in the previous case, Thomas is in a position to enforce his claim to more than half of the crate's contents. John is not in a position to argue, since he hasn't arrived in time, so in this case Thomas does not need to enforce his claim with muscle and bulk. If it is worse to enforce an unjustified claim with coercion than without, then this may

48. On the use of 'appropriation', see n. 15 above.

be a morally significant difference. But this difference is not relevant to the justification of the claim being enforced. In describing why Thomas's appropriation was harmful in the first example, no reference was made to the physical force used, though this may be an additional way in which Thomas harmed John in Desert Island One. If we consider only the aspects of Desert Island Two which are relevant to the determination of whether Thomas's claim to the excess one-eighth of the supplies is justified, there seems to be no significant difference between the two examples. As before, Thomas's appropriation is done with reckless disregard for John's basic interests and fails to respond to John's weightier prima facie claim. Again, Thomas's appropriation harms John.

These examples are pure fiction of course, but they are relevantly similar to a very real situation. Like John in the second of these two examples, future persons have a morally significant interest in our choices but are not in a position to complain if we appropriate in ways that leave them destitute. A third case increases the similarity to our own situation and our relationship to the members of future generations:

> *Desert Island Three.*—As in Desert Island Two, Thomas is alone and destitute on the same barren island. In this case, he knows, with a certainty very near one, that the moment he dies, John will arrive to live a lonely life on the same island, and after John, Jean-Jacques will arrive, and after Jean-Jacques, another person, ad infinitum. In this case however, Thomas is supplied not with a crate of goods, but with a given stock of a renewable resource. If he chooses to exploit this resource at a sustainable rate, he will be able live a long and comfortable life and will leave the same opportunity for the island's next inhabitant. Alternatively, he can choose to exploit this resource at an unsustainable rate. The higher yield he will enjoy will allow him to live better than he otherwise would, but as a result, no subsequent inhabitant of the island will be able to survive.
>
> Once again, Thomas decides that mere comfort and survival are not enough for him. He exploits the available resource at an unsustainable rate, and as a result none of the subsequent inhabitants is able to survive. As before, Thomas suffers from regrets, but once again, the happiness he enjoys more than compensates him for these regrets.

If we judge that John is harmed in Desert Island One, as I have argued that we should, then we cannot reject the claim that he is also harmed in Desert Island Two and that the innumerable subsequent inhabitants are harmed in Desert Island Three. The steps that lead from Desert Island Three to our own circumstance with respect to future generations are, I hope, easy to imagine. Unless we can find some morally relevant difference between our situation and that de-

scribed, we must acknowledge our own obligation to avoid harming future generations by using the resources of the earth in unsustainable ways.

THE STRUCTURE OF USUFRUCTUARY RIGHTS

Moving back to the case described earlier, the first person to arrive in ancient Kentucky may indeed have had a valid claim to appropriate land, and this claim might also justify clearing it for cultivation. This claim gains prima facie support from a number of considerations: agriculture may be beneficial to all, may be necessary for survival, and in this case, will "straiten" no one else. Even a bare desire to appropriate the land in question may provide the basis for a relatively weak prima facie claim to appropriate, since it is better for people to get what they want than to be denied it. But while any of these might ground a prima facie claim to appropriate, none is necessary to justify appropriation. As long as no present or future person is harmed by this appropriation, it is permissible under the proviso.

However, there is no reason to believe that the rights that arise as a result of this process will include all of the constituent claims and liberties associated with "full-blown ownership." In choosing how to use what has been appropriated, we have no valid claim to uses that might prove harmful to others. As argued in the context of Desert Island Two and Desert Island Three, future persons may be harmed when the actions of present persons unnecessarily and inexcusably deprive them of things they will need if they are to live adequately. If the land one wishes to appropriate and to cultivate is needed by future persons for the satisfaction of their basic needs, then the proviso may prohibit cultivating the land in destructive ways (say, by ignoring the effects of erosion or by irreparably leeching the land of its fertility). At least it will prohibit such destructive use of the land if there are nondestructive alternatives available and if these alternatives would enable one to satisfy one's own basic needs.[49]

