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DO PROPERTY RIGHTS PRESUPPOSE SCARCITY?

David Faraci

There is a common view, dating back at least to Hume, that property rights presuppose scarcity—i.e., that a good's being scarce is a condition of its legitimately being property.¹ Arguments for this claim can be found not only in the philosophical literature, but in legal discussions of property rights tracing back at least to the end of the 19th century.² Until recently, this view was primarily relevant only in debates about Intellectual Property (IP), for ideas were the only (arguably) non-scarce goods people claimed ownership in. Today, however, there are a number of other non-scarce goods—notably digital media and software³—that people are likewise granted property rights in. What's more, speculations about future technologies—particularly those surrounding nanotechnology and the possibility of atomic/molecular manipulation—suggest that more and more goods that are currently scarce may no longer be in the future (e.g., essentially infinite amounts of food will be producible at infinitesimal cost in “matter compilers” or “replicators,” to use a popular science fiction example). Because of these developments it is vital, now more than ever, that we clarify the relationship between scarcity and property rights, independently of specific concerns about the legitimacy of IP.

I begin, in §1, by laying out what I take to be the major line of defense for the thesis that property rights presuppose scarcity. In brief, the argument is that (1)

1 It might be more accurate to say that, for Hume, property rights presuppose non-desperate scarcity, since extreme scarcity can undermine the justification of property rights just as easily as extreme abundance. However, since my focus here is on the latter, I set this aside in what follows. Thanks to an anonymous reviewer for highlighting the need to address this point. Hume discusses this issue in both *A Treatise of Human Nature* and *An Enquiry Concerning the Principles of Morals*. Also see, e.g., Hoppe, *A Theory of Socialism and Capitalism*; Kinsella, *Against Intellectual Property*; Palmer, “Intellectual Property: A Non-Posnerian Law and Economics Approach”; Palmer, “Are Patents and Copyrights Morally Justified? The Philosophy of Property Rights and Ideal Objects”; Plant, “The Economic Theory Concerning Patents for Inventions”; Rothbard, “Justice and Property Rights”; McElroy, “Intellectual Property: Copyright and Patent” (on Benjamin Tucker).

2 “The necessity which is recognize in all civilised societies of conferring rights of private or personal property arises from the limited supply of that for which there is an unlimited demand. It is only from a limitation of supply that there can be any value in exchange.” Great Britain and Stephen, *Copyright Commission*, xlviii.

3 Of course, ownership of these is often protected through IP practices. But the manifestations of these goods are themselves arguably non-scarce, unlike in the case of, for example, (non-electronic) books.

property rights are legitimate only when necessary, (2) necessary only for avoiding injuries resulting from one party's use of a good over another's, and (3) that such injury is possible only where there is scarcity. While I accept (1) (at least for the sake of argument), I argue in §2 that each of three prominent theories of the justification of property rights appeal to values that may well undermine (2) and/or (3). In §3, I consider what this implies for the thesis in question. As it turns out, at the theoretical level, there are a number of different ways one might deal with the apparent conflict between the argument in §1 and the views discussed in §2. However, I argue that no matter which theoretical path one takes, it turns out the practical implications of the relationship between property rights and scarcity have been woefully misconstrued. Finally, in §4, I recount an independent argument for the thesis that property rights presuppose scarcity and argue that, whether or not it is successful as an argument against IP (as well as, perhaps, other kinds of property rights), it does not extend as an argument against ownership of non-scarce goods in general. This discussion serves to further highlight the need to distinguish arguments for the thesis under consideration from arguments against IP.

Before embarking, a brief word concerning the nature of property rights. As mentioned above, arguments for the thesis that property rights presuppose scarcity have primarily been deployed to object to specific property rights practices, such as copyright and patent law in the United States. Given this, I wish to remain as neutral as possible regarding the theoretical nature of property. Indeed, "property" is not really at stake here. What matters is the justification for granting particular sorts of exclusive rights over goods. My target is the claim that granting such rights is unjustified where goods are abundant.

