

The Meaning of Property in Things[†]

Bart J. Wilson*
Smith Institute for Political Economy and Philosophy
Economic Science Institute
Chapman University

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Abstract: What is property, and why does our species happen to have it? In this article I explore how *Homo sapiens* acquires and cognizes the custom of property and why this might be relevant to understanding how property works in the 21st century. I first support the claim that property is a universal and uniquely human custom and then I argue that humans locate the meaning of property within a thing. Using philosophy of property law and actual property disputes, I also explain (a) how my theory generates a testable hypothesis, (b) how the bundle of sticks metaphor inverts how we cognize property, and (c) how social scientists, particularly economists, can no longer think about property as an external constraint imposed upon an individual.

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* Email: bartwilson@gmail.com

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Part I

1. Claim and Title

Property is a universal and uniquely human custom.

Initial reactions to this short claim will differ. Cultural relativists will reflexively cringe at the notion of property being a human universal. Their counterclaim is that property is a modern Western hegemonic construction. Biologists will immediately search their mental databanks for a counterexample in the animal kingdom. There must be at least one other species besides *Homo sapiens*—a primate for sure, or perhaps a dolphin or a scrub jay—that exhibits, at least on occasion, some behavioral patterns of property. Legal centralists, which includes most ordinary people and social scientists, will at first take pause at, if not take issue with, the idea of property as mere custom, for governments surely institute and enforce the rules of property.¹ Philosophers and lawyers wouldn't first reach for the word *custom* as their substantive of choice. In philosophical and legal treatises, property rests on rights, not custom.

The cultural relativists have a point, but not the one they think. The evidence is clear to midcentury anthropologist George Murdock: “so far as the author’s knowledge goes, [there is property] in every culture known to history or ethnography.”² Nearly a half century later in response to widespread denial of human universals, Donald Brown reiterates the claim that all human groups “have concepts of property, distinguishing what belongs – minimal though it may be – to the individual, or group, from what belongs to others.”³ But these few words are as far as they each go in positing property as a human universal. Ralph Linton is a little more concrete when he says that “all societies recognize personal property in tools, utensils, ornaments, and so forth.”⁴

Cultural relativists would challenge the bases for these claims.⁵ Sure, all human groups *use* tools, utensils, ornaments, and so forth, and it might appear to modern Western observers that such patterns of use are consistent with modern Western patterns of uses for what we call property. But how do we know that the Ewe in Africa or the Cree in North America or the Longgu in the Solomon Islands think about property like Anglophones do? The word *property*, relativists would claim, is an Anglo concept with roots in Middle French and ancient Latin.

Perhaps there is something in the definition of the word that would help us apply the concept universally. Consider how the *Collins Cobuild English Language Dictionary* (for learners) defines *property*:⁶ “Someone’s property is all the things that belong to them or something that belongs to them.” What does

¹ These categories are largely, but not entirely exclusive.

² Murdock, George P. “The Common Denominator of Cultures,” in *The Science of Man in the World Crisis*, 123-142. Edited by Ralph Linton. New York: Columbia University Press, 1945, p. 124.

³ Brown, Donald E. *Human Universals*. New York: McGraw-Hill, 1991, p. 140.

⁴ Linton, Ralph. “Universal Ethical Principles: An Anthropological View.” In *Moral Principles of Action: Man’s Ethical Imperative*, 645-660. Edited by Ruth Nanda Anshen. New York: Harper & Brothers, 1952, p. 655.

⁵ See, e.g., Bell, Duran. “The Social Relations of Property and Efficiency,” in *Property in Economic Context*, Robert C. Hunt and Antonio Gilman (eds.). Lanham, MD: University Press of America, 1998, pp. 29-45, and Neale, Walter C. “Property: Law, Cotton-pickin’ Hands, and Implicit Cultural Imperialism,” in *Property in Economic Context*, Robert C. Hunt and Antonio Gilman (eds.). Lanham, MD: University Press of America, 1998, pp. 47-64.

⁶ Available at <http://www.collinsdictionary.com/dictionary/english-cobuild-learners>. Last accessed 2 November 2015. The Collins Dictionary is known for its definitions via the use of the word in simple sentences.

it mean for something to belong to someone? “If something belongs to you, you own it.” So what does it mean to own something? “If you own something, it is your property.” All right then, we’re right back where we started with an Anglo concept, only now defined circularly in terms of two Anglo-Germanic concepts. *Own* is a particularly problematic foundation for understanding property as a human universal.⁷ According to the Oxford English Dictionary (OED) the transitive verb *own* is newer than the adjective *own* and has been only in use since the 16th century when it began supplanting the use of its relative *owe* in the sense ‘to possess.’

The cultural relativists are right then to be concerned if we Anglocentrically interpret tool use by the Ewe, Cree, and Longgu in terms of belonging and owning to assert that they have property like we have property. Where the relativists go wrong is to leap to the conclusion that whatever is semantically common to *property*, *own*, and *belong* cannot also be found in every other human language. On the contrary, linguists have identified such a semantic element, so primitive, so basic that two-year-olds parse it from adult conversations and readily adopt it. That concept is MINE.⁸ But I prefigure.

If universally attributing Anglo-Germanic concepts to humans is fraught with Anglocentricism, then attributing the same concepts to other members of the animal kingdom is even more fraught with anthropocentrism, something about which biologists, and primatologists in particular, are reminded every day at work. Unfortunately, as much as we would like to be more objective and swap out our human-tinted lenses, we can’t because we are humans and not DNA changelings. So to comprehend how animals act in their environments, we must make do with our humanity when interpreting the basics of ‘property’ in nonhumans.⁹ Besides, identifying what humans have in common with the rest of the animal kingdom is useful, if for nothing else than it keeps us humble.

To preserve our bodies and propagate our species, we must—like all animals—satisfy our basic impulses to ingest, excrete, and avoid pain, heat, and cold, and such preserving and propagating requires physical matter external to ourselves. Whether the matter is some food, a potential mate, or shelter from the elements, conflicts among conspecifics (the term in biology for members of the same species) are bound to occur when individuals simultaneously desire to satisfy the same impulse with the same rivalrous object. Not every species competes with conspecifics in the same way to satisfy such universal impulses. Conflicts over external objects vary depending upon the ecological niche and the patterns by which individuals of the species group together and move around relative to one another (what C. F. Hockett calls the dwelling and scheduling patterns of the species).¹⁰

But why are we (and all animals) not instantly combative with every conspecific with whom we are in immediate direct competition for an external object? Because there are costs as well as benefits

⁷ Jeremy Waldron also notes “many ambiguities in the term ‘ownership’” in different legal systems. See Waldron, Jeremy. *The Right to Private Property*. New York: Oxford University Press, 1988, p. 29.

⁸ Goddard, Cliff and Anna Wierzbicka. 2016. “‘It’s mine!’: Re-thinking the Conceptual Semantics of ‘Possession’ through NSM,” *Language Sciences*, 56, 93-104.

⁹ See, e.g., Brosnan, Sarah F. 2011. “Property in Nonhuman Primates,” *Origins of Ownership of Property: New Directions for Child and Adolescent Development*, 132, 9–22. See also Strassman, Joan E. and David C. Quellar. 2014. “Privatization and Property in Biology,” *Animal Behaviour*, 92, 305-311. A key word search for “ownership” in the database for *Animal Behaviour* yields results for 356 different papers.

¹⁰ Hockett, C. F. *Man’s Place in Nature*. New York: McGraw-Hill, 1973.

to any fight, and any species that does not internalize these individualized costs will not remain a species for very long.¹¹ As every species evolves, it stumbles upon the many behavioral margins for the conditions under which to fight or not with conspecific competitors over food and mates. Through very slow feedback and innovation, species-wide patterns of actions form to govern how individuals engage one another. Thus, the rules and order regarding the use of external objects varies by species depending upon its ecological niche and its dwelling and scheduling patterns.

One problem with conveniently applying human rules to nonhumans is that such concepts are derived from the distinctly human experience of the last 100,000 years. Doing so also leads us to tacitly conclude that there are but minuscule differences between us and the rest of the animal kingdom, for the patterns of actions by which *Homo sapiens* satisfies its animalistic impulses can look like those of other animals. Consider the red squirrel. The biologist Brooker Klugh observes that, just like humans, the red squirrel's "sense of ownership seems to be well developed. Both of the squirrels which have made the maple in my garden their headquarters apparently regarded this tree as their private property, and drove away other squirrels which came into it. It is quite likely that in this case it was not the tree, but the stores that were arranged about it, which they were defending."¹²

Humans, like many birds and every other kind of mammal, have a home range, an area over which an animal travels in search of food.¹³ A home range typically contains a dwelling within it and its boundaries may be fixed or fluctuating. The subset of the home range, proper or not, that individuals will fight to defend against conspecifics is called, we all have heard, the territory of an animal.¹⁴ Territory is usually considered to be a form of property. As Klugh notes, animals fight to defend a territory, not for the sake of the territory itself, but for the food, mates, progeny, or shelter within it. Defending territory is the proximate means for satisfying the ultimate impulses to use the objects within it. Humans also fight conspecifics to defend objects within their territories. But we also fight for the sake of the territory itself. Moreover, we do not interlope *for the sake of* not interloping, even if we could use the items in a conspecific's territory. We do not interlope because do not want to think of ourselves as the kind of person who interlopes. And that is not a minuscule difference between us and the red squirrel. That discontinuity is one crucial item in what makes us human.¹⁵

The other important point to note in comparing red squirrels and humans is that "things" are logically anterior to "territories" for all animals, and things are the focus of this essay. As my argument unfolds, it will also become clear that property in things is temporally and cognitively prior to property in

¹¹ Economics 101 and Dawkins, Richard. *The Selfish Gene*. New York: Oxford University Press, 1976, ch. 5. Notice that the answer is not that we are moral beings. Learning not to instantly fight is more the source than the result of our moral insights. See Hayek, F.A. *The Fatal Conceit: The Errors of Socialism*. Chicago: University of Chicago Press, 1988, p. 21.

¹² Notice the use of the terms *ownership* and *private property*. Klugh, A. Brooker. 1927. "Ecology of the Red Squirrel," *Journal of Mammalogy* 8, 1-32.

¹³ Burt, William H. 1943. "Territoriality and the Home Range Concepts as Applied to Mammals," *Journal of Mammalogy* 24, 346-352.

¹⁴ Burt (1943).

¹⁵ My thinking on this has evolved considerably since my early forays into property in DeScioli, Peter and Bart J. Wilson. 2011. "The Territorial Foundations of Human Property," *Evolution and Human Behavior*, 32, 297–304, but much less so from Kimbrough, Erik O., Vernon L. Smith, and Bart J. Wilson. 2010. "Exchange, Theft, and the Social Formation of Property," *Journal of Economic Behavior and Organization*, 74, 206–229.

land. Rather than starting with the more difficult cases of land, effluents, and riparian zones, I aim to develop an uncontentious core for how we cognize property in things that gives the more contentious cases the significance they have.

As with territories, there is a gulf between humans and other animals in how we regard the property of things as we go about satisfying our impulses. The source of that gulf is symbolic thought.¹⁶ Symbolic thought is what makes many uniquely human capabilities possible: language, creativity and innovation, art, and trade, and symbolic thought is likewise what makes property a uniquely human custom.¹⁷ But I again prefigure.

If there is a gulf that separates nonhumans from humans regarding property of things, the chasm need not extend all the way from nonhuman patterns on the one side to government-instituted and -enforced property on the human other side. Some birds, many mammals, most primates, and all humans pass on patterns of actions to successive generations of progeny.¹⁸ When the patterns of actions are not acquired from the genes of the parent, but handed down from teachers who were likewise habituated to the same actions by their teachers, different social groups within a species will have different patterns of actions because the learning of the practices is social and not genetic. The brown-headed cowbird, a brood parasite, passes along different courtship songs that cannot have been transmitted genetically; bottlenose dolphin cows pass along different foraging techniques to their calves; and orangutans in certain locations manufacture and use tools to extract food that orangutans in other locations do not make and use, despite living in the same ecological conditions.¹⁹ The common feature to all nonhuman practices regarding food and mates is that the practice consists in learning how to acquire something. Only human practices regarding things consist in learning from a mentor how *not* to acquire something from someone else. Thou shalt *not* steal. Play nice, Johnny.

All human groups use the logical concept of NOT; no linguist has ever studied a language that does not contain the grammar to negate.²⁰ The other side of the symbolic threshold is not simply the capability to negate how we go about acquiring things to use. Our acts to acquire things are also judged, for their own sakes, to be good or bad. Every language can express the simple, indefinable-except-of-themselves concepts of GOOD and BAD.²¹ In other words, another discontinuity with nonhumans regarding things is that human practices are moral practices. Tens of millennia before there were governments, humans

¹⁶ Deacon, Terrence W. *The Symbolic Species: The Co-evolution of Language and the Brain*. New York: W.W Norton & Company, 1998. For my purposes, it is sufficient to use symbolic thought and abstract thought interchangeably.

¹⁷ Brown (1991); Bickerton, Derek. *Adam's Tongue: How Humans Made Language, How Language Made Humans*. New York: Hill and Wang, 2009; Ridley, Matt. *The Rational Optimist: How Prosperity Evolves*. New York: Harper, 2010; Dutton, Denis. *The Art Instinct: Beauty, Pleasure, and Human Evolution*. New York: Bloomsbury Press, 2010; and Wilson, Bart J. 2015. "Humankind in Civilization's Extended Order: A Tragedy, The First Part," *Supreme Court Economic Review*, 23(1), 35-58.

¹⁸ Hockett (1973).

¹⁹ Fragaszy, Dorothy M. and Susan Perry. *The Biology of Traditions: Models and Evidence*, New York: Cambridge University Press, 2008.

²⁰ Brown (1991) and Wierzbicka, Anna. *Semantics: Primes and Universals*. New York: Oxford University Press, 1996.

²¹ Goddard, Cliff and Anna Wierzbicka. *Meaning and Universal Grammar: Theory and Empirical Findings, Volume 2*. Philadelphia: John Benjamins Publishing Company, 2002.

were teaching each other what not to do regarding the use of things. No human is born good; all must be taught by their mentors the customs to become so.

The central question of this paper is how we comprehend the meaning of property as a custom. One consequence of this project is that it dispels the modernocentric myth that “governments must *grant* rights before it can enforce them.”²² If we think of property as a custom tens of millennia in the making, then I think a judge can adjudicate a concrete conflict regarding the content of the custom without a legislature positively granting anything. But I prefigure anew.

If, as I will argue, property is a custom about as old as our species itself, then reading into the world the concept of rights to discursively describe property might give us some pause for anachronistic concern. I say this with some trepidation and fear that I might lose a key audience before I even start. Permit me to explain. I understand what philosophers, lawyers, and philosopher-lawyers mean when they say, for example, that property is “the right to determine how a particular thing will be used,” or “the right to exclude others from a valued resource,” or “a right to a thing.”²³ And I understand what *X* means, where *X* is a thing, excluding others from a valued resource, and determining how particular things will be used. But what is not immediately clear to me is the meaning of *the right to* in *the right to X*.

Leif Wenar in *The Stanford Encyclopedia of Philosophy* defines rights as “entitlements (not) to perform certain actions, or (not) to be in certain states; or entitlements that others (not) perform certain actions or (not) be in certain states.”²⁴ Similarly, when philosophers Douglas Rasmussen and Douglas Den Uyl refer to a right, they say it is “a claim or entitlement that individuals have for how others will treat them.”²⁵ All right, what is a claim or an entitlement? Again dictionaries like the *Collins Cobuild* are dizzyingly unhelpful:

- “A claim is a demand for something that you think you have a right to.”
- “If you have a right to do or to have something, you are morally or legally entitled to do it or have it.”
- “If you are entitled to something, you have the right to have it or do it.”

Yet there must be more to the meaning of *right* and *entitle* for Sir Edward Coke to say that “every right is a title, but every title is not such a right for which an action lieth.”²⁶ Jeremy Waldron says that the idea of rights is “the idea that people have certain key interests...which they are not to be required to sacrifice, and which therefore may not be overridden, for the sake of the collective welfare or other goals

²² Sened, Itai. *The Political Institution of Private Property*. New York: Cambridge University Press, 1997, p. 6.

²³ Penner, J.E. *The Idea of Property in Law*. New York: Oxford University Press, 1997, p. 5; Merrill, Thomas W. 1998. “Property and the Right to Exclude,” *Nebraska Law Review* 77, 730-55, p. 730; and Smith, Henry E. 2012. “Property as the Law of Things,” *Harvard Law Review* 125, 1691-1726. See also Schmidtz, David. 2012. “The Institution of Property,” Available here: <http://www.davidschmidtz.com/sites/default/files/articles/InstitutionProperty2012.pdf>. Revised from “The Institution of Property,” *Social Philosophy & Policy*, 11(1994), 42–62.

