LOEKE FOR THE MASSES: PROPERTY RIGHTS AND THE PRODUCTS OF COLLECTIVE CREATIVITY

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I. INTRODUCTION

A concurring opinion in a First Circuit copyright case1 from the 1990s caught my attention when it came out, and I have been rolling its ideas around in my mind ever since. In the case, the court denied copyright protection to the menu command structure of the Lotus 1-2-3 spreadsheet program.2 The majority's holding was straightforward, and came right out of statutory law.3 But the concurrence by Judge Boudin was different. In it he talked of the importance of maintaining a commons, but his logic stressed that much of the value of Lotus' menus was created by the efforts of those who used the 1-2-3 program:

Requests for the protection of computer menus present [a] concern with fencing off access to the commons in an acute form. A new menu may be a creative work, but over time its importance may come to reside more in the investment that has been made by users in learning the menu and in building their own mini-programs—macros—in reliance upon the menu.

A different approach [to resolving this case] would be to say that Borland's use is privileged because, in the context already described, it is not seeking to appropriate the advances made by Lotus' menu; rather, having provided an arguably more attractive menu of its own,

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2. Id. at 819.
3. Id. at 819-20 (finding that "expression that is part of a 'method of operation' cannot be copyrighted").
Borland is merely trying to give former Lotus users an option to exploit their own prior investment in learning or in macros. The difference is that such a privileged use approach would not automatically protect Borland if it had simply copied the Lotus menu (using different codes), contributed nothing of its own, and resold Lotus under the Borland label. 4

The idea that the users’ collective efforts, their labor, should count in the copyright analysis caught my attention right away. It seemed to build implicitly on the idea that property has to do with labor; that central to a legitimate property claim is the expenditure of labor. But it defied conventional—for example, Lockean—thinking in contemplating the assignment of some sort of property right to the dispersed users; or, at any rate, recognizing the efforts of the dispersed users in the overall property calculus relating to the Lotus 1-2-3 program.

In this Idea, I have finally given full expression to the little voice that started whispering to me when I read Lotus v. Borland. In this Idea, I expand on Judge Boudin’s ideas. I explore the idea of awarding some form of intellectual property (“IP”) to large groups of dispersed creators. My point is simple, but somewhat radical: This form of effort is not well-accounted for in our legal system, which is organized around the idea of a single highly centralized creative entity (usually a person or corporation). To this end, I spell out some suggestions about how to bring dispersed creators’ contributions into the mainstream of IP policy. I start with an account of why these users’ efforts merit the attention (and protection) of IP law, using the property rights theory of John Locke. I then describe two primary types of collective creativity, “add-on” and “purely original.” Add-on works are those that are based in some way on a pre-existing work, typically owned by a single

4. Id. at 819, 821 (Boudin, J., concurring). Boudin added:

[It is unlikely that users who value the Lotus menu for its own sake—-independent of any investment they have made themselves in learning Lotus' commands or creating macros dependent upon them—would choose the Borland program in order to secure access to the Lotus menu.

If Lotus is granted a monopoly on this pattern [of menu commands], users who have learned the command structure of Lotus 1-2-3 or devised their own macros are locked into Lotus . . . . So long as Lotus is the superior spreadsheet—either in quality or in price—there may be nothing wrong with this advantage.

But if a better spreadsheet comes along, it is hard to see why customers who have learned the Lotus menu and devised macros for it should remain captives of Lotus because of an investment in learning made by the users and not by Lotus.

Id. at 820-21.
proprietor: These include fan websites where users contribute original material; user-generated game characters and scenarios in online games; user-generated software add-ons, such as macros, program modifications, and the like; and even user efforts to learn a standard technology (such as an operating system) and adapt their work to it. "Purely original" works are those, such as Wikipedia, created by dispersed users from the ground up. Each type of collective creativity has its own features, but a common thread unites them: They invite some sort of group claim to honor the labor that goes into them.

The idea of collective creativity is hardly new. Lots of people have remarked on it in recent years. For the most part, however, observers have talked about this form of creative work as falling well outside the traditional models of creative work—organizationally, socially, and even legally. From the perspective of law, collective creativity is today seen as a challenge to conventional mechanisms of encouragement, protection, and recognition. Intellectual property in particular is said to be a poor fit with this new form of creative work. While there is a good deal of overstatement in many of these accounts, I have come to see that some of the charges do stick. Chief among these is the idea that IP law is too attached to an outdated model of creativity, whose centerpiece is the lone creative individual. To be sure, I think this model has a long way to run; we are very far, I believe, from the day when the lone creator is a rare and unusual island in a vast sea of collective creations. Even so, I think the emerging model of collective creativity is something new, at least in its current mass form. As such, it poses a challenge to conventional thinking in the IP field. This is the challenge I take up here.

