



Two Cheers for the Bundle-of-Sticks Metaphor, Three Cheers for Merrill and Smith

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Property rights in a particular resource commonly are splintered among different owners. To account for this possibility, some legal commentators refer to the maximal set of ownership entitlements in a specific asset as a bundle that can potentially be disaggregated through consensual transactions or otherwise. This conception is often expressed in terms of a bundle of rights. For reasons that will become clear, I instead invoke the image of a “bundle of sticks,” an only slightly less popular metaphor for the same idea. Justice Benjamin Cardozo, a premier judicial wordsmith, is conventionally credited with having first likened a set of full property entitlements to a bundle of firewood.² And in several opinions, Justices of the Supreme Court of the United States have invoked this image to describe the fullest possible set of private property rights.³

In this usage, *bundle of sticks* is a metaphor. Metaphors, unlike synonyms, are invariably inexact and therefore potentially misleading. I anticipate that contributors to this symposium will highlight two types of mischief that the metaphor may cause. First, the conception that property rights come in bundles that are easily fragmented may be descriptively inapt because various legal rules limit a property

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2. “The bundle of power and privileges to which we give the name of ownership is not constant through the ages. The faggots must be put together and rebound from time to time” (Cardozo 1928, 129).

3. *Kaiser Aetna v. United States*, 444 U.S. 164 (1979, 176) (referring to “sticks in the bundle of rights that are commonly characterized as property”); *United States v. Craft*, 535 U.S. 274 (2002, 278) (“A common idiom describes property as a ‘bundle of sticks’...”).

owner's powers to disaggregate ownership. This theme has been central in the work of Thomas Merrill and Henry Smith (2001b and forthcoming), the leading critics of the bundle metaphor. Second, the metaphor may have negative normative consequences because it wrongly implies that the disaggregation of entitlements is unlikely to affect social welfare. According to Merrill and Smith, the legal realists who promoted the bundle-of-sticks metaphor had a political agenda, namely, dethroning the sanctity of private property and the private ordering it enables in order to enhance levels of "collective control and redistribution" (forthcoming, 11–12). Merrill and Smith themselves are more skeptical than the legal realists of the relative efficacy of collective control. They therefore object to the bundle metaphor partly because it is likely to foster legal measures that will lead to excessive splintering of entitlements in private resources. By and large, I agree with both of Merrill and Smith's criticisms. Nonetheless, at the end of the day my assessment of the bundle-of-sticks metaphor is more charitable than theirs. In my view, the metaphor has come into common usage because it highlights an important feature of a private property system that lawyers and law students might otherwise have difficulty grasping. I therefore urge legal commentators not to abandon the bundle-of-sticks metaphor, but rather to be aware of its limitations and to invent complementary metaphors that might counter the bundle's shortcomings.

The Merits of the Bundle-of-Sticks Metaphor

Virtually all American law schools require their students to enroll in an introductory course on Property. After spending a month or two on other issues, a Property instructor usually assigns a block of readings that depict how "full" ownership of a property interest may be fragmented among various partial entitlement holders. An illustration may help. Suppose that at the outset O owns a pasture known as Whiteacre in fee simple. (In Anglo-American law, *fee simple* denotes the fullest possible form of ownership, one that lasts in perpetuity.) Through voluntary acts, O might fragment rights in Whiteacre along at least the following five dimensions:

(1) subdivision of Whiteacre into parcels of lesser acreage. O might, for example, divide Whiteacre into two parcels, Blackacre and Redacre, retain ownership of Blackacre, and sell Redacre in fee simple to neighbor N.

(2) decomposition of particular privileges of use. Thereafter O might, for example, sell mineral rights in Blackacre to an oil company, enter into a grazing lease with farmer F, and grant N an easement entitling N to cross Blackacre to access Redacre.

(3) temporal limitations on entitlements. O could limit a transferee's rights to a less-than-infinite period of time, and also create various forms of future interests. For example, O could limit F's lease of grazing rights on Blackacre to a one-year term starting immediately, and simultaneously negotiate with farmer G a follow-on lease whose one-year term would commence as soon as F's lease had come to an end.

(4) concurrent ownership. To make matters yet more complex, O's follow-on grazing lessee might be with not just one farmer (G), but with three (G, H, and I), who would concurrently own undivided interests in the lease.

(5) security interests. O, after entering into all of the above transactions, might grant M a security interest in Blackacre to secure a loan that M had made to O.