With that in mind, let us proceed with a modified version of A.M. Honoré's widely endorsed conception of property as a "bundle of rights." On Honoré's account, this bundle consists of 11 "sticks" or "incidents": *rights* to (1) possess, (2) use, (3) manage, (4) receive income from, (5) consume or destroy, (6) be secure in ownership of and (7) transfer one's property, as well as (8) to have these rights persist over time; along with *duties* (9) not to use one's property harmfully; (10) to be liable to dissolution of ownership in cases of debt or insolvency, and (11) to respect any residual entitlements others may have in one's property.⁴

Unfortunately, not everyone agrees that all of the incidents Honoré mentions should be included on the list. Jeremy Waldron,⁵ for instance, argues against inclusion of the ninth incident, on grounds that the duty not to use property

⁴ See Honoré, "Ownership."

⁵ Waldron, *The Right to Private Property*.

harmfully is merely an implication of a general duty against harm, rather than being a part of the nature of ownership itself.⁶

Since it is far beyond the scope of this paper to resolve matters such as this, let us move forward on the assumption that, schematically, systems of property rights will mimic, though perhaps not precisely match, Honoré's—they will grant a bundle of exclusive rights (liberties, obligations, etc.), or some part thereof, including some of those listed above, to individuals or groups of individuals, with respect to particular goods. This should serve as a sufficiently generic account of property rights to encompass all schemes that are intuitively recognizable as property rights practices, without being so indeterminate as to fail to provide a genuine target.

1. In Defense of the Thesis that Property Rights Presuppose Scarcity

For what purpose make a partition of goods, where every one has already more than enough? Why give rise to property, where there cannot possibly be any injury? Why call this object *mine*, when upon the seizing of it by another, I need but stretch out my hand to possess myself to what is equally valuable? . . . We see, even in the present necessitous condition of mankind, that, wherever any benefit is bestowed by nature in an unlimited abundance, we leave it always in common among the whole human race, and make no subdivisions of right and property. Water and air, though the most necessary of all objects, are not challenged as the property of individuals; nor can any man commit injustice by the most lavish use and enjoyment of these blessings.⁷

Working backwards, Hume provides us with two concrete examples of (apparently) non-scarce goods: water and air. Hume does not actually use the word “scarcity” here.⁸ Nevertheless, he clearly implicates scarcity when he characterizes these as goods which are “bestowed by nature in unlimited abundance.”

Of course, this cannot quite be taken literally. Water and air are *not*, in fact, unlimited; there are finite amounts of each, and so Hume's statement is at least

6 Peter Jaworski and I argue something similar with respect to liability in our “To Inspect and Make Safe: Morally Responsible Liability in Property Ownership.”

7 Hume, *An Enquiry Concerning the Principles of Morals*, sec. III.

8 Though he does so elsewhere: “[T]he situation of external objects is their easy change, join'd to their scarcity in comparison of the wants and desires of men.” *A Treatise of Human Nature*, bk. III, sec. II.

somewhat hyperbolic. Luckily, we can get a sense of what his real concern is by looking earlier in the passage: Hume cannot see why we would grant property rights in a good if everyone were assured of having enough of it. If my breathing the air does not prevent you from having enough air for yourself, Hume seems to be saying, it is hard to see how my breathing the air could do you any injury. And if my breathing the air cannot do you any injury, what possible justification could there be for granting either of us exclusive rights in it?

Given the nature of this argument, it seems to me that Hume's comments here are best understood in terms of the non-*rivalrousness* of goods like water and air. A good is *rivalrous* just in case its possession by one party precludes its possession by another. Goods which are non-rivalrous are "unlimited" not in the literal sense of being infinite in quantity, but in the sense that one can possess the relevant good regardless of who else does.

For the purposes of the arguments to come (though I revisit this issue in §3), I will thus understand a good's being *scarce* to be synonymous with its being *rivalrous*, with one qualification. Note that while we have been discussing air as a non-rivalrous good, oxygen molecules *are* rivalrous—my possession (breathing) of them interferes with yours. Thus, when we discuss rivalry in the context of scarcity, we must be clear that we are talking about good *types* rather than good *tokens*. Particular oxygen molecules are rivalrous, true, but oxygen generally speaking is not, because (again, in most circumstances) there is sufficient oxygen readily available that one person's breathing oxygen does not interfere with anyone else's doing the same.