Put simply, the challenge is this: How do we adapt a system of property rights, conceived and designed for individual creators and the organizations that have traditionally employed them, to a new model of creativity where creators are sometimes widely dispersed? How do we move beyond the traditional dichotomy of rights/no rights, IP/public domain, or exclusive rights/the commons, to craft a new set of entitlements that recognize a middle ground—exclusive (or semi-exclusive) group rights? A detailed answer to these questions will come

over time, I believe, and will involve all sorts of micro-adjustments in doctrine, rules, and institutions. But here, almost at the outset, it seems useful to set out some of the conceptual ground rules that ought to guide this process of adjustment.

The best way to orient ourselves to this new development is to return to first principles. For IP law, as for property rights generally, that means the work of John Locke. When we look for a Lockean approach to the problem, we find some straightforward principles that can help structure our thinking about the problem generally. The principles are these: (1) labor ought to be rewarded with a property right—a claim good against others, justified by the exertion of effort that transforms starting materials into something useful; (2) laboring on an asset already owned by someone else may create some rights in the laborers, but this depends on the “terms of employment” under which the labor is expended; and (3) collective property claims are subject to the same caveats (“provisos”) as other such claims, all of which are designed to reconcile the rights of individual creators with the larger claims of society in general.

II. AN ASIDE ON THE DEMISE OF IP RIGHTS

No doubt many of the students of the new forms of creativity will be puzzled by this idea. Some at least have taken up the notion that distributed creativity is somehow by its nature inconsistent with IP, and with concepts of individual property rights altogether. Collective creativity and discrete ownership claims—property rights—just do not, in this view of things, go together at all.

This concept leads to the conclusion that the Internet, and the widely accessible distributed digital content it makes available, is

8. Considerable conceptual groundwork on the general issue of groups and group rights already exists, and some of it may have valuable lessons to teach us about how group property rights ought to be structured and governed. See generally AVIAM SOIFER, LAW AND THE COMPANY WE KEEP 81 (1995) (arguing that the legal system must be much more sophisticated in its handling of group rights and move away from exclusive focus on relations between individuals and the state); Eric R. Claeys, The Private Society and the Liberal Public Good in John Locke’s Thought, 25 SOC. PHIL. & POL’Y 201, 206 (2008) (describing Locke’s views on voluntary private associations); Lee Anne Fennel, Properties of Concentration, 73 U. CHI. L. REV. 1227 (2006) (arguing for group rights in connection with residential housing patterns emanating from private associational choices); Kevin A. Kordana & David H. Blankfein Tabachnick, The Rawlsian View of Private Ordering, 25 SOC. PHIL. & POL’Y 288 (2008) (discussing Rawls’ two principles of justice and how they apply to private associations); Marianne Constable, Book Review, 26 CONTEMP. SOC. 362, 362 (1997) (reviewing SOIFER, supra) (critiquing Soifer’s argument that “groups are important to individual identity and deserve legal recognition”).
somehow inconsistent at a deep foundational level with the notion of ownership rights. The very computers, wires, and WiFi hubs that power the Internet, in other words, implicitly dictate or constrain the legal-social rules and institutions that surround and govern human interactions in this technological milieu. Historians might see in this attitude a form of technological determinism,9 or “the idea of ‘technology’ as an independent entity, a virtually autonomous agent of change.”10 This view of society and history

is typified by sentences in which “technology” or a surrogate like “the machine,” is made the subject of an active predicate: “The automobile created suburbia.” . . . “The mechanical cotton-picker set off the migration of southern black farm workers to northern cities.” “The robots put the riveters out of work.” . . . In each case, a complex event is made to seem the inescapable yet strikingly plausible result of a technological innovation. Many of these statements carry the further implication that the social consequences of our technical ingenuity are far-reaching, cumulative, mutually reinforcing, and irreversible.11

To this list we, or rather some post-Internet IP scholars, might add “The Internet killed IP rights.”