²⁴ Wenar, Leif. 2015. “Rights,” *The Stanford Encyclopedia of Philosophy*, Edward N. Zalta (ed.), <http://plato.stanford.edu/archives/fall2015/entries/rights/>. Last accessed 17 November 2015.

²⁵ Rasmussen, Douglas B. and Douglas J. Den Uyl. *Norms of Liberty*. University Park, PA: Pennsylvania State University Press, 2005, p. 77.

²⁶ Coke, Sir Edward. *The First Part of the Institutes of the Lawes of England*, 1st edition, 1628, i. 345 b.

of their society.”²⁷ J.E. Penner’s definition contains somewhat simpler constituent concepts: “an interest of sufficient importance to the person who has it to serve as an exclusionary reason guiding the action of others.”²⁸ Both of these are illuminating explanations but also, it should be noted, post-aristocratic, bourgeois notions of the rights of individual persons, hoi polloi included.²⁹

According to the OED, the history of *right* as that which is considered consonant with aristocratic justice is much older (and cognate with Old Frisian, Old Dutch, Old Saxon, and Old High German and comparable to Old Icelandic, Old Swedish, and Old Danish) than the word *right* in having the right to do X. The latter is decidedly post-Norman invasion Middle English, which means it still does not necessarily include the masses. Furthermore, the linguist Anna Wierzbicka suggests that since the Enlightenment “it is likely that the semantic equivalents of *rights* in languages other than English (e.g., *les droits* in French, *prava* in Russian) do not have the same passionate moral connotations as the English word *rights*, associated by the speakers of English with ‘what is the right thing to do.’”³⁰ The point of this is to simply say that the concepts of entitlement and the right to do X, and the reasons why our species has them, are too modern, too complex, and possibly too Anglo to serve as our species’ mass modest foundation for the emergence of property on the Pleistocene plain. Moreover, it matters for how social scientists theorize, philosophers philosophize, and judges opinionize about property in the 21st century that we comprehend its meaning in a way that is consistent with how our species acquires and cognizes, by which I mean perceives and knows, the custom. And with that I desist with the prefiguring.

* * *

We have traversed some extensive terrain in this introduction. If I am guilty of prolixity, it is because I wish to pique the interest of readers from several disparate tribes about a problem about which I find social scientists, and economists in particular, to be strangely incurious, viz., explaining what property is and why their species happens to have it. Moreover, I find a notable lacuna in philosophical and legal scholarship concerning how the emergence of property in our species might be relevant to understanding how property works today.³¹ So I thought I would breach the borders of anthropology, archeology, biology, cognitive linguistics, economics, law, and philosophy, not to steal or disfigure their ideas, but to mate them à la Matt Ridley’s *The Rational Optimist*.³²

²⁷ Waldron (1988, p. 13).

²⁸ Penner, J.E. *The Idea of Property in Law*. New York: Oxford University Press, 1997, pp. 13-14.

²⁹ McCloskey, Deirdre. *Bourgeois Equality: How Ideas, Not Capital or Institutions, Enriched the World*. Chicago: University of Chicago Press, 2016.

³⁰ Wierzbicka, Anna. *English: Meaning and Culture*. New York: Oxford University Press, 2006, p. 317. See also Carbaugh, Donal. *Talking American: Cultural Discourses on Donahue*. Norwood, NJ: Ablex, 1988.

³¹ Jeffery Stake discusses how animal behaviors resemble property in humans, but not how the custom emerged in our species. See Stake, Jeffrey E. 2004. “The Property ‘Instinct’,” *Philosophical Transactions of the Royal Society of London: Biological Sciences*, 359, 1763–74.

³² This excellent book, written by a biologist, is a key motivation for this paper and one of the best introductions to economics for students. After writing several books explaining how *Homo sapiens* is like every other species on the planet, Ridley posits that routinely exchanging one thing for another is a unique human propensity. I don’t think it’s a coincidence that property in things is also unique to humans; see Wilson (2015).

Building upon the introduction, the remainder of the paper develops my claim about what property is by integrating nearly every word of the paper's title into the argument.³³ Claim and title go hand in hand.

Getting to meaning in a title will take a little time, for it relies on first establishing the universality and uniqueness of the custom in humans. Section 2 discusses how nonhuman animals use tools, the gulf between their uses of tools and ours, what symbolic thought is, and how symbolic thought explains this discontinuity with the rest of the animal kingdom. The next section explains how custom emerges out of the social practice of tool use in primates when symbolic thought is applied to it. Section 3 also develops the thingness of property as a custom.

The class of words most likely to be overlooked in a title is the preposition. While I will briefly touch on *of*, as well as *to* and *for*, as examples of the mighty unsung and inversely proportional work that prepositions do in language, the focus of Section 4 is on the cognitive contribution of the word *in*. My working supposition throughout this paper is that language reflects and reveals the unconscious principles of the mind.³⁴ As Wierzbicka says, "looking into the meaning of a single word, let alone a single sentence, can give one the same feeling of dizziness that can come from thinking about the distances between galaxies or about the impenetrable empty spaces hidden in a single atom."³⁵ I posit that an English language convention arose, and now has largely fallen out of use, for dealing with the formidable, yet beautiful, complexity of the meaning of property. The burden of my argument is to show that while this convention lasted for only 500 years, less than 1% of the time our modern species has roamed the planet, it provides an insight into how humans universally and uniquely cognize property. And my argument is this: humans locate the meaning of property within a thing.

In Part II I unite and critique several philosophies of property in light of this thesis. I also reconsider several prominent court cases involving property to work through how my theory can be used to think about property disputes. Out of this emerges a testable implication of the theory. Finally, I discuss the implications for economics and its treatment of property rights, not property. First of all, the bundle of sticks metaphor inverts how humans cognize property. Secondly, we can no longer think about the rules of property as mere external constraints imposed upon an individual.

2. All Animals Use Things, Specifically Food

Food is Unlikely to be the Original Object of Property

John Locke's famous and influential inquiry on property begins with the Earth given in common to all humankind so that nature might support us with "the fruits it naturally produces."³⁶ Acorns and apples are his illustrative examples of "how men might come to have a property in several parts of that which God gave mankind in common."³⁷ "When did [the acorns and apples] begin to be his?" Locke leadingly asks, "When he digested? Or when he ate? Or when he boiled? Or when he brought them home?"

³³ The sole exception is the initial definite article, which I obligatorily include to conform to the English grammar convention of connoting the uniqueness of the noun phrase that follows.

³⁴ Pinker, Steven. *How the Mind Works*. New York: W.W. Norton & Company, 1999.

³⁵ Wierzbicka (1996, p. 233).

³⁶ Locke, John. *Two Treatises of Government*. P. Laslett (ed.). Cambridge: Cambridge University Press, 1689/1988, p. 288.

³⁷ Locke (1689, p. 288).

Or when he picked them up?”³⁸ Food seems like (for us) the ideal starting point in the search for the original objects of property in our species. Its rivalrousness indicates its potential as a source of conflict and its absolute necessity indicates an important problem in need of an important solution.

The trouble with the origins of property beginning with food is that humans aren’t the only animal that needs to solve this problem. All animals are heterotrophs, i.e., all animals are incapable of using sunlight to convert inorganic carbon into organic compounds, and so all animals must ingest other organisms with organic carbon. Once ingested the organism containing the organic carbon literally vanishes as an object. That is why food is rivalrous for all animals, and moreover, in the face of scarcity, why it is ubiquitously a potential source of conflict.

While it is certainly possible that food is the original object of property, I suspect it is not. Tools, utensils, and ornaments are quite unlike food. Because they are not converted into energy after a single use, they continue to exist and can be used again on other occasion, by the same animal or another conspecific. It’s also one thing to try and take a bone away from your German shepherd when she is hungrily gnawing on it, but it’s quite another when the bone has become a plaything lying around in the yard. Taking food from within any animal’s grasp when it serves to satisfy an immediate impulse is not the same thing as picking up a hafted spear lying around. While we might similarly shout, “Hey, this apple is mine!” and “Hey, this spear is mine!” to the person who grabs either, the chimpanzee treats quite differently an apple in hand and a pruned twig previously used for termite fishing. Only if you try to take the apple will you lose some fingers. Food satisfies an immediate impulse and impeding it invites aggression for the harm in directly reducing the animal’s fitness for survival. Tools can be used to solve immediate impulses too, as they are by a multitude of different animals, but only in humans are tools, utensils, and ornaments socially taught to be made and used for purposes with considerable spatiotemporal distance from their manufacture.

Locke concludes his barrage of questions by saying that “’tis plain, if the first gathering made them not his, nothing else could. That *labour* put a distinction between them and common. That added something to them more than nature, the common mother of all, had done; and so they became his private right.”³⁹ The problem with Locke’s examples of acorns and apples as explaining how humans might come to have property in them is that all animals have solved the conflictual problems of food with his labor mixing theory of property. Now the temptation might be to say that this observation universalizes Locke’s labor mixing theory to the entire animal kingdom.⁴⁰ If so, then the organizing questions on property would be (1) how is it that humans came to apply these solutional practices to other things—like tools, utensils, and ornaments, and (2) how is it that our practices regarding other things became so much more complex than other animals’ practices regarding other things? In short, *how does a genetically scheduled behavior regarding food (or territory or mates) in nonhumans become a socially taught and learned behavior about how not to acquire things—not just food (or territory or mates)—in humans?* I find it to be a rather large leap, however, to go from “I’m eating this apple to satisfy my hunger here and

³⁸ Locke (1689, p. 288).

³⁹ Locke (1689, p. 288).

⁴⁰ Locke’s project is to justify why people ought to have property. Universalizing Locke’s labor theory would not be a moral justification for property in other animals, but an explanation for observing a common scheduling pattern among all animals.

now” to “I’ll be using this spear on next week’s hunt to get the meat that will satisfy my hunger then and there.” That’s a lot of time and distance over which to stretch the base animalistic impulse to eat. Locke’s example conflates the simple use of food in the here and now, a defining characteristic of every organism in the animal kingdom, with the custom of property, which, I shall argue, is cognitively distinct in humans and which stands outside the here and now.

So while it is true that solving the conflictual problem of food is vital, I suspect that human tool use is the key to understanding the similar form of the claims (and titles), “Hey, this apple is mine!” and “Hey, this spear is mine!” My contention is that a *genetically* scheduled behavior for food did not somehow somehow become a *socially* taught and learned behavior for *not* acquiring durable things. Rather, property emerged gradually out of the human tradition regarding tools and then came to be applied to support our base animalistic impulses for food.

Tools Have Potential Because of How We Construct and Use Them

Contrary to common thinking, tool use in nonhuman animals isn’t cognitively more complex than non-tool behaviors. Consider the digger wasp that hammers with a pebble; or the four genera of ants that transport liquid foods by placing drops on carrying containers of leaves, wood, soil, mud, grass, or sand; or the badger which blocks the burrow entrances of ground squirrels with soil, vegetation, or snow.⁴¹ Birds too, especially corvids, have amazed us with their feats of detaching, shaping, combining, and reshaping single tools, but birds are generally limited to using tools in the specific context of extracting food from holes and with but a short delay between manufacture/use and the acquisition of the food.⁴² There is also no evidence that tool use in birds—like the Hawaiian crow—is a socially transmitted scheduling pattern.⁴³

Much more so than birds, nonhuman primates are flexible users of associative tools, which are comprised of two or more distinct objects.⁴⁴ Both capuchin monkeys and chimpanzees crack open nuts in the wild using hammer and anvil stones. Because the process involves two spatial relations employed in sequence, biologists consider hammer and anvil nut cracking to be the most complex tool use observed in nonhumans.⁴⁵ Nonhuman primates also make and use tools in a variety of different contexts and socially transmit skills from generation to generation. In addition to acquiring food, chimpanzees use tools to play and communicate with others and to clean and defend themselves.⁴⁶ Once thought to be the putative hallmark of humanity, great apes and capuchins have also been observed using a tool to make

⁴¹ Shumaker, Robert W., Kristina R. Walkup, and Benjamin B. Beck. *Animal Tool Behavior: The Use and Manufacture of Tools by Animals*. Baltimore: The Johns Hopkins University Press, 2011.

⁴² Emery, Nathan J. and Nicola S. Clayton. 2004. “The Mentality of Crows: Convergent Evolution of Intelligence in Corvids and Apes,” *Science*, 306, 1903-1907, and Boesch, Christophe. “Ecology and Cognition of Tool Use in Chimpanzees,” in *Tool Use in Animals: Cognition and Ecology*. Crickette M. Sanz, Josep Call, and Christophe Boesch (eds.). New York: Cambridge University Press, 2013, pp. 21-47.

⁴³ Rutz, Christian, Barbara C. Klump, Lisa Komarczyk. et al. 2016. “Discovery of Species-Wide Tool Use in the Hawaiian Crow,” *Nature* 537, 403-407.

⁴⁴ See Tables 7-2 and 7-3 on p. 216 in Shumaker, Walkup, and Beck (2011).

⁴⁵ Visalberghi, Elisabetta and Dorothy Fragaszy. “The Etho-Cebus Project: Stone-tool Use by Wild Capuchin Monkeys,” in *Tool Use in Animals: Cognition and Ecology*. Crickette M. Sanz, Josep Call, and Christophe Boesch (eds.). New York: Cambridge University Press, 2013, pp. 203-222.

⁴⁶ Boesch (2013).

and use a tool. For example, an orangutan and a bonobo have on an occasion used a hammer stone to detach a sharp flake from another stone and then used the flake for cutting.⁴⁷ These and other examples, however, are quite rare in the wild and in captivity the nonhuman primates require instruction from their benevolent captors.⁴⁸

As taxonomically widespread as tool use is across the animal kingdom, it is still relatively rare.⁴⁹ And as impressive and humbling as it may be that our primate relatives can also use a tool to make and use a tool, no other species than ours routinely *makes and uses* a tool to *make and use* a derivative tool,⁵⁰ nor does any other species make and use a composite tool of at least two different material elements (like a spear, knife, or scraper).⁵¹ Sometime in the last 5 to 7 million years, between our last common ancestor with the chimpanzee and the first appearance of *Homo sapiens*, our ancestors overcame some major hurdles necessary for complex tool manufacture and use.⁵²

Chimpanzees and capuchin monkeys evaluate potential tools by their suitability for the task. They use heavier rocks to crack open nuts with tougher shells, and they regularly transport and reuse tools.⁵³ Chimpanzees also undergo a long-term learning from masters to become proficient at choosing suitable stones for different types of nuts.⁵⁴ But how chimpanzees learn to use tools indicates the limits of their use. Chimpanzees learn by copying the result of a demonstration.⁵⁵ They attend to the physical properties of the tools and the outcome of the demonstration, not to the purposes of the mentor.⁵⁶ In contrast, human children learn copying the action and not the result of the action.⁵⁷ They attend to the demonstration and the mentor's purpose of the tool.⁵⁸ The difference is subtle, but important. Human learners understand the mentor to be doing something *for* them, and by sharing that purpose, children discover the meaning of the mentor's process. Process and purpose are meaningful abstractions of the raw physical signs in the demonstration. This is an important step on the road to property, because property is more than just the physical information of the item of interest. There is meaning in the custom regarding the thing. Pinning down when this occurred in the hominin line is difficult, if not impossible given what we can and cannot know about our *Homo* ancestors from the archeological record. But doing

⁴⁷ Shumaker, Walkup, and Beck (2011).

⁴⁸ Shumaker, Walkup, and Beck (2011).

⁴⁹ Hunt, Gavin R., Russell D. Gray, and Alex H. Taylor. "Why is Tool Use Rare in Animals?" in *Tool Use in Animals: Cognition and Ecology*. Crickette M. Sanz, Josep Call, and Christophe Boesch (eds.). New York: Cambridge University Press, 2013, pp. 89-118.

⁵⁰ Brown (1991).

⁵¹ Ambrose, Stanley H. 2001. "Paleolithic Technology and Human Evolution," *Science* 291, 1748-1753.

⁵² Boehm, Christopher. *Moral Origins: The Evolution of Virtue, Altruism, and Shame*. New York: Basic Books, 2012.

⁵³ Carvalho, Susana, Tetsuro Matsuzawa, and William C. McGrew. "From Pounding to Knapping: How Chimpanzees Can Help Us Model Hominin Lithics," in *Tool Use in Animals: Cognition and Ecology*. Crickette M. Sanz, Josep Call, and Christophe Boesch (eds.). New York: Cambridge University Press, 2013, pp. 21-47.