With this in hand, we can give a fuller characterization of the argument for the thesis that property rights presuppose scarcity. First, Hume seems to be appealing to an implicit premise that property rights are in *need* of justification. This is not surprising, given that for Hume, property rights are conventional—they are not (contra others⁹) grounded in natural rights of any kind. As Hume's opening questions suggest, it may be hard to see why, in the absence of such natural rights, we would grant persons exclusive rights in goods—how our situation could necessitate making "a partition of goods." Surely, the burden of justification falls on those who propose such a partition, not those who would challenge it. Thus, we are asked to accept:

P1 Property rights are legitimate only insofar as they are necessary.

This leads naturally to the question of when property rights *are* necessary. Hume tells us when they are *not*: Property rights are unnecessary if the use or

⁹ E.g., Locke or Hegel, more on whom later.

possession of a good by one party does not cause or constitute injury to others.¹⁰ According to Hume, such injury is impossible if everyone has enough of the good in question. Thus, Hume seems to suggest that we should accept:

P2 Property rights are necessary only to avoid injury resulting from one party's use or possession of a good over another's.

P3 There can be such injury due to use of goods of type G only if goods of type G are scarce.

Together, P1-P3 entail that property rights are legitimate only for scarce goods. This argument seems to be what many—certainly, I think, Hume—have had in mind in defending the thesis that property rights presuppose scarcity.¹¹

Of course, this is not the only argument one might offer for this conclusion. For example, one might hold that the relationship between property rights and scarcity is just part of the *meaning* of “property.” Indeed, some seem to follow this suggestion. Kinsella, for example, discusses “the importance of scarcity in *defining* what property is”¹² and claims that in a world without scarcity, “property concepts would be meaningless.”¹³ Similarly, Hoppe claims that “any ethic, correctly conceived, must be formulated as a theory of property, i.e., a theory of the assignment of rights of exclusive control over *scarce* means.”¹⁴ But this is surely hyperbolic. It might be true that property rights do not legitimately extend to non-scarce goods; but surely those who believe that they do are not confused about what “property” *means*. Property rights are not *defined* in terms of rights over scarce goods; whether they extend to scarce goods is an open question.

Assuming, then, that P1-P3 provide the standard and, perhaps, the strongest case for the view in question, let us consider how strong the argument actually is.

I have already said something about why one would want to accept P1, given that property rights seem in need of justification. I will assume, in what follows, that P1 is indeed true. Thus, in what follows, I consider what we should say about P2 and P3.

10 That is, the use or possession merely as such. Obviously, even non-scarce goods—say, 3D-printed guns—could be used to injure.

11 Compare, especially, Kinsella, *Against Intellectual Property*, 29–31.

12 *Ibid.*, 29, emphasis added.

13 *Ibid.*, 31.

14 Hoppe, *A Theory of Socialism and Capitalism*, 235 n. 9, emphasis added.

2. P2 and P3

In preparation for examining P2 and P3, notice that on a view like Hume's, where all rights are conventional, we may not have a readymade account of what constitutes an injury—or, perhaps, which potential injuries are morally relevant. Yet, clearly, some lines will be drawn. For instance, we are unlikely to countenance the “injury” that befalls Jill the misanthrope when others have things they desire. Aside from the intuitive reasons for thinking we wouldn't want our property rights scheme to countenance such “injuries,” it should be clear that Hume must set them aside, as Jill can clearly be “injured” in this way regardless of whether the goods in question are scarce.

What Hume seems to have in mind, here, are only those injuries that result from one party's not being able to have something because another party does. Thus, an important question regarding P3 is whether these really are the only sorts of injuries that are relevant. If not, we need to ask whether relevant injuries of other kinds can result even in the absence of scarcity.