One conclusion we may draw from this discussion may be uncontroversial: it would be wrong to cause future generations to suffer basic deprivation merely to afford ourselves greater present benefits or to satisfy merely adventitious needs. For example, if we have an opportunity to use our resources at sustainable rates so that they will be preserved for the future, we ought to do this rather than squandering them. But a second conclusion is less obvious and much more important: property rights in resources in which future persons have

49. Kristin Shrader-Frechette has also argued that Locke's theory justifies at best limited property rights ("Locke and Limits on Land Ownership," *Journal of the History of Ideas* 54 [1993]: 201–19).

a morally significant stake will not include any claim to use these resources in ways that will unnecessarily leave future persons unable to satisfy their basic needs. We may have valid claims to use and control appropriated resources and to enjoy their fruits, but our rights include no claim to use these resources in ways that might inexcusably deprive future persons of what they need to survive and to live adequate lives. This is not just a conclusion about what it is right for us to do, it is a conclusion about the nature of the claims we can legitimately make and the constitution of our property rights themselves. The rights we have in resources to which this analysis applies are more like usufructuary rights than rights of full-blown ownership.

The *Oxford English Dictionary* defines 'usufruct' as "the right of temporary possession, use, or enjoyment of the advantages of property belonging to another, so far as may be had without causing damage or prejudice to this."[50] It was sometimes argued, for example by Filmer, that the subjects of a monarch had only usufructuary rights in the land on which they labored and that this land was actually the property of the king.[51] This implied that the king had the right to dispossess his subjects if he chose. In doing so, according to Filmer, he would not be arrogating new rights to himself but simply asserting his claim to property already his own. Other writers variously argued that monarchs possessed all their wealth only in usufruct, the real owners being their subjects. Still others have claimed that all human possession is usufructuary, since the earth and its inhabitants are all the property of God.[52]

The view of property we have been considering here is importantly different from these views. Nothing in my account of appropriation and the proviso depends on any notion that we are only managers of the property of others, nor does this view put people at undue risk of dispropriation by the state. Our duty not to damage or destroy resources is not based on the property rights of future persons, only on the general prohibition against causing harm. We may stipulate, however, another sense of the term 'usufruct' on which it refers to a limited property claim that affords the claimant the right to use and to consume the fruits of property but no right to damage or destroy its substance. This second sense of the term includes no implication that the resources in question are being held in trust for an absentee

50. *Oxford English Dictionary,* 1st ed., s.v. "usufruct."

51. Robert Filmer, *Patriarcha and Other Writings,* ed. Johann P. Sommerville (New York: Cambridge University Press, 1991).

52. In this vein, J. Howe wrote in 1702 that "God is indeed the only proprietor, Men are but usufructuaries" (*Oxford English Dictionary,* 1st ed., s.v. "usufruct"). For an alternate, more recent presentation of a similar view, see Michelle Shocked, "God Is a Real Estate Developer" on *Captain Swing,* Polygram Records, 1989.

owner. It is in this sense that our rights in renewable resources are usufructuary. While there is no one else whose claims supersede those of current owners, such owners simply do not possess any valid claim to degrade, consume, or destroy resources in which future persons have an important stake.

In many respects, usufructuary rights are similar to rights of full-blown ownership, so it will suffice to point out the ways in which they are different. Usufructuary rights may include all the liberties, claims, powers, and liabilities included in the analysis of full-blown ownership discussed earlier except the following: first, accounts of "full-blown ownership" typically include the liberty "to consume or destroy—that is, to annihilate the thing."[53] Obviously, usufructuary rights cannot include this liberty. Persons who have usufructuary rights in resources have a duty to conserve them. Second, full-blown ownership is supposed to include the liberty to modify what one owns. If one's right is usufructuary, then the liberty to modify is limited to the class of modifications that will not put the basic interests of others, including future persons, in jeopardy. For example, under some circumstances one might have the right to clear and plow one's land, but not the right to destroy it by covering it with concrete.[54] Third, the "prohibition of harmful use" articulated by both Becker and Honoré, should be understood to protect both present and future persons.[55]

The aim of this discussion is to help us understand the nature of actual property claims, but it might be argued that an analysis of the conditions for ideal appropriation cannot lead us to such an understanding. For we do not know the pedigree of actual property rights since we cannot trace them back to initial appropriative acts that removed them from the commons or the unowned health. And if we did know the pedigree of actual property claims, it is not likely that

53. Becker, "The Moral Basis of Property Rights," p. 191. See also Honoré, "Ownership," and Munzer, *A Theory of Property*. Sidgwick, p. 70, includes a claim to "deteriorate or destroy" as a constituent of the right to property, but argued that owners possess no such claim in the case of property rights in land.