⁵⁴ Matsuzawa, Tetsuro, Dora Biro, Tatyana Humle, et al. "Emergence of Culture in Wild Chimpanzees: Education by Master-Apprenticeship," in *Primate Origins of Human Cognition and Behavior*. Tetsuro Matsuzawa (ed.). Tokyo: Springer, 2001.

⁵⁵ Call, Josep, Malinda Carpenter, and Michael Tomasello. 2005. "Copying Results and Copying Actions in the Process of Social Learning: Chimpanzees (*Pan troglodytes*) and Human Children (*Homo sapiens*)," *Animal Cognition*, 8, 151-163.

⁵⁶ Ruiz, April and Laurie R. Santos. "Understanding Differences in the Way Human and Non-human Primates Represent Tools: The Role of Teleological-Intentional Information," in *Tool Use in Animals: Cognition and Ecology*. Crickette M. Sanz, Josep Call, and Christophe Boesch (eds.). New York: Cambridge University Press, 2013, pp. 119-133.

⁵⁷ Call, Carpenter, and Tomasello (2005).

⁵⁸ Ruiz and Santos (2013).

so is not necessary for my purposes. My claim is that property is unique to humans and that it stems from the customary practices of using tools.

To speak of meaning with human tool use is to get a little ahead of myself, for something else is necessary. Great apes, and possibly capuchin monkeys, comprehend the actions of others as entailing a goal, and they will work with others to help them achieve their ends.⁵⁹ But no other primate works *with* others to achieve a *joint* goal.⁶⁰ To do that requires what the comparative psychologist Michael Tomasello calls joint attention (or joint intention). All great apes cognize two individuals in an interaction as a ‘you’ and an ‘I,’ but only two humans can jointly attend to the same end so as to form a ‘we,’ a ‘we’ with the mutual knowledge that ‘we’ both know that each other’s end is the joint end.

With a demonstration of tools, children jointly attend to the same goal of the teacher. Children make inferences about what the teacher is thinking about their thinking, that this demonstration is ostensibly ‘for me’ to do this. Great apes do not interpret such a demonstration as ‘for me.’ They know that someone is dropping a stone onto a nut placed on another stone and that the result is a cracked open nut with edible goodness inside. But they do not know that the teacher is hammering a nut ‘for me’ so that ‘I’ may be able to hammer nuts for ‘myself.’ The demonstration is not personal to the great ape; it is physically factual. Great apes do not point demonstratively; they point as a request, but not to, so to speak, start a conversation. Human infants do.

Tomasello hypothesizes that joint intentionality emerged with our *Homo heidelbergensis* ancestors some 400 thousand years ago (kya). *Homo heidelbergensis* is the first hominin to hunt live prey as a joint end.⁶¹ To hunt large fleeing prey, the million-year-old technology of hand axes would not do. *Homo heidelbergensis* made and used composite spears.⁶² This is significant, for it means that *Homo heidelbergensis* could prune a wooden shaft, set it down, knap a stone into a sharp point, set it down, and then at some later time haft the pieces together with some binding material, which also needed to be prepared in advance. But more than that, *Homo heidelbergensis* was conjointly apprehending these particular pieces as a useful tool. By themselves the particular pieces were not useful for hunting. Conjointly constituted, the spear had meaning as a tool. How the mind conjointly constitutes the point, the shaft, and the haft into a meaningful whole is more than the sum of the physical facts of the individual pieces.

⁵⁹ Warneken, Felix and Michael Tomasello. 2009. “Varieties of Altruism in Children and Chimpanzees,” *Trends in Cognitive Science*, 13, 397-402, and Brosnan, Sarah F. and Frans B.M. de Waal. 2002. “A Proximate Perspective on Reciprocal Altruism,” *Human Nature*, 13(1), 129-152.

⁶⁰ Tomasello, Michael. *A Natural History of Human Thinking*. Cambridge, MA: Harvard University Press, 2014.

⁶¹ Tomasello (2014). –But don’t chimpanzees hunt monkeys in groups, to say nothing of lions and wolves?—Yes, but as Tomasello explains, there is a difference between hunting with others for the joint end of mammoth meat and simply “co-acting” in their own individual interests to get, and hopefully keep, whatever meat you can sink your teeth into. The philosopher Raimo Tuomela calls each individual pursuing his own individual goal “group behavior in I-mode.” In contrast, *Homo heidelbergensis* acted in “We-mode.” Tuomela, Raimo. *The Philosophy of Sociality: The Shared Point of View*. New York: Oxford University Press, 2010.

⁶² Thieme, Harmut. 1997. “Lower Palaeolithic Hunting Spears from Germany,” *Nature*, 385, 807-810.

Wilkins, Jayne, Benjamin J. Schoville, Kyle S. Brown, and Michael Chazan. 2012. “Evidence for Early Hafted Hunting Technology,” *Science*, 338(6109), 942-946.

Symbolic Thought Makes Meaning Possible

More than joint attention was changing in the hominin mind. The spear-wielding folk needed to coordinate amongst themselves when and where to pursue prey that was not immediately perceivable in the present. It is a nontrivial problem to convey information displaced from the here and now. Besides humans, only two other animals have solved the problem of communicating to conspecifics the location of food not present in the here and now. Ants lay pheromone trails and bees perform waggle dances to guide their nest/hive-mates to distant sources of food.⁶³ But humans voice words. The categorical difference between humans and hymenopterans in solving the problem of displacement is that our communication system is symbolic and theirs are not. In fact, no other animal communication system is symbolic.⁶⁴

Approximately two million years ago our ancestors began carving out a new ecological niche as scavengers.⁶⁵ Prior to two million years ago the archeological evidence indicates that large fanged-and-clawed predators ravaged dead carcasses and then the proto-humans came by to break open the picked over bones with their hand axes. But then it switches. Somehow the proto-humans armed only with their little hand “axes” were cutting through the tough hides and getting to the meat and bones *before* the smilodon cats with their seven-inch canine teeth. How is that possible? The proto-humans would have to coordinate both their defense of the carcass there and their later consumption of the spoils elsewhere.⁶⁶ They would also have to persuade other members of their band to scavenge a carcass beyond the hill, that is, communicate about objects and events displaced from the here and now. The evolutionary linguist Derek Bickerton hypothesizes that the selection pressure to solve this recruitment problem could have been strong enough to produce the first proto-words and to set in motion the very slow and gradual development of symbolic thought.⁶⁷

The archeological evidence indicates various milestones on the road to the modern mind and its capabilities for symbolic thought. At least as far back as 100 kya, humans were processing red ochre, perhaps for decoration, and as far back as 70 kya humans were deliberately engraving bone tools with abstract representations.⁶⁸ The widespread expression of symbolic thought in archeological artifacts, however, does not occur until 50 to 40 kya when, as paleoanthropologist Richard Klein explains, “structural ‘ruins;’ formal bone artifacts; complex graves implying ritual or ceremony; the routine hunting of dangerous species in proportion to their live abundance; active fishing; population densities like those of historic hunter-gatherers (implied by a significant reduction in tortoise and shellfish size); and art

⁶³ Bickerton (2009).

⁶⁴ Bickerton (2009) and Deacon (1998).

⁶⁵ Bickerton (2009).

⁶⁶ Domínguez-Rodrigo, Manuel and Travis Rayne Pickering. 2003. “Early Hominid Hunting and Scavenging: A Zooarcheological Review.” *Evolutionary Anthropology: Issues, News, and Reviews* 12(6): 275-282.

⁶⁷ Bickerton (2009).

⁶⁸ Henshilwood, Christopher, et al. 2011. “A 100,000-Year-Old Ochre-Processing Workshop at Blombos Cave, South Africa,” *Science* 334 (6053), 219-222, and d’Errico, Francesco, Christopher S. Henshilwood, and Peter Nilssen. 2001. “An Engraved Bone Fragment From c. 70,000-Year-Old Middle Stone Age Levels at Blombos Cave, South Africa: Implications for the Origin of Symbolism and Language,” *Antiquity*, 75, 309-318.

[appear as]...the MSA [Middle Stone Age] and the Middle Paleolithic were replaced by the Later Stone Age (LSA) and Upper Paleolithic, respectively.”⁶⁹

Symbolic thought, which this artifactual variation 50-40 kya evidences, is the ability not only to recall concepts at will but to manipulate those concepts so as to imagine new ways of doing things.⁷⁰ It is the ability not only to think *about* but to think *with* thoughts free from the here and now. All other animals think only in the here and now and without the ability to manipulate the thoughts. When an event external to the animal initiates thinking, the event uncontrollably culminates in an instruction to the body to act (or not act). Only humans can self-trigger thinking without an outside event, about something not before our very eyes, and without any instruction to the body to act.

If our symbolic communication system isn't tied to the here and now, what holds it together? Other communication systems are supported by the strength of the association between the sign and the external world. Vervet monkeys have a different call to alert the troop to each of three different threats: a leopard leaping from below, an eagle diving from above, and a slithering snake.⁷¹ When a monkey screams a from-below call, it indicates the presence of a leopard. The fit response is to run up the nearest tree as fast and far as you vervetly can. If the monkeys used the same call for an eagle as for a leopard, then the strength of the from-above call as an indicator of a diving eagle would be considerably weaker (and unfit). Vervet monkey calls are only as strong as the direct associations that support them.

The link or glue that holds a symbolic system of communication together cannot rely solely on the repeated correlations in the associations that are observed, for a symbol conveys meaning *m* only in a context in which not(*m*) could occur but did not.⁷² For example, why would we frown to ourselves if a student wrote in a paper, “Pleistocene people gathered mammoths and hunted tubers”? Because a rule of the word *hunt* is that the direct object it takes must *not* be a stationary plant.⁷³ While the word *hunt* directly conveys the meaning of chasing an organism that could flee from its pursuer, it simultaneously does *not* convey the meaning of harvesting something growing firmly in the ground. Every symbol for an organism in the plant and animal kingdoms supports this meaning of *hunt*. If we were to introduce to our class a newly discovered Pleistocene organism called a *jubjub*, the students would know from the context of the discussion (except for the one above) whether Pleistocene people “hunted it” or “gathered it” based upon the subsidiary knowledge of whether it was a plant or an animal.

⁶⁹ Klein, Richard G. 2000. “Archeology and the Evolution of Human Behavior,” *Evolutionary Anthropology*, 9, 17-36 (page 26). For a critical take on this interpretation, see d'Errico, Francesco and Marian Vanhaeren. “Upper Paleolithic Mortuary Practices: Reflection of Ethnic Affiliation, Social Complexity, and Cultural Turnover,” in *Death Rituals, Social Order and the Archaeology of Immortality in the Ancient World: 'Death Shall Have No Dominion'*. Colin Renfrew, Michael J. Boyd, Iain Morley (eds.). New York: Cambridge University Press, 2016.

⁷⁰ Bickerton (2009).

⁷¹ Seyfarth, Robert, Dorothy Cheney, and Peter Marler. 1980. “Monkey Responses to Three Different Alarm Calls: Evidence of Predator Classifications and Semantic Communication,” *Science*, 210, 801-803.

⁷² Deacon (1998).

⁷³ For this example I am using *hunt* as a transitive verb, the OED's first definition of which is to pursue (wild animals or game) for food or sport. As Sarah Skwire pointed out to me, we also hunt for Easter eggs, truffles, and treasure, which typically don't flee from their hunters. But note that we don't simply hunt these stationary things, we hunt *for* them. This is OED definition #2: to make a diligent or energetic search, look *about* (original italics). When we use definition #2, *hunt* is importantly an intransitive verb. In fn. 145 I will discuss how the little word *for* changes the meaning of *hunt* from definition #1 to #2.

And Meaning Makes Composite Tools Possible

The purpose of this exceedingly short natural history of tools is to lay the foundation for my claim that tools are the original objects of property in humans and humans only. To do it I must establish that the gulf that separates human and nonhuman tool use is indeed untraversable. I will explain that hammer and anvil tool use by chimpanzees and capuchins, the most complex, socially taught tool behavior in nonhumans, can be achieved by associations alone, that hafted spear use cannot be achieved by associations alone, and that abstract thought is the chasm that separates the two kinds of tools.

The first association in the chimpanzee practice of cracking open a nut is the choice of the object that is a nut. A limited number of physical features indicate whether a hard-walled object is edible. This is not particularly novel—all animals must discriminate between the physical features of an object that qualify it as food and those that do not—except that in this case the reward is not the whole nut itself, but the seed encased in the hard shell. What's impressive for nonhumans is the number of other simple associations that separate the chimpanzee from its goal.

The next association is the selection of an anvil stone. Again the physical features that indicate its suitability are observably few: flat, hard, and in a position not prone to move. The big leap for a nonhuman is to place the nut on the anvil for processing, which is the first of two spatial relations in this practice. The next step is to find a suitable hammer stone. Too light and the nut will never crack; too heavy and the seed inside will be pulverized. What is required of the apprentice is to associate the physical characteristics of the nut with the weight of the stone used. Again, the strength of the association is what matters. The final remarkable step is to cognize the second spatial relationship between the hammer and the nut and apply it sequentially with the release of the stone. In other words, the nut on the anvil indicates dropping the hammer stone onto it.

While impressive when we break it down, the practice requires the simple concatenation of associations. If the raw computing power of the brain is large enough to hold all of the associations in sequence, emulating the recipe step by step from start to finish is sufficient to obtain the reward. Nowhere along the way must a chimpanzee engage in abstract thought. The chimpanzee need only focus on the physical facts of what *is* the case. Great ape see, great ape do. There is no other glue that holds the demonstration together, no subsidiary knowledge of what *is not* the case regarding the items and the process. No theory of nut breaking.

The key to hafting spears 70 kya is literally the glue. Hafting a point onto a shaft is a major watershed in the natural history of making and using tools. The experimental archeologist Lyn Wadley and her colleagues Tamaryn Hodgkiss and Michael Grant duplicated the trace compound adhesives found on stone tools in Sibudu Cave, South Africa.⁷⁴ They find that not all powdered red ochres are the same when combined with plant gum, even if the color is the same. Without knowing anything about chemistry, something unobservable must *not* have been the case for a glue maker 70 kya to use this red ochre and not that one. Wadley et al. also find that not all fires are the same; some woods burn hotter and make longer-lasting coals. Again, something unobservable about the flame must not have been the case for

⁷⁴ Wadley, Lyn, Tamaryn Hodgkiss, and Michael Grant. 2009. "Implications for Complex Cognition from the Hafting of Tools with Compound Adhesives in the Middle Stone Age, South Africa," *Proceedings of the National Academy of Sciences*, 106, 9590-9594.

someone to use a specific type of wood with its moisture content. Wadley et al.'s conclusion from their archeological experiments is that "no set recipe or routine can guarantee a satisfactory adhesive product."⁷⁵ The raw observable facts about the inputs are not enough to successfully replicate the process. The glue maker 70 kya must have manipulated concepts abstracted from the here and now. In their words, "qualities of gum, such as wet, sticky, and viscous, were mentally abstracted, and these meanings counterpoised against ochre properties, such as dry, loose, and dehydrating."⁷⁶

If we're impressed with capuchin nut cracking, how much more amazing is early *Homo sapiens sapiens*, self-named with pride the wisest of the wise. By the time the human career takes off 50 kya, this symbolic thinking, joint goal attending, composite tool making, meaning forming, precocious little primate is thinking and doing things quite unlike any other species in the history of the planet. The modern reflex is to fearfully resist any claim of the uniqueness of our species, to minimize the gulf between humans and our animal relatives. I understand where that fear comes from. Pride is quick to take hold in our species and with it come a host of sins. I too would be more partial to human exceptionalism, as the economist Kyle Hampton put it to me, if it were espoused by someone other than humans. But only a human can. Only a human can think with thoughts regarding things not before our very eyes. So I stand by the claim—more articulately espoused and extensively defended by Terence Deacon, Derek Bickerton, Matt Ridley, Denis Dutton, Michael Tomasello, John Searle, and many others—that humans routinely do many things that categorically distinguish us from the rest of the animal kingdom. "If the gap between humans and other animals is as small as we've been told," Bickerton asks, "what in the world could possibly be this miniscule difference that makes all other animals do so little and us do so much? So far as I'm aware, none of those who argue for continuity between humans and other species have ever realized, let alone admitted, that *each time the gap is minimized, the manifold, manifest abilities of humans become more mysterious than ever.*"⁷⁷

3. Primates Socially Transmit Tool Practices, but Humans Share Meaning-laden Customs

Neither the chimpanzee nor the human are born with the skill for nut cracking or spear hafting; nor are these skills discovered anew each generation. Juveniles of both species acquire the pattern of actions by observing their mentors at work and must practice in order to become proficient. You learn to hang a door by watching a video on Youtube. Chimpanzees also seek out expert tool users to learn how to better crack nuts.⁷⁸ There is a distinct determination of purpose in the individual that seeks to learn from a conspecific. For the chimpanzee, the purpose is eating the seed inside the nut. For the human, the purpose is not so immediate nor so directly associated with an impulse to eat.