It is obvious by now that I disagree with this statement, and implicitly with the deterministic mindset that underlies it. While this is not the place to set out a full-scale defense of the future of property rights in the digital world,12 I will make two brief but essential points.

9. Technological determinism of this sort is often associated with the writings of Karl Marx, for example:

Social relations are closely bound up with productive forces. In acquiring new productive forces men change their mode of production; and in changing their mode of production, in changing the way of earning their living, they change all their social relations. The hand-mill gives you society with the feudal lord; the steam-mill society with the industrial capitalist. The same men who establish their social relations in conformity with the material productivity, produce also principles, ideas, and categories, in conformity with their social relations.

KARL MARX & FREDERICK ENGELS, 6 THE COLLECTED WORKS OF KARL MARX AND FREDERICK ENGELS 166 (1976), available at http://www.marxists.org/archive/marx/works/1847/poverty-philosophy/ch02.htm. Those who have studied Marx closely, however, claim that he was in fact not a strict determinist at all. See, e.g., Bruce Bimber, Three Faces of Technological Determinism, in DOES TECHNOLOGY DRIVE HISTORY? THE DILEMMA OF TECHNOLOGICAL DETERMINISM 81, 89-96 (Merritt Roe Smith & Leo Marx eds. 1994); Nathan Rosenberg, Marx as a Student of Technology, in INSIDE THE BLACK BOX: TECHNOLOGY AND ECONOMICS 34, 39 (1982).

10. Merritt Roe Smith, Introduction to DOES TECHNOLOGY DRIVE HISTORY? THE DILEMMA OF TECHNOLOGICAL DETERMINISM, supra note 9, at ix, xi.

11. Id.

First, the legal system, and society in general, will and should shape and mold digital technology to its ends. That is, the hardware and software that constitutes this technology should be adapted to our collective ends. We ought not to conceive of the problem as adapting ourselves to its internal logic. In other words, we should reject the temptation to buy into the deterministic mindset, thereby (in part) helping its predictions come into being. Second, the basic economic and ethical arguments in favor of having property rights are just as sound, and maybe in some ways more compelling, in the "new economy" as in the old.\textsuperscript{13} Individual control of economic assets as a general organizing principle makes as much sense when those assets are digital as when they are industrial or agricultural. The case for property rights turns on what works and what is fair, and is not strictly a function of the nature of the underlying economic assets. As far as we can tell, for the most part individual ownership and control are as important now as ever. This is true even though the subject of ownership claims is changing rapidly in today's world, and even though there is a need to expand our understanding of "individual" owners to include various discrete groups that have made collective investments of time and effort to create valuable assets. It is to this expanded notion of groups as potential owners to which I now turn.

III. \textbf{GROUP CLAIMS FOR GROUP EFFORTS}

I will have more to say briefly on how we might apply John Locke's property theory to the efforts of collective groups. For now, let us start with a simple account of Locke's basic justification for property rights, and see how that applies to the products of today's collective creativity.

Locke wrote his account of property rights to refute "divine right" theorists who said that a single monarch had been granted sole possession of the land and all its contents, and therefore that all citizens of a given state held property ultimately by the grace of that single monarch.\textsuperscript{14} The state of nature, prior to the establishment of any formal government, was where Locke began. In this hypothetical situation, Locke posited, the earth and all it contains are "up for grabs," having been given to everyone in common.\textsuperscript{15} Individuals can legitimately claim

\textsuperscript{13} See generally Robert J. Gordon, \textit{Does the "New Economy" Measure up to the Great Inventions of the Past?}, \textit{14 J. Econ. Persp.} 49 (2000) (discussing the later part of the 1990s and the dramatic productivity changes during that period).


\textsuperscript{15} \textit{Id.} at 100.
resources in this setting by exerting some sort of labor on them. Since labor is a product of the body, which the individual unquestionably owns, the extension of that labor to unowned things creates a legitimate claim to them.\textsuperscript{16} Thus, property claims—subject to a host of restrictions, and limited in a variety of ways—arise and become legitimate. The state, or civil government, comes after for Locke, as individual owners join together voluntarily for the protection and furtherance of the rights (including property) they already in some sense possess.\textsuperscript{17}

Labor is the keystone of the arch through which individuals pass to claim property. In Locke’s scheme, expending effort makes property claims legitimate.\textsuperscript{18} The simple thesis of this essay, from a Lockean perspective, is that collective labor ought to count just as much, at least in some situations, as a foundation for property claims. Of course, if we adopt a Lockean perspective to justifying group claims, we in fairness will have to subject these claims to the entire gamut of limitations and provisos in Locke’s theory. For now, however, let us concentrate just on the basic idea that group labor ought to translate into a justification for some sort of group right. To trace out what this idea might mean, we need see whether anything in Locke’s theory supports the thesis I am arguing for.