To help answer this, consider one of the most famous views on the justification of property rights: Locke's labor view of property. *Very* briefly: Locke begins from the premise that we own ourselves. Because I own myself, I own my labor, which is a part of me. When I mix my labor with some good, I come to own that good as well, with the two provisos that (a) I must not cause waste or spoilage and (b) I must leave “enough and as good for others.”¹⁵

Importantly, on this view, when I take ownership of something, taking *that particular token good* away from me might well constitute an injury. Thus, from my relationship to that good it may follow that, were that good lost to me, it would *not* be the case that I could simply “stretch out my hand to possess myself to what is equally valuable.” Most importantly for our purposes, this seems to be the case regardless of how abundant objects of that type are. So it seems that, on a Lockean theory, there are injuries that might result from one person's use or possession of a good *token* over another's, even where goods of that *type* are abundant. If the Lockean view is correct, we thus have reason to doubt P3.¹⁶

Similar points can be made regarding another historically important account. Both Hegel himself and a number of theorists following him have argued that property rights are based in a kind of self-expression:

15 Locke presents this view in his *Two Treatises of Government*. See especially *Treatise II*, Sections 27-46. For helpful analysis, see Jaworski, “The Metaphysics of Locke's Labour View.”

16 For discussion of relevant arguments concerning the extension of a Lockean theory to IP in particular, see Tavani, “Locke, Intellectual Property Rights, and the Information Commons.”

A person must translate his freedom into an external sphere in order to exist as Idea. . . . The rationale of property is to be found not in the satisfaction of needs but in the supersession [sic.] of the pure subjectivity of personality. In his property a person exists for the first time as reason. Even if my freedom is here realized first of all in an external thing, and so falsely realized, nevertheless abstract personality in its immediacy can have no other embodiment save one characterized by immediacy.¹⁷

It is not at all difficult to see how this view might—indeed, has¹⁸—been extended to non-scarce goods. Once again, this seems to be because Hegel’s view, if true, undermines P3. My relationship to, say, a particular chair may well make it the case that taking that chair away from me does me injury, regardless of how many other chairs (perhaps even indistinguishable ones) are available (much as for Locke).

At this point, one might worry about relying too heavily on Locke and Hegel to attack Hume’s view. After all, partly because Hume rejects the sorts of natural rights upon which Locke and Hegel are relying, he would reject the idea that our relationship to a particular object can serve to distinguish a token good (in a morally relevant way) from others of its type.

It is important to recognize, though, that Hume’s rejection of natural rights like those Locke and Hegel appeal to depends on aspects of Hume’s view beyond what was discussed in constructing the argument above. Thus, in order to defend P3, one would need to appeal to further arguments (whether Hume’s or others) against the possibility of natural rights like Locke’s and Hegel’s. This is important, given that the thesis that property rights presuppose scarcity is frequently defended, not on such broadly Humean grounds, but only by appeal to the intuitive case Hume makes in the passage above, concerning examples like water and air. Of course, if most people who defended the thesis that property rights presuppose scarcity were Humeans more broadly anyway, this might not be a problem. But what makes this situation particularly striking is that many proponents of the relationship between property rights and scarcity are *not* Humeans; many are, in fact, libertarians who explicitly endorse certain natural rights.

It’s not hard to see what’s gone wrong here. It is hard to imagine a case in which a particular bit of air or water would be related to an individual in a morally relevant way. Thus, when we focus on goods like air and water, Hume’s intuitive

¹⁷ Hegel, *Elements of the Philosophy of Right*, sec. 41.

¹⁸ See, e.g., Resnik, “A Pluralistic Account of Intellectual Property,” 326–327.

point seems forceful independently of his rejection of natural rights; we have trouble seeing any justification for granting exclusive rights in these goods, and generalize to all non-scarce goods. Once we consider views like Locke's or Hegel's, though, it becomes clear that this is a hasty generalization. There are other types of goods—perhaps things we create, for one—such that we may well bear morally significant relationships to particular tokens of those types regardless of how abundant goods of those types are.

As an interim conclusion, then, I submit that P3—the claim that injuries resulting from the use or possession of goods depends on scarcity—relies on aspects of Hume's view—*viz.*, rejection of natural rights—that are not only contentious generally, but are not even shared by all those who endorse the thesis that property rights presuppose scarcity. If such theorists wish to maintain the thesis in question, they must find other ways of arguing for it.