The proximate purpose of hafting a point to a shaft is to construct a new external object that did not previously exist. A spear is a created object. After cracking open a nut, the chimpanzee's anvil and hammer remain a stone, to be used perhaps on another occasion when the impulse arises, but nonetheless they're still stones. Nothing new has been created. A stone point when hafted to a wooden

⁷⁵ Wadley, Hodgkiss, and Grant (2009, p. 9593).

⁷⁶ Wadley, Hodgkiss, and Grant (2009, p. 9593).

⁷⁷ Bickerton (2009, p. 8).

⁷⁸ Biro, Dora, Noriko Inoue-Nakamura, Rikako Tonooka, et al. 2003. "Cultural Innovation and Transmission of Tool Use in Wild Chimpanzees: Evidence from Field Experiments, *Animal Cognition*, 6, 213-223.

shaft is more than a point, a shaft, and a haft. The composite object has been transformed into a tool by virtue of its usefulness for hunting. If a juvenile overhydrates the adhesive or boils it so that air bubbles form, the haft either lacks cohesiveness or is weak. Ruining the usefulness of the object as a tool dissolves the meaning of the object as a tool. The object is not a spear unless all of the elements, skillfully combined, jointly constitute something that can be used to hunt prey. That joint constitution, that meaning, occurs in the mind of the artisan.

The meaning from the shared practice also exists, due to joint attention to purpose, in the mind of the next generation of experts who learn from their master. Many other animals share practices with other members of their social group, practices that are socially, not genetically, transmitted. Primates, however, are the only order to routinely and flexibly use tools as a shared practice. But even among the most sophisticated nonhuman tool users in the wild (capuchins, chimpanzees, and orangutans), no more information than direct associations is passed on from teacher to the taught. What a nonhuman primate sees is what it acquires as a practice.

Humans acquire abstract meaning in our practice of making tools. To share the practice with at least one other member of the group is to share the meaning of the practice. The meaning-giving process in making tools is the same as the one at work in language. When someone speaks, our attention is not on the specific features of the sound waves that reach our ears. As a meaningful word—jointly attended to by the speaker and the listener—, sound waves lose their external character in the physical world. We hear *through* the sound and focus our attention on the meaning of the sound as a word. In the language of the chemist and philosopher Michael Polanyi, we subsidiarily attend to the vocalized sound when we focally attend to what we hear as a word with meaning.⁷⁹

Meaning works the same way in the human practice of making tools. A mentor can describe a spear in only physical terms as a particular assemblage of a point, a shaft, and a haft. The description would specify the materials, their arrangement, and the means for combining them. But such a physical description could only give an account of one particular specimen comprised of a point hafted to a shaft. It could not exemplify a whole class of *spears* of the same kind, which would include other specimens of different sizes or materials. What characterizes the class are the principles of its use as a spear, its purpose. As with language, we subsidiarily attend to the point, shaft, and haft when we focally attend to an assembled specimen as a spear, a long stabbing weapon for thrusting into a large fleeing mammal. When our minds integrate a particular specimen into an abstract thought that bears on its principles of use, we endow the physical object with a meaning that points, beyond the here and now, to its purpose.

More than a pattern of actions is shared in the human practice of making tools. While biologists use the term *tradition*, I have used *shared practice* to connote the social transmission of habitual patterns of actions in nonhumans.⁸⁰ I prefer to reserve the terms *tradition* and *custom* for human shared practices because *tradition* and *custom* additionally connote meaning as part of an individual's pattern of actions. *Custom*, in particular, has the meaning of a long-established practice that carries with it the moral force of what is right. Adding abstract thoughts of what is good and right to patterns of actions is a key element

⁷⁹ Polanyi, Michael. *Personal Knowledge: Towards a Post-Critical Philosophy*. Chicago: University of Chicago Press, 1958.

⁸⁰ Fragaszy and Perry (2008).

for the human custom of property to emerge out of the shared practices of making tools. The next step is to show how patterns of actions in property arise from making tools. To do this we must first take the intermediate step to connect know-how in making tools to know-how in using tools.

Tool Use is Embodied Knowledge

Knowing the meaning of a composite tool is an example of what Polanyi calls “tacit knowing,” *knowing how* to do something without the ability to articulate how you know it.⁸¹ We know how to convey the meaning of a spear, through words and gestures, but we do not have the ability to articulate how our mind takes the physical facts of stone, adhesive, and wood to give meaning to the composite object as a long stabbing weapon for hunting. The rules of the mind that give meanings to perceptions are supra-conscious and hence unarticulable.⁸²

Using tools also involves tacit knowing, but it’s more basic than giving meaning to a composite tool and hence not unique to humans. An animal uses a tool to extend its own body to do something that it could not otherwise do with the body alone.⁸³ For a chimpanzee to locate an underground termite colony or a stingless bee honey chamber, it must probe below the surface with a stick.⁸⁴ Termites and bees don’t make this easy. The visible signs above ground only give a general indication as to where the chamber may be. The chimpanzee must find its way by feeling the impacts of the stick on its hand as if the impacts occurred where the stick meets lower soil resistance, some 100 cm below the surface.

The same is true for humans when we hammer a nail or feel our way around blindfolded by use of a stick. Our focus is on extending our own body to feel what objects may be in front of us. When our stick hits the leg of a table, we feel the table *in* our body because we are only subsidiarily attending to the feeling of the stick on our palm. Likewise, we feel the hammer hit the nail, not the handle in our palm. We probe and know what’s hidden like a chimpanzee presumably probes and knows what’s hidden, but with abstract thought we can also reflect upon our probing and knowing, as Polanyi does:

Our subsidiary awareness of tools and probes can be regarded now as the act of making them form a part of our own body. The way we use a hammer or a blind man uses his stick, shows in fact that in both cases we shift outwards the points at which we make contact with the things that we observe as objects outside ourselves. While we rely on a tool or a probe, these are not handled as external objects. We may test the tool for its effectiveness or the probe for its suitability, e.g., in discovering the hidden details of a cavity, but the tool and the probe can never lie in the field of these operations; they remain necessarily on our side of it, forming part of ourselves, the operating persons. We pour ourselves out into them and assimilate them as parts of our own existence. We accept them existentially by dwelling in them.⁸⁵

Materialists will wince at Polanyi’s language. He isn’t merely thinking with metaphors to explain how tacit knowledge with tools works, i.e., he isn’t using mellifluous metaphors to make his explanation

⁸¹ Polanyi (1958).

⁸² Hayek, F. A. (1963). “Rules, Perception and Intelligibility,” *Proceedings of the British Academy*, 48, 321–344. For a proof, see Hayek, F. A. *The Sensory Order: An Inquiry into the Foundations of Theoretical Psychology*. Chicago: University of Chicago Press, 1952.

⁸³ Beck, Benjamin B. *Animal Tool Behavior*. New York: Garland Press, 1980.

⁸⁴ Boesch (2013).

⁸⁵ Polanyi (1958, p. 59).

more appealing to our mind. He is thinking *in* the very metaphors that we think in when we make contact with the external world through tools, for as the cognitive psycholinguist Steven Pinker says, “all abstract thought is metaphorical.”⁸⁶ Forming a part of ourselves *is* how we think about the use of a spear. Pouring ourselves out [and] into a spear *is* how we think about the use of a spear. Assimilating a spear as part of our own existence *is* how we think about the use of a spear. Dwelling in a spear *is* how we think about the use of a spear. Once our concepts were no longer tethered to the here and now some 200 to 150 kya, our mind could combine and recombine a few basic ideas to grasp even more abstract ones, metaphor most definitely intended.

Polanyi is doing in metaphor to explain tacit knowledge what I conjecture our symbolic-thinking ancestors did in metaphor as part of their everyday use of tools: they put themselves in their tools. This is not a wholly original conjecture. For example, the economist and philosopher F.A. Hayek speculates that:

The notion of individual property must have appeared very early, and the first hand-crafted tools are perhaps an appropriate example. The attachment of a unique and highly useful tool or weapon to its maker might, however, be so strong that transfer became so psychologically difficult that the instrument must accompany him even into the grave...Here the fusion of inventor with ‘rightful owner’ appears,...sometimes accompanied also by legend, as in the later story of Arthur and his sword Excalibur—a story in which the transfer of the sword came about *not* by human law but by a ‘higher’ law of magic or ‘the powers’.⁸⁷

How early is very early is not something that we can really hope to answer with the prehistorical record. Thoughts don’t petrify. Nor for our purposes do we need to know how early the notion of property appears. Our project is to explore how we humans cognize the meaning of property beyond asserting a strong psychological attachment.

Property Embodies the Claim, “This is Mine!”

If a spear is a bodily extension of my person, then if someone were to challenge my grasp by grabbing the spear in my hand, I would physically respond in the same instinctive way that I would respond if someone were to forcefully grab my arm, with resentment or fear at the affront. It would be an attack on my person that could trigger a primeval fight-or-flight response. The novel situation is what happens when I lay my spear down and look for a spot to lie down. The spear is no longer a physical extension of my body, so am I still in it? For any other animal, the answer can only be ‘no,’ because there can be no abstract idea of putting myself in the spear in the first place. Nor can there in any other animal be any joint attention to the same end that I had previously put myself in the spear.

But with humans, it would seem as if I am still in the spear. If someone else were to pick it up, my immediate response would be to shout, “Hey, that spear is mine!” My assumption would be that whoever is picking up the spear would be able to jointly attend to both the object as spear in question and my purpose in shouting at him. The shout might be accompanied by a physical display as aggressive as Klugh’s red squirrels, but I am doing much more than what a squirrel or a jay or a dolphin or a baboon or a

⁸⁶ Pinker, Steven. *The Stuff of Thought: Language as a Window into Human Nature*. New York: Viking, 2007, p. 242.

⁸⁷ Hayek (1988, p. 30).

chimpanzee does in the defense of a nest, food cache, prey, mate, or territorial domain. The anthropologist and businessman A. Irving Hallowell hits the nail on its head:

The ambiguity in the use of the term property is no doubt partly responsible for the reputed human analogies found among animals. If one starts with the naive idea that property is some kind of physical object that “belongs” to someone and it is then observed that animals store food or defend their nests or territory against aggressors, it is easy to say that the food, nest, or territory is the animal’s “property” and then to generalize further, on the basis of wider observations, and say that animals have “property” as well as human beings.⁸⁸

“Such a use of the word [*property*],” laments the economist Henry Dunning Macleod, “is quite a modern corruption, and we cannot say when it began,” though he is certain that “neither [Francis] Bacon, nor far as we are aware, any writer of his period calls material good property.”⁸⁹ Focusing our attention on the thing in question is understandable; it is the point of contention among conspecifics, both human and nonhuman, and the point of interest among those who study the conspecifics, both human and nonhuman. Nevertheless, by focusing our attention on the thing itself, which is but a subsidiary part of the dwelling and scheduling patterns of any species, we are apt to confuse ourselves about how property works, like the pianist who confuses herself when she shifts her attention from the piece she is playing to her fingers touching the keys. So to be clear, never do I use *property* to mean a thing (except perhaps in a quotation where the confusion and corruption are unavoidable). Property is a custom.

What am I doing if I’m doing so much more when I snarl, “Hey, this spear is mine!”? For you to know what the fuss is about, I have to predicate. A mammalian growl delivered with a curled lip and a wrinkled nose doesn’t predicate. It is a common characteristic of any mammal’s readiness to fight, whether or not you even know that my spear is nearby. All that matters for a mammal to growl is that it sees that you are near the spear. Iconic message sent and received, but that’s not property.⁹⁰ Property is symbolic and requires joint attention to the spear and my end regarding it.

The operative word in “Hey, this spear is mine!” is *mine*. *Mine* is predicated on a subject to tell the listener which of the many possible things I mean when I say, “mine.” In this case the subject is this spear, and because I am predicating, my vocalization is more than a warning sound. Property is a speech act; my utterance is a claim. Wierzbicka explains what the speech act means for me to claim that this spear is mine:⁹¹ (1) I imagine that the listener will say that this is not true, or why else would he be reaching for the spear when I lie down for a nap? I furthermore assert this claim because, (2) I think that I have good reasons to say that this spear is mine. I use it as an extension of myself and to take it is to harm me. (3) I also think that I can cause the listener to have to say that it is right that this spear is mine. I take for granted my fellow human will jointly attend to these good reasons and upon thinking about it some more

⁸⁸ Hallowell, A. Irving. 1943. “The Nature and Function of Property as a Social Institution,” *Journal of Legal and Political Sociology*, 1, 115-38, p. 136.

⁸⁹ Macleod, Henry Dunning. *The Elements of Economics*. Vol. 1. New York: D. Appleton & Co., 1881, p. 143.

⁹⁰ Rose, Carol M. “Psychologies of Property (and Why Property is not a Hawk/Dove Game),” in *Philosophical Foundations of Property Law*, James Penner and Henry E. Smith (eds.). New York: Oxford University Press, 2013, pp. 272-288.

⁹¹ Wierzbicka, Anna. *English Speech Act Verbs*. New York: Academic Press, 1987, p. 324-5.

concede that it is indeed right that this spear is mine. Finally, (4) I say that this spear is mine because I want to cause other people within earshot to think that it is right that this spear is mine.

Note the key concepts at work when I claim that this spear is mine. First, property involves saying things, not just communicating iconic sounds of aggression. I say something about the action of someone who attempts to pick up my spear, and as part of my claim, I imagine that the listener would say something to the contrary. The concept SAY is one of 65 universal semantic primes that linguists like Cliff Goddard and Wierzbicka have collected and tested across many disparate languages.⁹² Semantic primes are atomic concepts that are indefinable except of themselves, common to all languages, and presumed to be innate. In short, semantic primes are the concepts that make communication across all languages possible. All human groups say things with symbolic language, and all human groups have a word for saying things.⁹³ For humans to do what we do with property we must be able to say things with words. While the dating and character of the emergence of language is controversial, linguists conjecture, based on work by paleoanthropologist Ian Tattersall, that the atomic concept WORDS emerged when our species emerged 150 kya.⁹⁴

The second key concept in the claim is the predicate that I imagine applies to what I am saying: that the person picking up the spear would say that it is not true. Goddard, Wierzbicka, and Horacio Fabréga conjecture that TRUE originated with cognitively modern humans some 70 kya as one of the last two semantic primes to emerge in human thought.⁹⁵ They argue that TRUE would have to follow WORDS because it would be unlikely to evaluate something as TRUE and NOT TRUE “until it became possible to think of ‘pinning down’ what someone said, which, it seems to us, essentially involves focusing on their words.”⁹⁶ As I mentioned in the introduction, the concept NOT is essential to how meaning works in symbolic thought, and it is also a semantic prime.

The third key concept in my claim, RIGHT (the adjective, not the noun), is clearly not a semantic prime.⁹⁷ Even so, this concept succinctly captures something that must be true of all cognitively modern human groups, that we have expectations about the regularity of everyone’s conduct, i.e., there are standards which are to be acted. In this case, a standard of this community is that I can claim this spear as mine.

The critical atomic concept in the claim is the predicate of the claim itself. Humans in every language can say, “It (or, this thing) is mine,” and in every language it means that same thing.⁹⁸ People using such diverse non-Indo-European languages as Ewe, East Cree, Longgu, Arabic, Finnish, Koromu,

⁹² Goddard, Cliff and Anna Wierzbicka. *Words and Meanings: Lexical Semantics across Domains, Languages, and Cultures*. New York: Oxford University Press, 2014.

⁹³ Brown (1991) and Wierzbicka (1996).

⁹⁴ Tattersall, Ian. *Masters of the Planet: The Search for Our Human Origins*. New York: Palgrave Macmillan, 2012, and Goddard, Cliff, Anna Wierzbicka, Horacio Fabréga Jr. 2014. “Evolutionary Semantics: Using NSM to Model Stages in Human Cognitive Evolution,” *Language Sciences*, 42, 60-79.

⁹⁵ Goddard, Wierzbicka, and Fabréga (2014).

⁹⁶ Goddard, Wierzbicka, and Fabréga (2014, p. 74).