IV. LOCKE ON GROUP PROPERTY

Locke speaks extensively about property and its relationship to groups. He says that the world and its contents were given initially to the largest imaginable group—to all humans. Individual property arises against this backdrop of group rights, which he calls the common.\textsuperscript{19} However, Locke creates a strong contrast between initial rights in common—“group rights” in the state of nature, so to speak—and true property rights, which are held by individuals who work on things so as to justify removal from the primordial commons.\textsuperscript{20} Real property comes after common ownership, and represents a movement out of this initial state.\textsuperscript{21} Locke also discusses property arrangements after the formation of a civil state, including relationships between sovereign states, but in these discussions he is dealing again with large aggregations of people who already own property, rather than with property claims by smaller

\begin{itemize}
  \item \textsuperscript{16} Locke, supra note 14, at § 27.
  \item \textsuperscript{17} Id. § 35.
  \item \textsuperscript{18} Id. § 27.
  \item \textsuperscript{19} Id. § 26.
  \item \textsuperscript{20} Compare id. § 26 with id. § 27.
  \item \textsuperscript{21} Id. § 35, 38.
\end{itemize}
groups arising from initial appropriation on a par with individual property claims.  

What guidance Locke does give is, in a sense, negative. In showing why individual property claims are legitimate, he explains that it would be infeasible for each individual who wanted to claim something to get the permission of all existing co-owners of that thing—that is, from all living persons, who again initially holds the earth and its contents in common. We might describe this as a transaction cost argument: The costs of obtaining permission from all co-owners is too high, so unilateral property claims must be permitted if individuals are to make good use of the resources they come across. In the passage where he describes the famous examples of gathering acorns and apples in the state of nature, Locke says:

And will any one say he had no right to those Acorns or Apples he thus appropriated, because he had not the consent of all Mankind to make them his? Was it a Robbery thus to assume to himself what had belonged to all in Common? If such a consent as that was necessary, Man had starved, notwithstanding the Plenty God had given him.

In other words, the transaction costs of obtaining permission from all the “owners” of a resource are too high; therefore, individual property claims must be permitted if people are to make use of the resources they encounter. This idea finds expression in a wide range of operative legal

22. Id. § 45.
23. See id. ("God, who hath given the World to Men in common, hath also given them reason to make use of it to the best advantage of Life, and convenience. The Earth, and all that is therein, is given to Men for the Support and Comfort of their being.").
24. This assumes that at least some individual exclusive rights are necessary for people to make full use of resources, an assumption I accept but that others have not always gone along with. Compare JAMES TULLY, A DISCOURSE ON PROPERTY 122 (1980) (arguing that granting use rights, as opposed to full exclusive rights, would be ethically superior and consistent with Locke’s writings) with JEREMY WALDRON, THE RIGHT TO PRIVATE PROPERTY 140-41 (1988) (explaining limitations and offering alternatives to this view).
25. LOCKE, supra note 14, at § 28.
26. This confluence of individual property claims and the transaction costs they engender finds expression in contemporary property theory, under the rubric of the anticommons. See generally MICHAEL HELLER, THE GRIDLOCK ECONOMY: HOW TOO MUCH OWNERSHIP WRECKS MARKETS, STOPS INNOVATION, AND COSTS LIVES (2008). In anticommons theory, however, the discussion centers on the obverse of Locke’s state of nature, the situation in which too many individual property rights have been granted. Id. at 2. Locke thought the potential for high transaction costs explained why individual property is justified in the first place (given the initial state of shared ownership in common). LOCKE, supra note 14, at § 28. Anticommons theory confronts the situation where individual property rights have been granted over disparate assets or parts of assets to many separate individuals, thereby preventing the aggregation of rights and assets into useful, functional units. HELLER, supra, at 4. For Locke, property rights are the solution to the
rules regarding property, along with the cognate thought that those wishing to transact with a property holder ought not to have to engage in excessive effort to locate and bargain with multiple people or entities. The basic idea is that property, as an institution, works in part because it empowers a single person or entity—a unique legal focal point—to make decisions regarding the use and disposition of a particular asset. This is a powerful advantage of property as traditionally conceived. So a novel extension of the property trope that encompasses the collective efforts of groups better be prepared to deal with transaction cost issues.