Although most of the partial interests mentioned in this example—leases, mortgages, easements—are in no way exotic, their concatenation is likely to make a beginning law student's head spin. To help beleaguered students, a teacher of Property therefore might invoke a metaphor. O, the instructor might say, once had a full bundle of sticks, but has since chosen to deal off specific sticks to a variety of transferees. "Aha," say the students. "That's clarifying."

The Bundle-of-Sticks Metaphor Slights Agglomeration Effects

At this point, however, a teacher of Property should also note the limitations of the bundle metaphor that Merrill and Smith, among others, have identified. The market value of a bundle of sticks of firewood is roughly twice the market value of half the same bundle of sticks. In other words, the bundling or unbundling of packets of firewood seldom gives rise to either agglomeration gains or agglomeration losses. The decomposition of interests in many other resources, by contrast, commonly is either value-reducing or value-enhancing.

Potential losses from fragmentation. The bundle metaphor implies that there is no rationale for unifying the entitlements in a particular resource in a single private owner. This implication is flatly erroneous. It is hardly news that the value of a whole may exceed the sum of the values of its parts. For example, when two or more individuals share access to the same resource, each of them may opportunistically overuse it, undermaintain it, or torpedo plans for cooperative endeavor. The fragmentation of rights among partial owners thus introduces risks of tragedies of the commons (Hardin 1968) and anticommons (Heller 1998). Partial owners must either put up with the losses this opportunism causes or incur the transaction costs of either controlling each other's opportunism or buying

each other out. These sorts of downsides of property fragmentation have figured prominently in the influential work of Michael Heller (1998; 2008). At the extreme, Heller might analogize full ownership of a resource not to a bundle of sticks but to a complete deck of 52 cards. In many contexts, the loss of a single card from a complete deck renders the remaining 51 cards virtually worthless.

Venerable enthusiasts of the bundle metaphor, such as Thomas Grey (1980) and the legal realists, seldom confronted this downside of fragmentation. Many policy analysts remain oblivious to it. For example, to make tenure in a single-family house more affordable, some commentators have proposed the creation of land trusts to acquire and lease the lands under houses (e.g., Kelly 2009) and the sale of shares of home equity to non-occupying investors (Caplin et al 1997). In most contexts, these sorts of arrangements would overly complicate governance of the shared real estate and thereby reduce, not enhance, the total value of the interests in it (Ellickson 2008, 85–86).

There also is evidence that, all else equal, most individuals are psychologically disposed to prefer a full bundle of rights in a resource. Jonathan Remy Nash and Stephanie Stern (2010) devised a survey instrument to test the effects of what they call “property frames.” Their respondents expressed a relative dissatisfaction with policies that confer less than full ownership.

Potential benefits of fragmented ownership. In many contexts, however, the carving out of partial interests in a resource can be value-enhancing.⁴ The value of an apartment development, for example, lies in its owner’s power to enter into leases, each of which presumably generates gains from trade for both the landlord and the tenant. A well-designed private property system therefore must enable many forms of consensual, and sometimes even nonconsensual, decomposition. In contexts where the disaggregation of property rights would greatly enhance value, full property rights might be better analogized not to a bundle of sticks but to a wholesale lot of rabbits’ feet. Because no individual desires to permanently possess a raft of good-luck charms, the value of the wholesale lot arises almost entirely out of the possibility of its future disaggregation.

A Few Friendly Criticisms of Merrill and Smith’s Essentialist View of Private Property

Merrill and Smith’s writings have permanently altered legal academic thinking about the nature of private property. Drawing on James Penner (1997) and

4. This is the basis of Richard Epstein’s (2010, 462–472) spirited defense of an owner’s powers to transfer particular sticks in a bundle.

others, they have resurrected the important truth that the *in rem* quality of property rights makes this legal category distinctive. They have persuasively argued that the law of private property is shaped largely to reduce the informational burdens of the owners and non-owners who have to cope with the system. As mentioned, they have also stressed the inconsistency of the bundle-of-sticks metaphor with the actual principles of Anglo-American property law. In their maiden venture as co-authors, Merrill and Smith (2000) defended, for example, the *numerus clausus* principle that limits the menu of possible interests that an owner may create through voluntary transactions. In their view, the law is hostile to the introduction of new forms of property interests because the introduction of a “fancy” may increase informational burdens on those not involved in the transaction. If the law were to permit the creation of endlessly exotic forms of land ownership, for example, an entrepreneur might be deterred from trying to assemble land parcels. Many other property rules, such as an owner’s robust right to exclude, the doctrine of adverse possession, and the rule against perpetuities, similarly reduce the informational burdens of the system.