⁹⁷ Wierzbicka, Anna. *English: Meaning and Culture*. New York: Oxford University Press, 2006.

⁹⁸ Goddard and Wierzbicka (2016).

Mandarin Chinese, and Vietnamese can all utter the claim, “It is mine.”⁹⁹ Moreover, there is no other way to express that claim in terms of any other atomic concepts. *Mine* means what mine means, just like *do* means what do means, *say* means what say means, and *good* means what good means. Attempting to define these words in terms of simpler concepts fails because these words symbolize atomic conceptual units. And yet in every language every human being knows what *mine*, *do*, *say*, and *good* mean. The claim “It is mine” stands all by itself, in part, because it is a normative statement, not a factual one. If someone else runs off with my spear, I can still say that it is mine, and I’m not just stating a physical fact. I’m saying that to act as if the spear is not mine is to harm me; that it is not right to take my spear; and that by the standards of the community the spear ought to be returned to me. Part of the difficulty in working out what property means is that a conceptual singularity is at the core of the custom, and it is a normative concept at that.

Along with TRUE, it seems that MINE would be the other of the last two universal atomic concepts to emerge on the Pleistocene plain.¹⁰⁰ Part of the evidence that MINE is atomic is that it can be readily combined with other semantic primes to capture the meaning of *yours* and its archaic rhyming ancestor *thine*. “This is yours” can be paraphrased as “You can say about it: ‘this is mine’” and “This is not yours” as “You can’t say about it: ‘This is mine’.”¹⁰¹ Property is about saying something beyond the here and now, not merely growling in the present. In every language you can also say, “This thing is someone else’s.”¹⁰² In other words, if there are things about which I can say, “This is mine,” then there are other things about which you can say the same thing. I use the abstract concepts YOU and I to imagine myself switching places with you to say the same things I say. Property is not just about me saying “This is mine.” Property is jointly reciprocal.¹⁰³ It is about mine and yours, mine and thine, *meum* and *tuum*. There is no abstract concept of YOURS in Klugh’s squirrels or any other animal because there is no abstract concept of MINE in any other animal.

If I can switch places with you to think that “This (other) thing is yours,” then I can do another simple switch with my thoughts. Instead of saying, “This spear is mine,” I can say, “This spear is not mine, it is yours.” In doing so, something in the social world has changed. The physical perception of the external world remains unchanged for both of us, yet I have *done* something with these words to alter how both you and I think about the physical object.¹⁰⁴ We cognize the spear differently: You are now in the spear, and I am not. From this point on, you and only you can say, “This spear is mine.” With a few simple words symbolizing a few simple concepts, what we personally know about the external world has changed, even though the physical matter has not.¹⁰⁵ That is a marvel of the animal kingdom.

⁹⁹ Goddard and Wierzbicka (2016).

¹⁰⁰ Goddard, Wierzbicka, and Fabréga (2014, p. 74).

¹⁰¹ Goddard and Wierzbicka (2016).

¹⁰² Goddard and Wierzbicka (2016).

¹⁰³ Ronald Coase’s famous examples of cattle raisers and crop growers illustrate this beautifully. See, Coase, Ronald. 1960. “The Problem of Social Cost,” *Journal of Law and Economics*, 3, 1-44.

¹⁰⁴ Austin, J.L. *How to Do Things with Words*. Cambridge, MA: Harvard University Press, 1975.

¹⁰⁵ I have now briefly and unwittingly introduced the first two of David Hume’s “fundamental laws of nature, that of the stability of possession [and] of its transference by consent.” Hume, David. 1740. *A Treatise of Human Nature*. David Fate Norton and Mary J. Norton (eds.) New York: Oxford University Press, 2000, p. 337.

Humans Socially Transmit Property with Moral Force

Property is more than one individual claiming “this is mine,” for one claim does not make a custom. Within a band of humans there are many individuals who can claim “This is mine.” Conflict can ensue when a single item is the simultaneous subject in two distinct claims. Whether it is a scrub jay or a human, an animal’s scheduling pattern regularizes the nature and timing of its engagements with the external world, including conspecifics. “Life consists of the capacity,” says Ridley, “to reverse the drift towards entropy and disorder, at least locally—to use *information* to make local *order* from chaos while expending *energy*.”¹⁰⁶ A scheduling pattern is the resulting order from the animal’s point of view that “constitutes a set of *expectations* about its actions, their ordering, their probable results, and appropriate responses to outside stimuli.”¹⁰⁷ Genetics is one scheduling mechanism; the other is shared practices. In humans, property is a socially shared practice that forms a local order by aligning expectations so as to settle or prevent competing claims of “This is mine.”

A defining characteristic of the *Primate* order is that we take pleasure in regularly being in physical proximity and bodily contact with members of our group.¹⁰⁸ Our impulse for sociality is ancient, at least 35 million years ancient when extant New World monkeys split from the family tree. Like Adam Smith and his early 20th century heir, the philosopher Samuel Alexander, I take our sociality as an external given and a necessary starting point. For property that means how we deal with each other regarding objects must fit with the general scheduling pattern of our sociality. So far nothing is different than for any other primate. But with symbolic thought, we can—as an end in itself—think about the actions of others and how they fit, or fail to fit, with the scheduling pattern of our group. We can also contemplate our own actions for no other purpose than to think about what we have done in the past or will do in the future. And when we think about our actions, or others’, we can evaluate them to be good or bad.

When we deem a deed to be good or bad, we are contemplating more than a thing done, an act. We are contemplating our conduct, our character, a whole—just like a spear—that means more than the individual pieces of the thing done. Good conduct includes actions that others can attune their sociable impulses to. Bad conduct includes actions that disrupt the orderly relations of the group. The other members of our group disapprove of someone taking my spear because they empathize with me in the harm that I feel. They also wish to avoid the conflict that may ensue as my resentment prompts me to beat off this injury and restore my condition. But more than that, others do not empathize with the taker because they themselves do not want to take the spear from me, and they do not want to take the spear from me because we humans judge our acts “for their own sakes, for their bearing on our character.”¹⁰⁹ Sociability hafts the point of actions to the shaft of moral valuations to form our character.

As a social species, we have expectations regarding the regularity of each other’s conduct. This regularity, this harmony of conduct forms the background of a human band and the basis of what is right in the sense of what is pleasingly coincident or fitting with the entire scheduling pattern or order of the

¹⁰⁶ Ridley, Matt. *The Evolution of Everything*. New York: Harper, 2015, p. 60.

¹⁰⁷ Hockett (1973, p. 46).

¹⁰⁸ Hockett (1973).

¹⁰⁹ Alexander, Samuel. 1933. *Beauty and Other Forms of Value*. New York: Crowell Company, 1968, p. 237.

band.¹¹⁰ A single act is thus not good unless it is also right with the whole of human intercourse. Out of the habits of responding to claims of “This is mine” emerged a fitting custom found in every human society: Do not steal. This general rule is stated in the negative because not following the custom leads to harm, discord, and violence. It is furthermore stated in the abstract making it applicable to unforeseeable circumstances. Finally, because it is not genetically transmitted, we must be taught how to follow the rule and submit to its authority. We are taught by our mentors not to steal for the sake of not stealing. Children may acquire the concept of MINE by age two, but it is by teaching, imitation, and practice that they learn how to meaningfully apply the custom of property *hic et nunc*.¹¹¹

4. The Custom of Property is Physically Contained

Etymology Evidences Both Custom and Containment

Few documents on private law remain to record the custom of property prior to the Roman Empire. The Code of Hammurabi merely registers the fine for robbery in general (death) and for theft of temple items in particular (also death), so we know precious little about how the custom worked in practice except that we have taken it seriously for at least 4,000 years. A small piece of etymological evidence remains in the Latin word *mancipium*, which came into use sometime after the founding of Rome but before the Republic. This word is derived from *manceps*, which can be glossed as “hand (*manus*) + taker (*-ceps*).” As the 19th century French jurist Joseph Ortolan explains it, the distance was not that great from the Pleistocene plain to Rome in the 7th to 5th centuries BC:

The hand (*manus*) was the symbol of power in the widest sense. Chattels, slaves, children, wife, and freedmen, all were subject to the chief—*in manu*—an expression which, at a later period, lost its wide and acquired a more special signification. But the means by which the warrior acquired power and was enabled to get his property within his grasp (*manu capere*), was by the lance, the wielders or possessors of which were the *Quirites*—a symbol that long remained in use after the actual prototype had disappeared...That which we now call property bore a name very expressive of the then state of civilization—*mancipium*.¹¹²

There are, however, subtle differences to note. First, the singular for Quirites, the name for an ancient Roman citizen, is *quiris*, or spear. Sometime in the last 70 ky the meaning of *spear* began to point to more than the purpose of the tool; it began to point to social class. We also extended the use of the abstract notion of “this is mine.” An ancient Roman citizen could say, “*Hoc est meum*,” about the spear in hand *and* the multitude of things that he acquired from using the spear. Symbolic thoughts were further recombining with the customary scheduling pattern for acquiring things.

By the classical period we do have records on vestigial private acts for transferring corporeal things. Two of these procedures explicitly incorporated the physicalness and orality hypothesized above into the conveyance. The first, *mancipatio* (from *mancipium*), took the form of a fictitious sale, and the

¹¹⁰ The word *right* and its cognates in Old Saxon, Old Frisian, Old Norse, Gothic, Dutch, German, and Latin mean straight; not bent, curved, or crooked; direct, going straight towards its destination; directed straight forwards (OED).

¹¹¹ Brownell, Celia A., Stephanie S. Iesue, Sara R. Nichols, and Margarita Svetlova. 2013. “Mine or Yours? Development of Sharing in Toddlers in Relation to Ownership Understanding,” *Child Development*, 84, 906–920.

¹¹² Ortolan, Joseph Louis Elzéar. *The History of Roman Law*. 2nd Edition. Iltudus T. Prichard and David Nasmith (trans.). London: Butterworth & Co., 1896, p. 64.

second, *in iure cessio* (surrendering in court), the form of a fictitious lawsuit.¹¹³ In both choreographed acts, the transferee would grasp the thing, say a slave, and pronounce a precise statement in the presence of the transferor, who would remain silent. The specific formula for the *in iure cessio* was: *Hunc ego hominem ex iure Quiritium meum esse aio*, or literally, “I assert (or say) from the law of the Quirites this man to be mine.” The transferee didn’t simply stand in the vicinity of the thing being transferred even though everyone present would know why they were there, nor did the presiding praetor or provincial governor say the magic words. No, the Romans, notorious sticklers for procedures, were precisely and symbolically marking—with physical contact and oral work—a cognitive transfer. One person’s abstract notion of MINE in a thing was disappearing and being replaced by another person’s notion of MINE in the same thing. With practice the marvel of the animal kingdom becomes a custom.

These two procedures indicate that there is much more at work in the custom than transferring the grounds for someone to say, “This is mine.” The *in iure cessio* was a formal proceeding before a magistrate, and the *mancipatio*, while private, required the presence of six Roman citizens.¹¹⁴ This public display is a key component of the custom, for when the transferee asserts his first-person claim in the future, other people will know what he says to be true. The basis of a custom is more than a subjective claim. It is simultaneously objective in the sense that the resulting order constitutes a set of expectations for the transferee grounded in what other members of the community know, namely that they know that it is true that the transferee can say, “This is mine.” The visibility of the custom also implicitly contrasts its meaning for the transferee and everyone else, for other people cannot say that “this thing is mine.” If these features feel familiar and belabored, it is because for the past 500 years modern Anglophones have had a pithy little verb, which the Romans did not, to succinctly summarize the situation:¹¹⁵ the transferee now *owns* the thing.¹¹⁶

As the scheduling pattern of the Romans changed with the overthrow of the monarchy c. 509 BC, a new word supplanted *mancipium*. Roman society, ordered around the family/household (*domus*), recognized the oldest male citizen (*dominus*) as the head of the house. Within the *domus*, other members could use things in the household, but the expectations were that only the *dominus* could decide to transfer household things to and from other families. What was right was that he alone held the *patria potestas* (power of a father) to alienate things and to exclude others from using them. This abstract

¹¹³ Schulz, Fritz. *Classical Roman Law*. New York: Oxford University Press, 1951.

¹¹⁴ Nicholas, Barry. *An Introduction to Roman Law*. New York: Oxford University Press, 1962.

¹¹⁵ Goddard and Wierzbicka (2016) define the verb *own* with only semantic primitives. Since every language contains these primitives, any human being could comprehend this deconstructed concept in the semantic primes of their own language even if they do not have a corresponding verb for *own* in their own language. Whether or not every human society would use the concept in the same way is an entirely different question.

¹¹⁶ Herein lies a difficulty with applying human concepts of property and ownership to nonhumans like baboons and long-tailed macaques. Nonhuman primates are incapable of thinking with such concepts as SAY, TRUE, MINE, and KNOW which are integral to the meaning of *own* and *ownership* for humans. Property in humans is more than the physical acts in the present that demonstrate the recognition of another conspecific’s mate and a refrain from treating it as part of its harem. Recognizing this awkwardness, Hans Kummer and colleagues put the word *owned* in quotation marks the first time they apply it to baboons. See Kummer, Hans, W. Götz, and W. Angst. 1974. “Triadic Differentiation: An Inhibitory Process Protecting Pair Bonds in Baboons,” *Behaviour*, 49, 62-87. More recent articles are less sensitive to the differences between human and nonhuman primate concepts regarding things. See, e.g., Sigg, Hans and Jost Falett. 1985. “Experiments on Respect of Possession and Property in Hamadryas Baboons (*Papio hamadryas*),” *Animal Behaviour*, 33, 978-984; and Kummer, Hans and Marina Cords. 1991. “Cues of Ownership in Long-tailed Macaques, *Macaca fascicularis*,” *Animal Behaviour*, 42, 529-549.

concept came to be called *dominium*.¹¹⁷ Unlike *mancipium*, *dominium* never referred to a thing; a thing itself was *materia*.¹¹⁸ Like ‘ownership,’ *dominium* connotes a -ship-ness, the abstract condition or status of being the *dominus*, i.e., what is solely and despotically right for the *dominus* to do. (Despotic is not a stretch. Capital punishment was not beyond the power of the *dominus*.) In Old English/Middle Age terms *dominium* is lordship.

By the time of the early Emperors, expectations had evolved further so that other members of the household, e.g., non-firstborn sons in the imperial army, could act like *domini* with regards to the booty they acquired in war.¹¹⁹ Eventually a second term came into use consistent with the new expectations that some things that were exclusively, particularly, peculiarly, and properly distinct from the reach of *dominium*. The ancient adverb ripe for nominalizing this distinct abstract concept was *proprie* from which came the noun *proprietas*. Notice then that *dominium* and *proprietas* were originally not perfect synonyms even though both have been translated simply as ‘ownership.’ Both are about what is right for someone to do with things that he can say, “*Hoc est meum.*” *Dominium*, however, draws upon grander, absolute connotations from rule and dominion that *proprietas* does not. This evolutionary etymology illustrates the important sense that property is a custom. More is involved than the mere thing about which someone can say, “This is mine.” An individual’s actions regarding such things must fit with the larger scheduling pattern of society. As third century jurist Julius Paulus puts it in maxim, what is right is not derived from the [customary] rule, but the [customary] rule arises from our knowledge of what is right (*non ex regula ius sumatur, sed ex iure quod est regula fiat*).¹²⁰

After 1,200 some years, the distinction between *dominium* and *proprietas* begins to blur. The Spiritual Franciscans, extreme proponents of poverty, argued that Christ and the Apostles had renounced *dominium* over all things, even the food they ate.¹²¹ In their withering attacks on this position, the secular theologians William of Saint-Amour and Gerard of Abbeville seem to treat *dominium* and *proprietas* as synonyms for ownership.¹²² For Bonaventure, a defender of the Franciscans, *proprietas* is a special case of *dominium* and most aptly translated as ‘ownership.’¹²³ His defense of the Franciscans, by the way, rests on distinguishing *dominium* from the simple use (*simplex usus*) of things like clothes, shoes, food, books, and other utensils. Bonagrata of Bergamo, however, a well-trained lawyer who defended the Spiritual Franciscans at the papal curia, maintains the distinction between *dominium* as lordship and *proprietas* as ownership, a distinction that had remained in civil law.¹²⁴

And a Linguistic Convention Emerges with the Tiny Word ‘In’

It is in this debate that I find the earliest use of a noun phrase which would later become a broad linguistic convention in English jurisprudence. As part of his argument, Henry of Ghent, another scholastic

¹¹⁷ Lewis, Charton T. and Charles Short. (Eds.). *A Latin Dictionary Founded on Andrews’ Edition of Freund’s Latin Dictionary*. Oxford: Clarendon Press, 1879.