V. THE SHAPE OF A GROUP RIGHT: WHY PROPERTY?

The problem Locke identified is much more than speculative. It is very real. As the anticommons literature has shown, there are real costs to handing out property rights, at least when those rights include the conventional power to exclude others from using a resource.27 So the question occurs, is the game worth the candle? Or, to put it another way, do we really need to give a property right to groups that collectively labor on something?

One way to approach this is to consider the alternatives to awarding formal property rights. As far as I can tell, our legal system has a number of non-property mechanisms that recognize the expenditure of time or labor on an asset. Prime examples include various estoppel doctrines, such as the doctrine of reliance in contract law, or equitable estoppel as applied in patent or copyright cases.28 A presumption of expended labor also lies behind disparate other rules, ranging from laches to statutes of limitations to adverse possession.

Why aren’t doctrines like these enough to protect the effort of people who work on some resource, when those people are challenged by the holder of a property claim on the resource? The answer is that these doctrines are strictly personal or individual—bilateral, in a sense—in that they grow out of interactions between a right-holder and a specific individual party. As a consequence, these rules fail to capture two important complexities. The first happens when the holder of a right

27. HELLER, supra note 26, at 4-5 (discussing a “gridlock” in the testing and development of treatments for Alzheimer’s disease because of conflicting property interests).

against whom someone has a legitimate estoppel claim transfers that right to a third party. Does that third party take the right subject to, or free of, the estoppel claim? This is a complex wrinkle in the law that seems to require a complex answer. The second happens when no single individual has expended enough effort to meet the threshold required under the estoppel rule. There is no way under these rules to aggregate the efforts of multiple, disparate parties, into enough of a quantum of effort to trigger the estoppel.

A collective property right answers both deficiencies. As a property right, it is "good against the world," and so should survive any transfer of ownership from a party against whom it might be asserted to another party. And it grows out of an explicit recognition of group efforts, and thereby renders irrelevant whether any single individual has expended enough effort to qualify personally for an estoppel defense.

VI. THE SHAPE OF A GROUP RIGHT II: ADDRESSING THE TRANSACTION COST ISSUE WITH "ROUGH AND READY REPRESENTATION"

Even if you buy the argument that there may be advantages to a group property right, you might still have concerns—the same concerns Locke described in the passage quoted earlier—about the transaction costs required to administer such a group right. If so, know that you have company: I share the same concerns. It is extremely easy to make out a fuzzy case for a group right on the basis of a generalized appreciation for collective labor; it is another thing entirely to figure out even a moderately workable structure for such a right. Misgivings aside, however, let me plunge ahead.

I begin with a simple observation: In other areas of law, even in IP law, legal actors have faced complex and sometimes large groups whose members each hold part of a larger entitlement of some sort. And sometimes the legal system has figured out clever ways to identify, and in some sense construct or constitute, a single focal point entity to represent the larger group.29 This is actually common if you think about it. The Board of Directors of a corporation can act for the entire group of shareholders; members of a class action participate in the class certification process, out of which come identifiable group representatives; and bankruptcy participants go through similar

29. See, e.g., Multiparty, Multiforum Trial Jurisdiction Act, 28 U.S.C. § 1369 (Supp. II 2002) (permitting federal courts broad discretion to exercise original jurisdiction and joinder authority over lawsuits stemming from an accident or disaster involving the death of at least 75 people).
procedures, out of which identifiable focal entities are constituted.\textsuperscript{30} In copyright law, large groups of co-owners often result when multiple original creators transfer or devise partial interests of their long-lasting rights to multiple people and entities. Each of these examples has in common a sometimes large group of people whose common interest revolves around a single property right, event, or transaction. What I am proposing is an extension of this concept to embrace groups whose members share a common expenditure of effort to create something of value.