Hats off, then, to Merrill and Smith. That said, I now briefly identify three issues on which my take is somewhat different from theirs.

First, because Merrill and Smith define “property” as an entitlement in a “thing” as opposed to a “person” (2007, 18–19), they are unwilling to refer to a person’s rights in his own body, labor, and reputation as property. Why this definitional timidity? Returns to human capital constitute approximately three-quarters of GDP. Slavery, the most contested legal issue in U.S. history, involved rules governing the ownership of labor. Because property concepts can help clarify analysis of these momentous legal issues, it is not apparent why property scholars should cede, on the altar of definitional purity, this entire territory to other legal specialists.

Second, Merrill and Smith, in their understandable passion to rehabilitate a robust conception of private property from the onslaught it has endured over the course of the twentieth century, at times exaggerate the role of private property in the overall system of resource management. For example, the first chapter of their superb property casebook (2007) carries the title, “What Is Property?” By this, it becomes clear, they actually mean another question: “What Is Private Property?” On that issue, they distinguish between the “essentialist” view that “property” has a core meaning as a legal concept, and the skeptical view that it is a bundle of sticks whose composition may vary widely from context to context (2007, 15-16). Merrill (1998), even before he joined forces with Smith, had declared that he embraced an essentialist view of private property. In their casebook, Merrill and Smith nonetheless tactfully decline to reveal the depth of their disdain for the bundle metaphor.

Merrill and Smith's casebook rightly places private property at center stage. Private property abounds in a market economy and is the form of greatest concern to both transactional lawyers and civil libertarians. But as Merrill and Smith know as well as anyone, even in market economies many valuable resources are not, and as a normative matter should not be, held in private ownership. The high seas, for example, are open-access resources that anyone can navigate, and many intellectual creations are in the public domain (that is, usable without charge). In ordinary speech, neither a pasture shared by villagers nor a common area in a condominium project is likely to be described as *private property*. Another phrase, perhaps *limited-access commons*, might better describe these arrangements (see generally Ellickson 1993, 1322–23). It is notable that in U.S. legal education, the names of most of the basic private-law courses are plurals—Contracts, Torts, Business Associations. Merrill and Smith perhaps should consider the virtues of retitling their casebook “Property Institutions,” and its first chapter, “What Are the Forms of Property?”

Third, Merrill and Smith rarely discuss the reality that affirmative duties may automatically attach to private ownership. They indeed have boldly asserted that any *in rem* duties of property owners, such as the duty of a landowner to refrain from carrying out a nuisance activity, are always negative (Merrill and Smith 2001a, 783, 789). This oversimplifies. The law may affirmatively require a landowner, for example, to control natural vegetation (Jones 1994) or to contribute to the costs that an abutting neighbor has incurred to fence a common boundary (Ellickson 1991, 65–81). One commentator (Ouellette 2011) supports imposing on each patent holder an affirmative duty to explain the nature of the patented invention to other researchers.

It is easy to understand why Merrill and Smith would tend to resist the notion that property ownership may come laden with affirmative *in rem* duties. Because they generally favor the simple packaging of entitlements, they are undoubtedly averse to layering on additional complexities. In many contexts, moreover, property owners may be able to use contracts or norms to elicit affirmative contributions from one another. Because Merrill and Smith exalt owner sovereignty, they likely would tend to prefer coordination by means of those mechanisms, as opposed to legal compulsion. Most important, they are acutely aware that some prominent property scholars have been urging lawmakers to affirm that property ownership entails broadly defined duties. Gregory Alexander (2009), for example, favors explicit legal recognition that an owner is bound by a “social-obligation norm,” and Joseph Singer (2009, 1048), by a general duty of “attentiveness.” Merrill and Smith understandably would be skittish about how a sitting judge might apply these amorphous concepts in a concrete case.

Yet, property law in fact does impose some narrowly circumscribed affirmative duties on owners. If Merrill and Smith aspire to accurately describe the

property system as it is, they might apply their exceptional analytical skills to this understudied set of obligations, perhaps to conclude that the category is narrowly cabined and should remain so.

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