¹¹⁸ Macleod (1881).

¹¹⁹ Macleod (1881).

¹²⁰ See also Wilson, Bart J. 2015b. “Further Towards a Theory of the Emergence of Property,” *Public Choice*, 163, 201-222.

¹²¹ Robinson, Jonathan. *William of Ockham’s Early Theory of Property Rights in Context*. Boston: Brill, 2013.

¹²² Mäkinen, Virpi. *Property Rights in the Late Medieval Discussion on Franciscan Poverty*. Leuven, Belgium: Peeters, 2001.

¹²³ Mäkinen (2001). The other special cases of *dominium* that he notes are possession and usufruct.

¹²⁴ Mäkinen (2001).

critic of the mendicants, describes a usufructer this way: *Non habet dominium aut proprietatem in re.*¹²⁵ To translate the Latin into modern English, the theologian Virpi Mäkinen renders the sentence as “he does not have ownership (*dominium* or *proprietates*) of the thing.”¹²⁶ A literal translation would be “he does not have *dominium* or *proprietates* in the thing.” Note the original preposition *in*. For Mäkinen and the modern ear for whom she is translating, *ownership of the thing* has the right ring for *proprietatem in re*. For our purposes, though, the literal prepositional phrase *in the thing* is revealing because *in* can take two cases in Latin, and Henry of Ghent chose the ablative case, not the accusative.¹²⁷ Henry says that the bearer of a usufruct does not have *proprietates* in the thing. This construction reflects and reveals how the mind is cognizing the custom as an abstract concept. By the Middle Ages we are no longer simply putting ourselves inside things when we use them, we are putting abstract concepts of *dominium* and *proprietates* inside things. Godfrey of Fontaines, another critic of the Franciscans, similarly uses the *in*-with-ablative construction when he argues that the Pope as the Vicar of Christ “does not have right (*ius*) and *dominium* in them [ecclesiastical goods].”¹²⁸ The pairing of *ius* with *dominium* is interesting for it substantiates Mäkinen’s thesis that a new language of rights came out of the Franciscan poverty debates, which, she argues, eventually led to the idea and expectations of individual natural rights. For us, Henry and Godfrey are examples of people putting more than themselves inside things; they were cognizing the custom as part of the very thing itself. The *Institutes of Gaius* and the *Corpus Iuris Civilis* contain a few uses of *habet proprietatem*, but never *habet proprietatem in* with the ablative. Ideas are continuing to mate in marvelous ways.

Proprietates makes its way to English through the Old French word *propriété* and then by the Anglo-Norman word *propreté*.¹²⁹ In the *Confessio Amantis*, the Middle English poet John Gower provides us with the oldest instance in English that I have found—c. 1393—of an *in* prepositional phrase modifying *propreté* or *property*:¹³⁰

Bot yit it is a wonder thing,
Whan that a riche worthi king,
Or other lord, what so he be,
Wol axe and cleyme propreté
In thing to which he hath no riht,
Bot onliche of his grete miht.
For this mai every man wel wite,
That bothe kinde and lawe write
Expressly stonden theragein.¹³¹

¹²⁵ Quoted in Mäkinen (2001, p. 108, fn. 13).

¹²⁶ Mäkinen (2001, p. 108).

¹²⁷ He also didn’t choose the genitive case for *of* without a preposition.

¹²⁸ Quoted in Mäkinen (2001, p. 134, fn. 98).

¹²⁹ Kuhn, Sherman M. and Hans Kurath. *Middle English Dictionary*. Vol. 8. Ann Arbor: University of Michigan Press, 1952, pp. 1405-6.

¹³⁰ Gower, John. c.1393. *Confessio Amantis*. Volume 2. Russell A. Peck (ed.) and Andrew Galloway (trans.). Kalamazoo, MI: Medieval Institute Publications, 2013, Book 3, l. 2323-31. Available at <http://d.lib.rochester.edu/teams/publication/peck-gower-confessio-amantis-volume-2>. Last accessed 1 April 2016.

¹³¹ Note also Gower uses *propreté* as part of an explicit claim. Here is my novice literal translation:

But yet it is a wonder thing,
When that a rich and worthy king,

Other contemporaries of Gower, like the theologian and Biblical translator John Wycliffe, use the preposition *of*: “for they will haue propretie of Ghostly goods where noe proprietie may be, and leauen propretie of worldlie goods where christian men maie haue propretie.”¹³² One difference between the two is that Gower may have been a lawyer and thus familiar with the Law French term *propreté* and its usage. If Gower wasn’t a lawyer, there is evidence that he was a litigant and that he regularly used technical legal terms in his work.¹³³ Gower’s use of “property in thing” is interesting because a century and a half earlier the English judge Henry of Bracton never once uses *proprietatem in* in his celebrated legal treatise, *On the Laws and Customs of England*.¹³⁴ While *habet* (or *habuit*) *proprietatem* appear in a few places, Bracton never employs the *in* prepositional phrase of his contemporary Henry of Ghent. Gower is perhaps supplying for us the earliest trace in English for how we think with the conception of property.

In the early 1500’s another dispute with the papacy erupted regarding its power. As part of his engagement with the Church, a young professor of theology, Jacques Almain, revisited the 13th century arguments of another Spiritual Franciscan William of Ockham.¹³⁵ Whereas the first uses of *having proprietas in the thing* are stated in the negative (a pope or usufructer does not have *dominium* or *proprietas* in the thing), Almain provides the earliest instances in Latin (that I have found) for a statement in the affirmative that the Pope “*habet proprietatem in aliquibus rebus* [these things],” which he further elaborates upon to mean “*in talibus habet proprietatem proprie propriam*.”¹³⁶ By the third successive *propri-* I think the point is firmly made: the Pope has *proprietas* in such things properly his own (i.e., those things before he became pope). All told Almain uses the construction *habet proprietatem in* seven times in the page-long second chapter, including the chapter title. He also uses the phrase frequently throughout the rest of the piece and in his other works. Almain’s teacher, the Scot John Mair, likewise uses the phrase, but just once in his 1518 commentary on the power of the Pope.¹³⁷ In every instance the preposition takes the ablative case.

Until the early part of the 16th century, English lawyers use three words interchangeably in ownership disputes involving chattels: *proprietas*, *propreté*, and *property*.¹³⁸ By the end of the 16th century, the usage of *have property in Y* is firmly established in English jurisprudence. Sir Edward Coke’s

Or other lord, what so he be,
Would ask and claim property
In thing to which he hath no right,
But only of his great might.
For this may every man well know,
That both natural and written law
Expressly stand there against.

¹³² Wycliffe, John. *Two Short Treatises, Against the Orders of the Begging Friars*. Available at <http://quod.lib.umich.edu/e/eebo/A15298.0001.001/1:5?rgn=div1;view=fulltext>, p. 33. Last accessed 17 April 2016.

¹³³ van Dijk, Conrad. *John Gower and the Limits of Law*. New York: Boydell and Brewer, 2013.

¹³⁴ See Bracton Online, available at <http://bracton.law.harvard.edu/>. Last accessed 2 April 2016.

¹³⁵ This is the same prominent Spiritual Franciscan more famously known for the razor principle that bears his name.

¹³⁶ Almain, Jacques. *Expositio, Circa Decisiones Magistri Guilielmi Occam, Super Potestate Summi Pontificis, De Potestate Ecclesiastica & Laica*, in Johannes Gerson’s *Opera Omnia*, 1706, p. 1079.

¹³⁷ Mair, John. *Disputatio, De Statu & Potestate Ecclesiae*, in Johannes Gerson’s *Opera Omnia*, 1706, p. 1151.

¹³⁸ Aylmer, G. E. 1980. “The Meaning and Definition of ‘Property’ in Seventeenth-Century England,” *Past and Present*, 86, 87-97.

report on *The Case of the Swans* (1592) is a landmark decision and nicely illustrates.¹³⁹ As Solicitor General, Coke represented Queen Elizabeth against Lady Joan Young and Thomas Saunger. At issue was whether the Keeper of the Queen's Swans could seize 400 unmarked swans in a public river from where the swans would travel to the plaintiffs' adjoined, privately-owned estuaries. Coke's report includes eight instances of the phrase *have property in*, three of which are in the negative:

- That the subject might have property in white swans not marked, as some may have swans not marked in his private waters, the property of which belongs to him, and not to the King.
- That everyone who hath swans within his manor, that is to say, within his private waters, hath a property in them, for the writ of trespass was of wrongful taking his swans.
- A man hath not absolute property in any thing which is *ferae naturae*, but in those which are *domitae naturae*.
- But in those which are *ferae naturae*, and by industry are made tame, a man hath but a qualified property in them, *scil.* so long as they remain tame, for if they do attain to their natural liberty, and have not *animum revertendi*, the property is lost, *ratione impotentiae et loci*: As if a man has young shovellers or goshawks, or the like, which are *ferae naturae*, and they build in my land, I have possessory property in them, for if one takes them when they cannot fly, the owner of the soil shall have an action of trespass.
- But when a man hath savage beasts *ratione privilegii*, as by reason of a park, warren, &c. he hath not any property in the deer, or conies, or pheasants, or partridges, and therefore in an action.
- He shall not say (*suos*) for he hath no property in them, but they do belong to him *ratione privi'* for his game and pleasure, so long as they remain in the privileged place.
- But a man may have property in some things which are of so base nature, that no felony can be committed of them; and no man shall lose life or member for them, as of a blood-hound or mastiff, *molessus*.¹⁴⁰

These excerpts summarize several of the important findings of the case, for which judgment was given in favor of the Crown. When a swan is marked on the beak or foot, the person who marked the swan has property in that swan, even if it strays into someone else's waters. If an unmarked swan flies into private waters, the owner of the water has property in the swan while the swan is in his or her waters. But the moment an unmarked swan leaves private waters for a public waterway, the property in the swan vanishes and the Crown now has property in the swan. Depending simply upon where a swan swims, one person's abstract notion of MINE in a swan can disappear and be replaced by the Queen's. And the marvel is that if that same swan were to swim back into private waters the next minute, the Queen's notion of MINE would disappear in the swan and someone else's would instantaneously replace it. Physical touch and uttered words are no longer necessary. The mind is doing all the work.

The custom is different, however, for animals that are tame by nature. A person has property in a cow when the cow is on private land, when it strays onto someone else's private land, and when it wanders onto public land. No matter where the cow may saunter, as cows are wont to do from time to time, the property in the cow never changes. That is the sense in which Coke says the property in the thing is absolute; the property in a naturally tame animal is independent of time and place. Property in a naturally wild animal is not absolute; it's relative, dependent upon the circumstances of time and place. The human scheduling pattern regarding animals in the external world depends upon the generally different scheduling patterns of wild and domesticated animals.

¹³⁹ Trinity Term, 34 Elizabeth I. See Coke, Sir Edward. 1600. *Selected Writings and Speeches of Sir Edward Coke*. Vol 1. Steve Sheppard (ed.). Indianapolis: Liberty Fund, 2003.

¹⁴⁰ Coke (1600/2003).

The Semantics of 'In a Thing' Physically Contain Property

The preposition *in* isn't the only one Coke uses in his report on *The Case of the Swans*. On two occasions he also modifies *property* with an *of*-prepositional phrase:

- For one white swan, without such pursuit as aforesaid, cannot be known from another, and when the property of a swan cannot be known, the same being of its nature a fowl royal, doth belong to the King.
- That if any swan cometh on the land of any man, and there builds, and hath cignets on the same land, that then he who hath the property of the swan shall have 2 of the cignets, and he who hath the land shall have the third cignet, which shall be of less value than the other 2.¹⁴¹

In the former, the phrasing is not about having a property in a swan, but in the latter it is precisely about having the property. So why choose *of* here, but *in* for the other eight cases? For the eight uses of *have property in*, the context of the sentence involves the questions of who has, and under what circumstances does someone have, property in a swan. These eight sentences explicate the specifics of the custom by which someone can say, "This swan is mine." In the sole case of having the property *of* the swan, there is no question about who has property in the swan. It is assumed that someone does and that that a swan has wandered onto someone's private lands to build a nest and raise some cygnets. The question is about the cygnets, not the swan itself.

In both cases a little two-letter word does the heavy work of orientating the noun being modified, *the property*, to the prepositional complement, *the swan*. The preposition *of* connotes an intrinsic, part-whole relationship between the property and the swan.¹⁴² As another example, consider *the front of the swan*. The swan is a whole, and it is an intrinsic feature of a whole swan that it has a front, a back, and two sides. The swan also has feathers, a beak, and two webbed feet, but what is contextually important in referencing *the front of the swan* is the part of it that is the front. By choosing *of* to say he who has the property of the swan, Coke is highlighting to the reader that it is an intrinsic feature of the very swan itself that someone has the property in it when it builds the nest on private land.¹⁴³

The linguists Andrea Tyler and Vyvyan Evans develop a cognitive model of prepositions that is comprised of two entities, a spatial relationship between the two entities, and a functional element which reflects the interactive relationship between the two entities.¹⁴⁴ The model explains how a change in a preposition subtly changes the meaning of a sentence. Different contexts call for choosing one preposition over another. Consider Tyler and Evan's example of *He ran to the hills* versus *He ran for the hills*. In both cases the person has a goal of reaching the hills, and the relationship between the person and the hills is that the person is in motion toward the hills. But the functional element concerning the interactive relationship is quite different in the two sentences. The preposition *to* places emphasis on the prepositional complement as the primary goal. If the context is that a city jogger wants to exercise somewhere peaceful and smog free, then *to* would fit the bill as it highlights the goal of getting to the hills

¹⁴¹ Coke (1600/2003).

¹⁴² Tyler, Andrea and Vyvyan Evans. *The Semantics of English Prepositions*. New York: Cambridge University Press, 2003.

¹⁴³ Coke's rival, Francis Bacon similarly uses both prepositions. See Bacon, Francis. *The Works of Lord Bacon*. Volume I. London: William Ball, Paternoster Row, 1838. Bacon writes both that there are "several ways whereby a man may get property in goods or chattels" and that one may "dispose the property of their goods and chattels" (p. vii, 586). These two uses are consistent with two different contexts in which Coke uses *property in Y* and *property of Y*.

¹⁴⁴ Tyler and Evans (2003).

and subordinates the current location in the city. But if getting to the hills is secondary or oblique to the context of getting the hell out of Dodge, say because there are guns ablaze in the streets, then a bank robber would run *for* the hills. The preposition *for* puts the hills in the background and emphasizes the intentions behind the running.¹⁴⁵

Now let's consider our preposition of interest. As far as English prepositions go, the polysemy of *in* is rather extensive and complex. Tyler and Evans identify 27 distinct senses of *in* and organize them into 6 different clusters. The canonical sense of *in* involves one thing spatially located within a second three-dimensional entity which has a boundary, an interior, and an exterior—for example, *the tea in the cup*. The interactive relationship between the two entities is that the cup contains the tea. Move the cup and the tea moves with it. The tea will not move by itself because the tea is in the cup.

Every one of the 27 senses of *in* that Tyler and Evans identify, even the non-canonical ones, involves a bounded entity and the functional relationship of containment, whether, for example, *The cow is in the meadow* or *The cow is in heat*. Even though the cow is not literally located within a three-dimensional entity but instead standing on a planar meadow, our minds flexibly conceptualize the spatial and functional relationships of *in* as applying to the cow and the meadow. Because the meadow is bounded and because the cow is located within the interior of the meadow, we say, “The cow is in the meadow” like we say, “The tea is in the cup.” Our minds likewise process the cow and its estrous cycle as fitting the requisite spatial and functional components of *in*. The estrous cycle of a cow lasts about 15 hours and reoccurs every 21 days or so.¹⁴⁶ Because the biological process is temporally bounded and because the cow cannot free itself from an estrous state, we say, “The cow is in heat” like we say, “The tea is in the cup.”¹⁴⁷ The semantics of *in* reflect and reveal the supra-conscious principles by which our minds cognize the external world.

What, then, does *in* reveal about the relationship between property and the thing when someone has property in the thing? The abstract notion of property is located within a three-dimensional thing, say a spear, which has a boundary, an interior, and an exterior. The interactive relationship between property and the spear is that the spear contains the property. Just like where the cup moves so moves the tea, so where the spear moves so moves the property. The property will not move by itself when the property is in the spear. The same is true of domesticated animals which, unlike spears, have a tendency to wander about on their own accord. The cow contains the property no matter where it strays. Property is but another characteristic of the very thing itself. The custom is contained in the thing.