There are situations where a dispersed group such as this becomes the target of a right-holder. The many users who had invested time and effort in learning the Lotus 1-2-3 menus, and writing complex macros for them, would be an example. Judge Boudin's concurrence contains the seeds of a defense for the Lotus users that operates something like an estoppel—a strictly defensive right.\textsuperscript{31} This protects the interests of the group against the right-holder. In many ways, this kind of group defense has some of the properties of a class action class, or a related class in a bankruptcy proceeding. In each case, it is litigation by a right-holder that creates the focal point that brings together an otherwise disparate group.\textsuperscript{32} It is the lawsuit by the right-holder that creates the focal point in these cases.

Even if we add some quasi-property dimensions to this defense, it is still strictly a defensive right. The argument in this Idea is to go beyond this, to extend the logic of the defensive group right into more diverse situations. For example, contributors to a group project might want to prevent a competing variant from the "authorized" version of the project from becoming available. (Contributors to an open source software project might be an example.) They might thus seek an injunction against someone trying to introduce or distribute the competing variant. This kind of action requires a more active representation. It must take place in the absence of the sort of focal point provided by the activities of a right-holder.

The problem is to find some representative of the dispersed group. For answers, we can look to other areas where the legal system has to locate a focal point to represent a broader class of interests. Because the


\textsuperscript{31} See \textit{Lotus Dev. v. Borland Int'l}, 49 F.3d 807, 819 (1st Cir. 1995) (Boudin, J., concurring).

\textsuperscript{32} See \textit{FED. R. CIV. P. 23(a)(2)} (requiring for the certification of a class action "questions of law or fact common to all members of the class").
contributors we are interested in are by definition widely dispersed, this will be an especially difficult task. As a consequence, it is best not to set our sights too high. What we need is "rough and ready representation." An example of this comes from within the law of IP. In the space available here, it will have to serve as a model for the kind of representation I am talking about.

A vexing problem in IP law has been efforts to figure out how to protect and reward useful knowledge of various kinds that is developed and maintained by traditional communities. Medical uses for herbs, certain craft traditions and techniques, and even aspects of folklore have all been considered for this sort of treatment.\footnote{33. See generally Robert L. Ostergard Jr., Matthew R. Tubin & Patrick Dikirr, \textit{Between the Sacred and the Secular: Indigenous Intellectual Property, International Markets and the Modern African State}, 44 J. MODERN AFRICAN STUD. 309 (2006) (worrying that granting rights to sub-state groups will undermine the authority of already weak states); Viviana Munoz Tellez, \textit{Recognising the Traditional Knowledge of the San People: the Hoodia Case of Benefit Sharing}, available at http://www.ipngos.org/NGO%20Briefings/Hoodia%20case%20of%20benefit%20sharing.pdf (last visited Sept. 19, 2008).} The problem of representation arises here, and might serve as a model. In these cases, the current inhabitants of traditional leadership roles are assumed to adequately represent the generations past and future who have an interest in protecting and profiting from the traditional knowledge. There is no pretense that this is perfect or even procedurally fair representation. But it is assumed to be the best we can do.

What is needed in cases of dispersed creativity is to identify similar representative people or entities. They may not speak perfectly for all contributors, but they can be assumed to be good enough. The most active contributors to interest group websites, or heads of informal user groups, would be good examples. The idea is not perfect representation, but rough and ready representation along the lines of the traditional communities just mentioned. Only through this sort of mechanism can the group efforts of dispersed creators be translated into a legally functional entity. The basic idea is this: Courts need not be too fine in their concern for representative adequacy. The transaction costs of creating a representational superior legal entity will often be too high, and the entity will in effect then be useless.

VII. CONCLUSION

Group property rights for dispersed creators make sense under principles of IP law. But these rights must be tailored to the unique circumstances of group creation. What we are after is something
between the complete absence of an affirmative right, as often prevails now, and a full-bodied, full-fledged IP right. Something like exclusive (or semi-exclusive) rights to be held by groups who exert collective labor on things would satisfy the basic requirement of rewarding Lockean labor, without unduly complicating the IP system.

The vagueness and novelty of this idea are bound to bother a good number of people, lawyers, and scholars alike. If you fall into this class, consider this: there may be a good deal at stake here. If we cannot find a way to accommodate dispersed creativity within the traditional property paradigm, the growth of this kind of creativity will only add to the pressure on that paradigm. Isn't it better to adjust and adapt our conception of property than to restrict it to traditional channels, where it will preside, in all its formal rigor, over a still-large but backward-looking domain?