54. The moral theory of property described here bears significant resemblance to portions of the current legal conception of property—in particular the law of waste, which applies in the context of abuse or destructive use of property which causes unreasonable injury to the holders of other estates in the same land, and the law of ameliorative waste, which applies when tenants or holders of usufructuary rights change the physical characteristics of property by an unauthorized act which adds value and improves the property. But there are differences as well, since the law of waste and the law of ameliorative waste apply only to property that is either jointly owned or rented by an absentee owner or in which future owners have legally protected interests. While future persons have interests at stake in the present treatment of property (especially land and resources), it would be a conceptual error to identify such interests as rights of ownership.

55. Becker, "The Moral Basis of Property Rights"; and Honoré.

they would be judged as valid by the criteria expressed here: most actual property claims probably result from conquest and violent extermination of prior claimants rather than initial appropriation from a commons or health.[56] If they should be respected at all, it is probably for practical reasons, like the pursuit of economic efficiency or the value of social stability, not the false claim that they arose through a justifiable process. We can, however, discover some features of current rights by considering what sort of rights could possibly arise through a process that avoids harm. If full-blown property rights in land and natural resources could not arise in an ideal case, then they certainly cannot arise in less ideal circumstances. Current property rights derive from transfers and special relations among people, and only legitimate claims can legitimately be transferred. If there are some claims, or some kinds of claims, which could not come into existence without causing harm, then those claims cannot be constituent elements of current property rights either. If the right to destroy or degrade such resources could not legitimately have been acquired or transferred, then it cannot now be legitimately claimed.

In general, people are at liberty to do as they will with what they legitimately own, but the analysis of rights provided here will justify restrictions on property use. If owners have no claim to degrade their property, this provides a potential justification for environmental regulations that prohibit the destruction of our nation's wetlands or impose restrictions on those who would build houses and resorts in the Adirondack Mountains. These restrictions are not based on positive rights of future persons, but only the fact that current persons have no claim to do what would harm future generations. However, two important qualifications are in order regarding the claim that current property claims constitute usufructuary rights and not rights of full-blown ownership. First, even if rights in certain resources are usufructuary, there may be other things in which we can have full-blown rights of ownership. I will not unduly set back the interests of future persons by eating (thereby "destroying") the apples I grow, or by selling those apples (along with the right to eat them) to others. The set of resources in which our rights are usufructuary will not include goods that can be harmlessly consumed or destroyed. Second, interpreting the proviso as a harm principle can sometimes justify the destructive use of resources even when preservation of these resources would be necessary for the satisfaction of the basic needs of future persons. If the resources of the world were simply insufficient to supply the

56. This has led some to argue that considering the conditions of legitimate original appropriation is not relevant to the theory of current property rights. I hope that my argument here puts this mistaken claim to rest. See also A. John Simmons, "Original-Acquisition Justifications of Property," *Social Philosophy and Policy* 11 (1994): 63–84.

basic needs of both present and future persons, it would be excusable to use them to meet the basic needs of current persons.[57] If we interpret the proviso as a harm principle, we do not commit ourselves to a world in which it is "always jam tomorrow, and never jam today."[58]

HARM, USUFRUCT, AND THE PROTECTION OF INDIVIDUAL LIBERTY

Does the account of property rights given here provide adequate protection for individuals? There are two classes of individuals whose protection is at stake in the question: first, there is the class who stand at risk of having their interests set back by the appropriation of others. But second, it is important to show that this account provides adequate protection for the interests of property owners. Their interests might be set back if what now are understood to be full-blown property rights came to be understood as merely usufructuary rights.[59] It must be shown that the interpretation recommended here provides adequate protection for members of both classes.