¹⁴⁵ Recall the two meanings of *hunt* in fn. 73. As a transitive verb, *hunt* emphasizes the direct object and the action it receives. The mammoth is why men go a-hunting. Append *for* to *hunt*, as in hunting for Easter eggs, and the emphasis of the sentence shifts to the diligence and energetic search of kids dressed in their Easter Sunday best. When we use *hunt for*, there is no direct object to receive the verb's action; Easter eggs, truffles, and treasure are prepositional complements. We could say, “The kids gather Easter eggs,” but only if the parents were more interested in the cheap plastic eggs than the activity of their adorable kids.

¹⁴⁶ Growing up on dairy farm comes in handy from time to time.

¹⁴⁷ British Anglophones would not say, “The cow is in heat.” They would say, “The cow is on heat.” As Tyler and Evans explain, the choice of the preposition can be conventional when there are multiple functional elements of the situation on which to coordinate (p. 188). The preposition *on* connotes a functional element of a relatively short state, as in *The family is on vacation* and *Aaron Rodgers is on fire*. So both *on* and *in* fit the case of a cow's estrous cycle.

The case of property in swans marks an interesting and illuminating example. The same property that is in a cow can be located in a horse and a sheep and a goose, but it cannot be located in a swan or a deer or a fox. Our powers of conceptualization are flexible such that different kinds of custom can be located in different kinds of things. That is the ancient difference between *ferae naturae* and *domitae naturae*. Presumably we could try to put the same property that is in a cow into a swan, but it is likely to conflict with the scheduling pattern of swans more generally, which is to say that it is likely to conflict with how we think about swans, which is further to say that it is likely to conflict with the scheduling pattern of humans regarding swans.

Eventually the Use of 'Property in a Thing' Wanes

The phrase “have property in” is commonplace in 17th and 18th century writing, most frequently in legal contexts.¹⁴⁸ Locke uses it 12 times in Chapter V: *Of Property* in the *Second Treatise* (1690). Sir William Blackstone refers to *property in Y*, where *Y* is a moveable thing, over 20 times in the *Commentaries on the Laws of England in Four Books*, Vol. 1 (1765).¹⁴⁹ In his *Lectures on Jurisprudence* (1760's), Adam Smith discusses property in goods, crops, a hare, a watch, flocks, cattle, furniture, moveables, and possessions. David Hume only uses the phrase once in the main text and twice in footnotes in *A Treatise of Human Nature* (1740).¹⁵⁰

This way of thinking about the relationship between property and things so penetrated Macleod's thinking in the late 19th century that he misremembers Wycliffe and quotes him as saying “and leave property in worldly goods,” when, as quoted above, he actually says “and leave property of worldly goods.”¹⁵¹ Macleod also translates Justinian's “*transfert proprietatem mercium*” as “transfers the property in the goods,” when the literal translation of *mercium* is in the genitive case, “of the goods.”¹⁵² Macleod's mind cognizes *proprietas* to be more than an intrinsic feature of the goods; *proprietas* is in the goods.

¹⁴⁸ In the *Metaphysics of Morals* (1797) Immanuel Kant also uses an *in*-prepositional phrase when he says “all rights in this thing” (alle Rechte in dieser Sache). Consistent with discussion of Latin phrases above, the German *in* here takes the dative case meaning *within* or *contained by*, and not the accusative. The full sentence is about *dominium* and external objects:

Der äusserer Gegenstand, welcher der Substanz nach das Seine von Jemandem ist, ist dessen Eigenthum (*dominium*), welchem alle Rechte in dieser Sache (wie Accidenzen der Substanz) inhären, über welche also der Eigenthümer (*dominus*) nach Belieben verfügen kann (*ius disponendi de re sua*).

The original German can be found on page 79: <https://archive.org/stream/immanuelkantsme00kircgoog#page/n278/mode/2up>. Last accessed 22 June 2016. Mary Gregor's translation is:

An external object which in terms of its substance belongs to someone is his property (*dominium*), in which all rights in this thing inhere (as accidents of a substance) and which the owner (*dominus*) can, accordingly, dispose of as he pleases (*ius disponendi de re sua*).

Kant, Immanuel. *The Metaphysics of Morals*. Mary Gregor (ed. and trans.). New York: Cambridge University Press, 1996, p. 56.

¹⁴⁹ Blackstone also uses other physical prepositional complements like a king, dwelling, soil, land, copyholder, and bailor, and other abstract complements like possession, action, and debt. James Madison likewise talks about property in such abstract things as opinions, the use of faculties, and rights. Locke precedes them in this by writing about “property in his own person.” As our thoughts continue to mate and evolve in our flexible symbolic minds, it is beyond the scope of this paper to discuss these extended cases. See Madison, James. “Property,” *National Gazette* 14, 29 March 1792, 266-68. Available at <http://press-pubs.uchicago.edu/founders/documents/v1ch16s23.html>. Last accessed 18 April 2016.

¹⁵⁰ One footnote is a paraphrase of Locke.

¹⁵¹ Macleod (1881, p. 143).

¹⁵² Macleod (1881, p. 143).

The Dutch jurist Hugo Grotius in his magnum opus *De Jure Belli ac Pacis* (*Concerning What is Right of War and Peace*) says that “*Est...filius aut filia capax dominii in res ex jure gentium.*”¹⁵³ In 1738 John Morrice translates this sentence as “children in their infancy are, by the Law of Nations, capable of having a property in things.”¹⁵⁴ More literally, the gloss is “a son or daughter is capable of *dominium* against things by the Law of Nations.” Grotius uses the plural accusative case for things (*res*), not the plural ablative (*rebus*), yet Morrice interprets *in res* as meaning *in things* in the way that Blackstone, Coke, Locke, Macleod, and Smith refer to property in things.¹⁵⁵ *In res* is the plural of *in rem*, the legal term for an action directed against a thing (as opposed to an action *in personam*, against a person). Considering that the context of the section is that even children can by custom make legal claims regarding *dominium*, Grotius’ sentence conveys legality in a way that Morrice’s translation fails to.

Over a hundred years later William Whewell’s translation of the same sentence begins to sound modern: “a son or daughter is capable of ownership over things *jure gentium.*”¹⁵⁶ The choice of *over* for the preposition is a nice touch to convey the lordship in the original *dominium*, particularly when the subject of the sentence is the little lord of a child exercising *dominium*. But it also indicates that the use of “property in things” may be waning by the mid 1800’s, for Whewell prefers *ownership* to Morrice’s *property* as a translation for *dominium*.

By the early 20th century, Francis Kelsey renders Grotius’ sentence succinctly familiar to the modern ear: “a son or daughter, according to universal customary law, is capable of ownership of property.”¹⁵⁷ Because Kelsey naïvely thinks of property as a physical object, Macleod would (anachronistically) consider Kelsey’s translation to be a modern corruption. Recall that the preposition *of* connotes an intrinsic, part-whole relationship between, in this case, ownership and property. For Kelsey, ownership is an intrinsic feature of ‘property,’ the thing itself. When Coke talks about the property of a swan, he is referring to one of the many features of the swan, to wit, the property in it. Kelsey is doing something different, using a specific part of a thing, its property, to refer to the whole thing. In other words, ‘property’ is a synecdoche for the thing itself. He then refers to ownership in “ownership of property” as an intrinsic part of *pars-pro-toto* property. To Macleod, “ownership of property” is pleonastic. It’s like saying the grayness of a gray beard. If we are synecdochically referring to an old man by the feature of his facial hair, the grayness is redundant.

I conjecture that synecdoche is how *property* came to refer to both the custom and the thing itself.¹⁵⁸ Synecdoche is, I further conjecture, the reason why the use of “property in a thing” begins to

¹⁵³ Grotius, Hugo. 1625. *De Iure Belli ac Pacis, Liber II*. Washington, DC: Carnegie Institution of Washington, 1913, p. 146.

¹⁵⁴ Grotius, Hugo. 1625. *The Rights of War and Peace, Book II*. Richard Tuck (ed.). Indianapolis: Liberty Fund, 2005, p. 510.

¹⁵⁵ Morrice elsewhere uses the language of “property in Y” when there is no *dominium* or *proprietas* at all in the original. He translates Grotius as saying that “we lose our property in wild beasts, as soon as they recover their natural liberty.” Grotius (1625/2005, p. 636). A more literal rendering would be that “the wild beasts *cease to be ours* as they recover their natural liberty.” Grotius (1625/1913, p. 196).

¹⁵⁶ Grotius, Hugo. 1625. *Rights of War and Peace, An Abridged Translation*. William Whewell (trans.). London: Cambridge University Press, 1853, p. 93.

¹⁵⁷ Grotius, Hugo. 1625. *De Iure Belli ac Pacis, Liber II*. Francis W. Kelsey (trans.). London: Clarendon Press, 1925, p. 232.

¹⁵⁸ Only a language maven would fret about the creative use of language.

wane. Once the part becomes the whole so that our minds cognize ‘property’ as the physical object itself, having property in a thing becomes redundant; the thing *is* ‘property.’

Even though the OED defines *property* in terms of *ownership* and *ownership* in terms of *property*, “ownership of property” doesn’t sound redundant to the modern ear. Neither does, “If you own something, it is your property.” We treat the concepts of OWNERSHIP and PROPERTY as complements. Ownership is the state or condition of being able to say at this time, “I own Y” or “Y is my property,” which in non-circular atomic concepts means: (1) I can say about Y: “It is mine;” (2) people can know that what I say is true; and (3) other people cannot say, “It is mine,” about Y.¹⁵⁹ Both *own* and *property* are about states of the world. In some states you own a cow and in others you don’t. In some states a swan is your ‘property’ and in others it is not. The difference between the two words is that *own* is a static state verb and ‘*property*’ the corresponding noun for the class of things that the verb *own* can take as a direct object.

But ‘Property in a Thing’ Conveys More Meaning Than ‘X is my Property’

Does it matter that our language has evolved from *She has property in the swan* in the 16th century to *The swan is her property* and *She owns the swan* in the 21st?¹⁶⁰ Yes, if different language can bring different ideas to the foreground for how we think about the world. Suppose there is a dispute about a particular swan. The modern statements involve a swan, a woman, and a claim of a relationship between the two. The verbs *own* and *is* convey the claim, namely that the state of the world is such that this woman and only this woman can say, “This swan is mine” and that people can know that what she says is true. The focus is on whether the state is such that the woman can claim this swan to be in the set of things she owns. Is the swan her ‘property’? Or is it not? To then ask why the swan is her ‘property’ is to ask for a function that maps things into one of two mutually exclusive sets, her ‘property’ or not her ‘property.’ The primary question is about the objective criteria for the static mapping and whether this swan meets the criteria to be in the set of things that are her ‘property.’ The features of the swan itself, swans in general, and the scheduling pattern of humans regarding swans are all secondary. At best they shape the function that does the mapping; at worst some or all of these features are ignored.

The quaint sounding statement *She has property in the swan* also involves a swan, a woman, and a claim of a relationship between the two. But it also involves—thanks to the non-thingness of property and to the powerful tiny word *in*—an interactive relationship between property and the swan. The swan contains the property. Moreover, because the swan itself isn’t property, the statement contains three distinct entities, which means there is a third relationship at play between the woman and property. In our modern vernacular there are only two distinct noun phrases and hence only one relationship. While our modern minds project the question onto the flatland of just two dimensions, the 16th century language of property operates vividly in three dimensions.

¹⁵⁹ Goddard and Wierzbicka (2016, p. 102).

¹⁶⁰ If property is a human custom and we can say, “she has property in a swan,” then why does it sound awkward to say, “she has custom in a swan”? For the same reasons that (1a) is felicitous and (1b) isn’t:

(1a) *Stephen Curry immediately puts the ball in the shot pocket.*

(1b) ??*Stephen Curry immediately puts the sphere in the shot pocket.*

Whereas *property* and *ball* are specific terms, *custom* and *sphere* are general terms and hence can be less suitable substitutions.

Where we moderns cognize the problem as whether or not to put a circle around the swan and call it her 'property,' the Elizabethan jurist locates the woman, the swan, and the property within a sphere of actions. The features of the swan itself, swans in general, and the custom regarding swans are not secondary, but indeed primary to the three dimensional problem before our mind's eye. Property is an evolving process. It matters how we get to the here and now.

Part II

The Language of 'Rights' Muddies the Meaning of Property

The Harvard Law School Dean James Ames submits that "only he in whom the power to enjoy and the unqualified right to enjoy concur can be called an owner in the full and strict sense of the term...A true property may, therefore, be shortly defined as possession coupled with the unlimited right of possession."¹⁶¹ Legally founding property on possession is not just an Anglo-Roman fashion and an Anglo-Roman fetish, it's useful. For, as the weighty legal authorities of Sir Frederick Pollock and F.W. Maitland attest, "to prove ownership is difficult, to prove possession comparatively easy...Possession then is an outwork of property."¹⁶² The metaphor is apt. Outside the principal fortification of ownership, possession is a minor fortification for maintaining the enjoyment of the thing.

But defining "true property" as the conjunction of possession and the right of possession does more than fortify ownership. It appears to change the meaning of the term. Ames continues, "if these two elements are vested in different persons there is a divided ownership."¹⁶³ It changes the ordinary meaning of the word to say that my dispossessor has an element of ownership in my spear. Nay, the dispossessor has physical control. It is I and my spear which have been divided. And upon the division I am vested with something more than a right of possession. No matter where the spear goes, the property contained therein goes with it, and no matter where the property contained therein goes, my claim still stands: "That spear is mine." What is separated are possession and ownership, physical control *of* a thing and property *in* a thing.

Ames' definition appears at first blush to confuse the issue until we distinguish a first-person from third-person point of view of the events. When I think about what has happened, I cognize the situation as: I can say about that spear: "It is mine;" people can know that what I say is true; and other people cannot say, "It is mine" about that spear. When I say, "That spear is mine," it is predicated on some good reasons that I can say that spear is mine. Based on those good reasons, I think that I can cause people to have to say that it is right that that spear is mine. And so I say out loud for everyone to hear, "That spear is mine," because I want to cause other people by a speech act to think that it is right that that spear is mine.

Well, that's what I'm claiming anyways. Does it matter if I had previously taken the spear from the person now in physical control of it? Or if I had previously taken the spear from someone else who has now disappeared? Or if—and this is not as far-fetched as it may seem in human history—I had taken

¹⁶¹ Ames, James B. *Lectures on Legal History*. Cambridge, MA: Harvard University Press, 1913, pp. 193-94.

¹⁶² Pollock, Sir Frederick and Frederic W. Maitland. *The History of English Law before the Time of Edward I*. Vol. II. Boston: Little, Brown, & Company, 1895, p. 42.

¹⁶³ Ames (1913, p. 194).

the spear from someone else who has now disappeared and a fourth person has in the meantime taken the spear from the person who took it from me?

Part I is a first- and second-person account of how we as a species comprehend the meaning of property in a thing. It does not address how a traditional legal theorist or judge sifts through conflicting claims of “This is mine” and “That is mine” from a third-person point of view. In a concrete conflict, someone must decide what is indeed true and what is indeed right, which is a problem logically, cognitively, and temporally posterior to the dispute between my dispossessor and me. Ames isn’t defining property to explain how you and I cognize the meaning of property. He is summarizing a practical definition of property for third parties to settle disputes.

Blackstone, I submit, organizes the problem less clumsily. Rather than defining property as the unity of possession and a right of possession, he construes the problem in terms of what constitutes an unassailable title. Should there be a dispute, a trinity of possession, a right of possession, and a right of property completely substantiates a claim of “This is mine”:

For it is an ancient maxim of the law, that no title is completely good, unless the right of possession be joined with the right of property; which right is then denominated a double right, *jus duplicatum*, or *droit droit*. And when to this double right the actual possession is also united, there is, according to the expression of Fleta, *juris et seisinæ conjunctio*, then, and then only, is the title completely legal.¹⁶⁴

Bracton too treats *dominium* as the union of the right of possession (*ius possessionis*) and the right of ownership (*ius proprietatis*). The job of judges and jurists is to explicate that which justifies a claim of “this is mine.” To do that they separate possession and ownership in parallel with the claim that someone has separated possession from ownership.¹⁶⁵ The legal scholar Richard Epstein explains:¹⁶⁶

At this point, lawyers ask the question, what is the basis of the action to recover possession of property or damages for its loss—ownership or possession? To an economist [or an ordinary person too] that question looks largely empty, given that the original owner and possessor were the same person. But for the classical lawyers in both the Roman and the common law tradition, the primary actions to recover the possession of land, animals or chattels were said to rest on the violation of the fact of possession, and not of the ultimate right of ownership. The difference between these two conceptions becomes critical in any situation in which the location of ownership is in dispute.