This brings us to P2. Even if there are no relevant injuries in the absence of scarcity (perhaps, if Hume is correct about natural rights), we still need defense of the claim that property rights are only justified by their role in preventing such injuries in the first place. Yet a third prominent view on the justification of property rights seems to undermine this claim—indeed, does so without appealing to natural rights Hume would balk at.

Consider the legal justification of IP rights in the United States. Article One of the United States Constitution allows for IP rights in order to “promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”¹⁹ This is an example of a *consequentialist* or “non-individualistic”²⁰ justification for property rights. On models like this, property rights are justified because they further some important (social) end (e.g., here, progress).

Even without this case where consequentialist reasoning is explicitly used to extend property rights to non-scarce goods, it should be clear that nothing about the consequentialist viewpoint *per se* should lead us to think that property presupposes scarcity. One reason for this, apparently, is that the values of progress and innovation being appealed to here have nothing to do with whether violating the property rights in question would injure anyone. Rather, the property rights are being granted because making “a partition of goods” has good consequences, regardless of whether it is necessary to prevent injury. Thus, it seems clear that, if such consequentialist justifications for property rights exist, P2 is false. And, once again, the problem seems to be hasty generalization. When one focuses on goods

¹⁹ “The Constitution of the United States,” Article 1, Section 8, Clause 8.

²⁰ See Cruft, “Against Individualistic Justifications of Property Rights.”

like air and water, it is extremely difficult to imagine consequentialist reasons for instituting ownership practices (under normal circumstances). Once we move to other goods—e.g., those IP concerns—such reasons aren't hard to imagine at all.

3. Implications: Theory and Practice

Each of the theories discussed in the previous section appeals to values for which property rights may well be necessary, irrespective of how abundant goods are. One might think the implication clear: Insofar as one of these views is correct—or at least, insofar as one ought to countenance that possibility—the thesis that property rights presuppose scarcity is either false or, at least, seriously under-motivated. It must be admitted, however, that at the theoretical level, things are not quite so simple. Indeed, nothing said so far demonstrates that the argument presented in §1 is unsound. For one way to respond to the apparent tension between the argument in §1 and the views in §2 is to claim, not that property rights do not presuppose scarcity, but that I have misunderstood the nature of scarcity itself.²¹ Here is one example of how this might go: Take the Hegelian view discussed above, according to which property rights help us to respect the value of self-expression. One might argue that in addition to being rendered scarce when my possession of them precludes your *possession* of them, goods are rendered scarce when my possession of them undermines their *expressive power* for you. In that case, it might yet turn out that property rights *do* presuppose scarcity; it's just that many more things than we've typically thought turn out to be scarce!

I will not attempt to settle the theoretical issue here. This is not because it is not important, but because, ultimately, it does not affect the matter at hand. What matters here is that, regardless of the *correct* understanding of scarcity, proponents, like Hume, have clearly relied on a conception of scarcity that entails something like “lack of physical abundance.”²² And it is *this* that the values discussed in §2 call into question. To take the obvious example, the “Hegelian” understanding of

21 Alternatively, you might hold that I've misunderstood the nature of rivalry, or that I've neglected to recognize certain ways of delineating good types. None of this affects the points to come.

22 An anonymous reviewer offered a helpful distinction between “empirical scarcity”—scarcity that arises from, e.g., a physically limited number of resources—and “normative scarcity”—restrictions on access that we impose (perhaps, say, because we recognize the value of self-expression). With this distinction in mind, one might read my argument as contending that the argument presented in §1 is refuted (or at least its premises severely under-motivated) insofar as the scarcity in question is empirical scarcity. Since it seems to be empirical scarcity that people have had in mind in drawing on Hume's view—e.g., in challenging IP—I take this to be an important result insofar as our concern is the practical upshot of Hume's argument.

scarcity just proposed does nothing to undermine the value of IP since, as already discussed, whether my possession of a good token undermines its expressive power for you may have nothing to do with how abundant that good type is.²³

Practically speaking, then, it doesn't particularly matter whether we give up the thesis that property rights presuppose scarcity or just rethink what scarcity is. Either way, the conclusion remains: The arguments that have been offered for the thesis that property rights presuppose scarcity fail to motivate the idea that a good's unlimited availability makes it unjust for us to grant persons exclusive rights over it.