Some people have found Locke's theory too permissive and argued that it provides inadequate protection from the potentially harmful appropriation of others. John Arthur recommends that we protect people from potentially harmful appropriation by restricting the circumstances in which appropriation may be considered legitimate.[60] Nozick and more recently Jan Narveson have been criticized on the ground that the provisos they recommend would justify too much appropriation.[61] But if the arguments considered here are correct, restricting opportunities to appropriate is the wrong way to protect people from harm. The problem is not that less restrictive versions of the proviso allow too much appropriation, rather that the rights that

57. Recall that excusable setbacks of interest do not constitue harms in the sense relevant to the current discussion. See Feinberg, "Wrongful Life and the Counterfactual Element in Harming."

58. Lewis Carroll, *Through the Looking Glass,* in *The Complete Works of Lewis Carroll* (New York: Vintage, 1976), pp. 196–97.

59. Property rights in land are not understood this way in the legal system of the United States, nor in any legal system I am aware of. See Marla E. Mansfield, "On the Cusp of Property Rights: Lessons from Public Land Law," *Ecology Law Quarterly* 18 (1991): 43–104; and James P. Karp, "A Private Property Duty of Stewardship," *Environmental Law* 23 (1993): 735–62. The conception of property I recommend here would also have important implications for takings law. See esp. Lucas v. South Carolina Coastal Council, 112 S.Ct. 2887 (1992), and a recent symposium on *Lucas* in *Environmental Law* 23 (1993): 869–932.

60. John Arthur, "Resource Acquisition and Harm," *Canadian Journal of Philosophy* 17 (1987): 337–47. In *The Right to Private Property,* Jeremy Waldron also regards strengthening the proviso as a way to protect nonappropriators from the potentially harmful appropriation of others (see, e.g., pp. 265–66).

61. Nozick, pp. 178–82; Narveson, pp. 80–85.

may be legitimately claimed are more restricted rights than these authors have appreciated. In fact, as Schmidtz has shown, restricting the conditions under which appropriation is justified may be just the wrong way to protect the interests of others from the ravages of present intemperate consumption.[62]

What then of the concern that understanding property rights as usufructuary would inappropriately limit the rights of property owners? Several examples come to mind. In Tucson, developers have argued that their property rights in land justify them in clearning large areas of the Sonora desert to build golf courses, shopping malls, and new housing subdivisions. Environmental advocates have argued that such development would irreparably harm the desert ecosystem which should be preserved for the benefit and enjoyment of future generations. If the rights of property owners are merely usufructuary, then it might be justifiable to prohibit these owners from draining and developing in spite of the fact that they own the land to be developed. If future Arizonans have a morally significant stake in the preservation of this desert land, then the view I have been advocating may imply that these property owners do not have the right to develop their land.[63]

Examples like this might lead some to question whether usufructuary rights constitute property rights at all. Loren Lomasky would apparently claim that they are not. He writes, "The only bundle of rights that can intuitively be identified with ownership of a thing is the bundle that constitutes complete control over that thing. Less inclusive bundles are an embarrassment for the property-in-things account."[64] Are usufructuary rights of the sort we have described here a theoretical embarrassment? Are usufructuary rights so restricted that it would be improper to call them property rights at all? On one interpretation, this is a question about our concept of property. But the answer may depend not only on the structure of our concepts but also on the theoretical function we want this concept to serve. It seems unlikely that our natural language concept of a 'property right' is itself sufficiently explicit to rule out usufructuary rights. The concepts behind our natural language terms are usually not clear around the edges, and while usufructuary rights are not in the core of our concept of property, they are not obviously excluded either.[65] So if one wanted

62. Schmidtz, *The Limits of Government,* chap. 2.

63. The modality of this claim is important: it is *possible* that these owners do not have development rights. Some might argue that such development guards the interests of current and future nonowners, who will decisively benefit from the existence of these malls and golf courses. I have not seen a convincing version of such an argument, but perhaps the possibility cannot be ignored.

64. Lomasky, p. 119.

65. Indeed, some law texts identify usufructuary rights as a subset of property rights.

to support Lomasky's claim by arguing that usufructuary rights are not property rights at all, one would need to provide an analytic or reformative definition of 'property right' and to show that we have good reason to accept this analysis or reformative definition and that it excludes usufructuary rights. And even this would now show that rights in key resources are more robust than usufructuary rights, though it would support the claim that we should cease to regard such resources as "property."

Libertarians may be mistrustful of limited conceptions of property rights, since such conceptions are less likely to provide the ironclad safeguards for individual liberty and free markets which lie at the core of the libertarian view. Would the conception of property proposed here justify too much interference with individuals' use of what they own? State intervention is often inefficient and misguided, and a weaker conception of property rights might undermine our commitment to individual rights and the institutional safeguards protecting them.

My response to this worry is threefold: first, unless absolute property rights can be justified, we should not use them as the foundation of a political theory. It would be better to start with a defensible conception of rights, including property rights, and work from that conception. Second, we may recognize that if this conception of property rights failed to provide adequate protection for property owners, this would indeed constitute a significant objection. But the conception of property I have recommended here would provide justification for interference with individuals' use of their property only when this use is likely to cause harm. It is therefore based on a principle that is not only consistent with the negative rights libertarians hold dear, it is a principle essentially designed to protect these rights. Finally, adopting a conception of property rights as usufructuary rights would not, in practice, justify widespread government interference. For many of the arguments against such interference apply with undiminished force in spite of the considerations discussed here. It must still be recognized that under many, and perhaps most circumstances, individuals will be in a better position than anyone else to decide how their property should be used. In addition, the economic arguments concerning the inefficiency of centralized authority and the circumstances of "government failure" (as opposed to "market failure") justify careful limitation of the government's power to interfere with individuals' use of what they legitimately hold. Such considerations should make us, as citizens, careful consumers of proposed legislative restriction. They should not be understood to provide categorical objection when there is reason to believe that such legislation will effectively protect the interests of the future. Thus, while the argument presented here undermines

the Lockean argument for libertarianism, it leaves the "utilitarian" argument for that view unscathed.[66]

What the argument presented here shows, then, is not that political intervention on behalf of future generations is always a good idea, nor still that liberty limiting legislation designed to protect and preserve the environment for the future is always good legislation. What we may legitimately conclude is only this: when legislation designed to protect the basic interests of future persons functions to restrict the rights of current persons, current property claims will not always trump the interests of the future. When environmental legislation can reasonably be expected to guard the basic interests of future persons, the fact that it would also infringe current property rights will not be a conclusive argument against it.

The notion that people's rights in land and natural resources are less extensive than full-blown property rights has a long history. Thomas Jefferson famously claimed that "the earth belongs in usufruct to the generations of the living."[67] While Jefferson's primary concern was the ability of current agreements (like the constitution) to command the allegiance of future citizens, he clearly recognized the need to insure that current persons will not harm future generations by destroying the substance of this usufructuary property. Both Mill and Sidgwick argued that property rights in land were more restricted than other property rights.[68] The argument I have given here provides a Lockean foundation for the conception of property rights implicit in the ideas of Jefferson, Mill, and Sidgwick, among others. This conception is based on a deep conviction that our legal, social, and political institutions must be responsive to the needs of the future. If current claims on resources constitute usufructuary rights rather than more robust rights of full-blown ownership, then these rights will not be violated by legislative restrictions that prohibit destruction or degradation of privately owned resources needed by future persons. Argu-

66. Richard Epstein is among those who offer Lockean arguments in favor of a libertarian social policy, but many libertarians oppose market restrictions on the ground that they are likely to make people worse off. For Epstein's well-known work on property, see *Takings* (Cambridge, Mass.: Harvard University Press, 1985). A roughly utilitarian brand of libertarianism finds expression in Anderson and Leal. I have argued that we should not be too readily convinced by this utilitarian argument in favor of the market (see "Markets, Environmental Goods, and the Interests of Future Generations").

67. Thomas Jefferson, from a letter to James Madison, written in 1789, in *The Portable Thomas Jefferson,* ed. Merrill D. Peterson (New York: Penguin, 1977), pp. 444–51, p. 445.

68. See John Stuart Mill, *Principles of Political Economy With Some of Their Applications to Social Philosophy* (Toronto: University of Toronto Press, 1965), bk. 2, chap. 2, secs. 5–6; Sidgwick, chap. 5.

ments against such restrictions should therefore be based on the likelihood that they will fail to protect the interests of the future, not on the claim that they violate current rights.