4. Emerging Technologies and Non-Scarce Property: Beyond IP

Thus ends my critique of the thesis that property rights presuppose scarcity. Before concluding, however, I wish to address one further issue. As mentioned earlier, there might be arguments *other* than the one presented in §1 for embracing the thesis that property rights presuppose scarcity (in Hume's sense). In this section, I consider an argument that has been presented as such in order to further highlight the need to distinguish the debate over the thesis that property rights presuppose scarcity from the debate over IP.

What, though, is really wrong with recognizing "new" property rights? After all, since new ideas, artistic creations, and innovations continually enrich us, what is the harm in moving with the times by recognizing new forms of property? The problem is that if property rights are recognized in non-scarce resources, this necessarily means that property rights in tangible resources are correspondingly diminished.²⁴

Suppose I have an idea for a new kind of boat, which is made entirely out of wood. You own a large quantity of wood. If I am granted IP over my idea, claims Kinsella, I diminish your property rights in your wood because your authority over that wood is limited; in particular, you cannot use it, without my permission, to construct a boat that is an expression of my idea:

[T]he IP advocate must propose some homesteading rule along the following lines: "A person who comes up with some useful or creative idea which can guide or direct an actor in the use of his own tangible property thereby instantly gains a right to control all

23 Again, one might instead suggest that when a good has expressive power for me, there are no other goods of the relevant type. It should be clear, though, that this wouldn't affect the point in any substantive way.

24 Kinsella, *Against Intellectual Property*, 43.

other tangible property in the world, with respect to that property's similar use." This new-fangled homesteading technique is so powerful that it gives the creator rights in third parties' already owned tangible property.²⁵

For our purposes, the strength of this argument against patents and other IP schemes is largely irrelevant. Indeed, let us grant, for the moment, that such schemes really do grant one objectionable control over others' property. What matters here is that the features of IP that make this the case are not features of non-scarce goods generally speaking. Suppose that I build a machine that can produce hamburgers at zero cost—say, through atomic matter construction, thus not requiring raw materials such as ground beef. This would make hamburgers (at least of the sort made by this machine) non-rivalrous; your having a hamburger would in no way interfere with my having one. Suppose, further, that I were granted sole ownership of the machine and its issue. Here I am with my infinite pile of hamburgers and there you are going about business as usual. It is hard to see how this would in any way diminish your property rights in anything you own.²⁶ Indeed, claiming that this situation affects your property rights in any way seems like a total non sequitor.

It is an interesting question what feature of IP Kinsella is latching onto here, and thus exactly what class of properties his argument, if successful, would show to be an illegitimate object of property rights. I will not pursue this question here. What matters for our purposes is only that Kinsella's argument, with its clear focus on IP, constitutes further evidence of the frequency and ease with which theorists have conflated the issues of the justification of IP, on the one hand, and the legitimacy of property rights in non-scarce goods, on the other. This conflation is understandable given the aforementioned fact that, until recently, IP was the only instance of property rights being granted in non-scarce goods. But recent and prospective technological advances have changed all that, and it is a change we must be careful to acknowledge. Being careful to differentiate the general issue of property rights and scarcity from the justification of IP is an important first step.

²⁵ Ibid., 43–44.

²⁶ In fact, ironically, it may be that what would affect someone's property rights would be the thesis that one cannot own non-scarce goods. Suppose that Ted owns a hamburger shop where he makes hamburgers just like the ones my machine produces. If property rights presuppose scarcity, then, arguably, once I make my machine, Ted would cease to own the hamburgers he produces!

4. Conclusion

The primary purpose of this paper has been to argue that, whether or not we ultimately decide to retain some version of the thesis that property rights presuppose scarcity, we have little reason to think that it can be deployed as its proponents have typically thought. Insofar as we recognize values like those discussed in §2, we may well find justification for granting persons exclusive rights in infinitely abundant goods. Given the increasing importance of IP, and the growing likelihood that certain tangible goods will become (nearly) infinitely abundant, recognizing this is important, now more than ever.

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