As part of resolving conflicts regarding things, judges and jurists have nominalized two features of that ancient process into the concept of an incorporeal right—the right of possession and the right of ownership. What is right regarding the physical control of a thing and what is right regarding the property in a thing lie dormant until a dispute arises. When a disagreement occurs, judges call upon these concepts to explicate what should have guided expectations of the situation in question. The ancient rights of possession and ownership are scheduling patterns in conflict resolution, the resulting order of which

¹⁶⁴ Blackstone, Sir William. 1765. *Commentaries on the Laws of England in Four Books*, Vol. I, Book II. Clark, NJ: The Lawbook Exchange, 2003, p. 199. *Seisina* is the Latinization of the Law French term *seisin*, meaning freehold possession of land or chattels.

¹⁶⁵ Epstein, Richard A. “Possession,” in *The New Palgrave Dictionary of Economics and the Law*. Vol. 3. Peter Newman (ed.). New York: Palgrave Macmillan, 1998, pp. 62-68.

¹⁶⁶ Epstein (1998, p. 64).

constitutes a set of expectations about we ought to do, the state of affairs and probable results of those actions (what is true and what is good, respectively), and the appropriate responses to external events. While it may be easy to forget, such scheduling patterns are not genetic; they are moral shared practices that form an external order by aligning expectations among conspecifics. These expectations fit with and are founded upon the internal order of the mind, how we think about claims of “This is mine.”

And the Concept of ‘Possession’ Discards the Mind and Custom from Property

In 1803 and at the tender age of 24, Friedrich Savigny published *Das Recht des Besitzes* (*The Law of Possession*), a groundbreaking treatise in the history of jurisprudence. Savigny reads Roman law to say that the legal concept of possession is the conjunction of acts that demonstrate (1) physical control of the thing (*corpus possessionis*) and (2) an intention to hold the thing as one’s own, as the mind of an owner (*animus domini*). While agreeing with the first element, Oliver Wendell Holmes famously takes issue with the second in *The Common Law*. For Justice Holmes, acting with the mind of a *dominus* is too strong to establish possession. When a *dominus* treats something as his own, the point of the law is “to prevent other men to a greater or lesser extent from interfering with [his] use or abuse.”¹⁶⁷ Holmes argues that the limited intention to exclude is all that is needed to establish possession and that this streamlined intention makes a related type of dispute, though legally distinct, easier to handle. Suppose a *domina* leaves something with a shopkeeper to sell on her behalf and then someone else absconds with it while in the shopkeeper’s trust. Savigny would deny possession to bailees like the shopkeeper because they cannot, by definition, hold the item with the mind of a *dominus*. And without possession, the bailee does not have access to a standard legal remedy called trover to recover the value of the thing (not the thing itself) from the absconder. Holmes argues that the common law has found a way to settle more cases of dispossession by limiting the intention in possession to that of mere exclusion.

Judge Richard Posner expertly sifts through the differences between Savigny and Holmes.¹⁶⁸ True to his reputation, Posner compares and contrasts them through a third lens, the economics of the law of possession to expose an anomaly in Holmes’s definition of possession. If Savigny’s definition is anomalous with regard to bailees, Holmes inconsistently handles the case of an employee who steals from an employer.¹⁶⁹ By Holmes’s definition, an employee has possession of an employer’s goods because he has both physical control of them and the requisite intent to exclude all others from using them. But if an employee has possession, how can he be treated as a thief who has taken the goods from his employer’s possession? Posner explains that Holmes wiggles his way out of this inconvenient case by saying that employees have been historically treated as slaves. Because slaves could not be legally regarded as possessors, an employee-slave can thus be deemed a thief when he physically takes goods from the employer’s possession. Note that Savigny’s definition has no problem with this case. The moment the employee carts off the goods for his own use, he is acting as a *dominus* and is hence in possession of the goods.

¹⁶⁷ Holmes, Oliver W. *The Common Law*. Boston: Little, Brown and Company, 1881, p. 220.

¹⁶⁸ Posner, Richard A. 2000. “Savigny, Holmes, and the Law and Economics of Possession,” *Virginia Law Review*, 86, 535-67.

¹⁶⁹ Posner (2000, p. 548).

Both definitions run into problems regarding theft. Savigny's definition is inconvenient for bailees because the intent is too strong; for Savigny the *animus domini* must always be present. But by weakening the intent, Holmes's definition creates a *corpus possessionis* problem (we are unable to distinguish two possible motives attached to the same matter of fact), the solution to which is to treat thieving employees as slaves.¹⁷⁰ I find it curious that in the case of swans and cattle, property in a thing depends upon the scheduling patterns of the thing itself and the scheduling patterns of the humans regarding the thing. But in the cases of bailors and bailees, and employers and employees, property in the thing does not depend upon human scheduling patterns. In an important way, the life of the law of possession has not been experience, despite what Holmes may exhort.¹⁷¹ The legal concept of possession has been about axioms and fictive corollaries.

When a *domina* places an item in the hands of a shopkeeper, she can still say, "That is mine," even though she no longer has physical control of the thing. Where the item moves, so moves the property in it. Another feature of the scheduling pattern is that the *domina* places her trust *in* the shopkeeper to treat the item as she treats it, *i.e.*, *as her own*, which includes maintaining its condition and defending it against would-be dispossessors.¹⁷² This is to say that the bailor and the bailee jointly attend to the same end that the bailee will maintain the item's condition and defend it against would-be dispossessors.

For the bailee to treat the item as the *domina* would treat it, he must treat the item as if he can say, "This is mine" (a) to himself as he cares for it and (b) to others who would dispossess him of it. When someone becomes a bailee, he divides himself, as it were, into two persons.¹⁷³ The first is himself, someone who is not the *domina* and who cannot say, "This is mine." The second is himself, the bailee, who treats the thing as the *domina* treats the thing, maintaining its value and pursuing dispossessors. The first has no property in the thing; the second has property in the thing against dispossessors. The didact might claim that it is as impossible for the first to be, in every respect, the same with the second as it is impossible to identify cause with effect. Yet without such abstract thinking beyond the here and now, never would a bailor place goods in trust and joint attention with a bailee. Such is the scheduling pattern of our (and only our) species. Perhaps the common law could recognize it explicitly as it explicitly recognizes the scheduling patterns of wild and tame animals.

Holmes must weaken Savigny's intent to act with the mind of an owner because he is intent on defending the outwork of property, not the bastion of property itself. By doing so, Holmes leaves unguarded the back door to the castle, wherein the concept of MINE sits singularly on the throne. Holmes's logic is that "if what the law does is to exclude others from interfering with the object, it would seem that the intent which the law should require is an intent to exclude others."¹⁷⁴ There exists not a slight temptation to begin with the assumption that possession must be the first line in the defense of property and that the intent of import is that which protects possession, namely, the intent to exclude others. This

¹⁷⁰ For legal purposes only.

¹⁷¹ Holmes (1881, p. 1): "The life of the law has not been logic: it has been experience."

¹⁷² Where the shopkeeper goes, so goes the *domina's* trust.

¹⁷³ In what follows, compare with Smith, Adam. 1759. *The Theory of Moral Sentiments*. Indianapolis, IN: Liberty Fund, 1982, p. 113.

¹⁷⁴ Holmes (1881, p. 220).

provisional assumption is treated as a necessary practical consideration which can be dropped later without much consequence for philosophical, legal, and economic foundations of property. Yet the concept of MINE is the basis for the *animus domini* and central to how we cognize the meaning of property in things. The practical consideration by which the *animus domini* is put aside is typically never explicitly reconsidered but simply conveniently forgotten. The discussion then proceeds as if the mind of the *dominus* does not matter. As we shall see, the mind of the *dominus* matters.

5. My Theory Unites Modern Philosophies and Shores Up their Weak Points

A new wave of research has reintroduced the thing to the study of property. The work is a response to the 20th century American tradition of legal realism, in which property is not about things, but a bundle of incorporeal rights and legal relations between people.¹⁷⁵ While this substantial body of work has re-thingified the study of property over the last 20 years by rediscovering how people long ago thought about property, the step that this new legal research has not taken is to treat property as, first and foremost, customary human action.¹⁷⁶

When we make a composite object, as only a human can, we create something. That object is not the end of that action. It is a feature of the action itself that an object now exists that previously did not, and it is a feature of the action itself that we have self-directed purposes for which that object is a means.¹⁷⁷ Finally, it is a feature of the action itself that for anyone else to assert physical control of that object is to interfere with those self-directed purposes. Those purposes carry with them expectations that are the consequence of creating an object. I thus join Rasmussen and Den Uyl in concluding that such an object (with a single creator) “must be considered an extension of what one is (assuming no dichotomy between oneself and one’s action) and not as items contingently attached to oneself.”¹⁷⁸ Property is more than an external dichotomous mapping of things into one of two sets, ‘my property’ and ‘not my property.’ Property is a scheduling mechanism of human action that takes the concept of I in my body and places it in an object as the moral concept of MINE.

Note the cognitive similarities between the semantically related, but non-compositional concepts of I and MINE. Both are first-personal, but neither can be defined in terms of the other.¹⁷⁹ Just as only I can use the concept of I to refer to myself, only I can use the concept of MINE to predicate a claim on something that I have property in. A body is also the physical container for the concept of I. Move the body, and I move with it. Likewise then, a thing is the physical container for the concept of MINE. Move the thing, and the property moves with it.

The Neo-Lockean Theory Invokes Custom but Doesn’t Go Far Enough

Locke’s is perhaps the most well-known theory of property. If it is not the most well-known, it’s the most intuitive to the average person. The labor theory of property holds that someone can say, “This

¹⁷⁵ For an extension of legal realist property as a thing-free, socially constructed concept, see Underkuffler, Laura S. *The Idea of Property: Its Meaning and Power*. New York: Oxford University Press, 2003.

¹⁷⁶ For an excellent survey and the references therein, see Penner, James and Henry E. Smith (eds.). *Philosophical Foundations of Property Law*. New York: Oxford University Press, 2013.

¹⁷⁷ Rasmussen and Den Uyl (2005).

¹⁷⁸ Rasmussen and Den Uyl (2005, p. 100).

¹⁷⁹ Goddard and Wierzbicka (2016).

is mine,” if he or she does something productive with the thing. The popularized version of the theory is that we have property in the things with which we mix our labor. As the legal scholar Eric Claeys explains, carefully read, Locke’s theory of property is a theory of purposeful activity that creates value.¹⁸⁰ Because Locke is writing in the natural rights tradition, he bases his theory on something that appears to be naturally right. For Locke this entails the unarguable proposition that “every Man has a *Property* in his own *Person*. This no Body has any Right to but himself.”¹⁸¹ From this it follows that “the *Labour* of his Body, and the *Work* of his Hands, we may say, are properly his.”¹⁸²

I don’t want to push this too hard, but is there not something awkward, some conceptual tension, about saying that someone has property in her own person? In a world in which slavery was commonly accepted, Locke is making more than one statement when he says that everyone has property in his or her own person. But even though slavery is no longer condoned, there is still another source of conceptual tension in his phrasing. Modern restatements of Locke frequently use the verb *own*, which Locke never does, to say that a person owns herself, owns her body, and owns her actions. Sometimes authors put this use of *own* in quotation marks, and it is that nonfelicitousness that I am referring to. What does one say pointing at one’s self: “This is mine” or “This is my body”? I submit that this conceptual tension—saying, “I own myself” or pointing at one’s body and saying, “This is mine”—stems from how MINE cognitively works. Because MINE is something is we felicitously put in things external to ourselves, our minds resist locating MINE inside our physical body.¹⁸³ The concepts I and MINE are both first-personal, but not, I tentatively conjecture, co-locational.

If I prune a stick whose original tree matter had been “in the common state Nature placed it in,” Locke’s theory is that by the work of my hands I can say, “This stick is mine.” Why? Because I have “mixed [my] labour with it, and joined to it something that is [my] own.”¹⁸⁴ The stick has “by this labour something annexed to it that excludes the common right of other men.”¹⁸⁵ The philosophers Robert Nozick and Waldron mock the mixing metaphor with examples of pouring radioactive tomato juice into the Atlantic Ocean and dropping a ham sandwich in cement.¹⁸⁶ So successful are these amusing critiques that even a Lockean scholar like Claeys feels compelled to concede that “true, the mixing image is somewhat hyperbolic.”¹⁸⁷ No, the metaphor is not hyperbolic, nor easily dismissible as a mere image. Locke is using how we think about property to explain how the custom works. There is a reason why his labor theory of property is intuitive and well known; people actually think that way. The concept of mine and the property constituted thereby is in the pruned stick. What this means is that other people cannot say, “This stick is mine.”

¹⁸⁰ Claeys, Eric R. “Productive Use in Acquisition, Accession, and Labour Theory,” in *Philosophical Foundations of Property Law*, James Penner and Henry E. Smith (eds.). New York: Oxford University Press, 2013, pp. 13-46.

¹⁸¹ Locke (1689, p. 287).

¹⁸² Locke (1689, pp. 287-88).

¹⁸³ We also resist referring to people as “mine.” Even though we say, “This truck is mine” and “This is my truck,” we generally don’t say, “This sister is mine” even though we say, “This is my sister.”

¹⁸⁴ Locke (1689, p. 288).

¹⁸⁵ Locke (1689, p. 288).

¹⁸⁶ Nozick, Robert. *Anarchy, State, and Utopia*. New York: Basic Books, 1974, pp. 174-5. Waldron, Jeremy. 1983. “Two Worries about Mixing One’s Labour,” *The Philosophical Quarterly*, 33 (130), 37-44, p. 43.

¹⁸⁷ Claeys (2013, p. 23).

Sometimes, though, someone else may say, “That stick is mine.” No custom stands independent of other customs. Only in its totality does a social system comprised of customs form the sense of how to conduct ourselves rightly, and Locke’s is no different.¹⁸⁸ Claeys identifies in Locke’s treatise three of the myriad other customs that qualify when I can say, “This is mine:” do not waste, leave a sufficient amount (“enough and as good”) for others to do the same, and charitably give to those whose very life or safety depend on my thing.¹⁸⁹ In the case of my pruned stick, I suppose someone could come up with an entertaining statement that would qualify my claiming of the pruned stick such that I could no longer say, “This stick is mine.” But what would be the point? Neither Locke’s nor my claim is that property is absolute. (Nor is my claim that we can interpret the custom to be as we wish it to be, including wishing it away.) Property is embedded in a system of good conduct. One of Locke’s and his interpreters’ major contributions to the study of property is that they embed it a social system with other customs.

Where modern Lockean miss the mark is that they don’t go far enough and treat property itself as a custom. They stop short with an appeal to an incorporeal substantive, a right: “productive use” “grounds ownership of property in each person’s non-conventional right to acquire and deploy external assets to satisfy some aspect of his self-preservation or –improvement.”¹⁹⁰ Property is a scheduling pattern of actions distinct from the patterns of actions associated with using the thing. When I say, “This stick is mine,” I am doing something different in the world than when I do something productive with the stick, like prune it, or than when I use the stick as a shaft for a spear. Of course, it is because I intend to do something with the stick that I go out, find, and prune it. And, of course, there are customs that govern when and how I may acquire and deploy an unpruned stick. But none of that makes the physical facts of labor mixing and productive use a theory of property. Recall that physical facts are insufficient in and of themselves to explain how you and I cognize the external world differently when we jointly attend to a spear and I say, “This spear is not mine, it is yours.” You have property in an object that you create because humans (and only humans) *re-cognize* created objects as objects that don’t appear in the common state placed by nature. We recognize the purposes of an ‘I’ in a created object, and one meaning of a created object is that by custom an ‘I’ can say, “This is mine.”

Property, to borrow from Polanyi, “transcends the disjunction between the subjective and objective.”¹⁹¹ In so far as the custom establishes contact with the external world, such as mixing labor with a thing, it is not subjective; and in so far as I confidently say, “This is mine” based upon that contact, it is not objective either. I have property in the thing because other people and I jointly comprehend that (1) I can say about the thing: “It is mine;” (2) people can know that what I say is true; and (3) other people cannot say, “It is mine,” about the thing. Physical facts and productive use do not account for the personal presence of the singular I and the singular MINE in cognizing the custom, and hence cannot explain property.

¹⁸⁸ Hayek, Friedrich A. *The Sensory Order: An Inquiry into the Foundations of Theoretical Psychology*. Chicago: University of Chicago Press, 1952.

¹⁸⁹ Locke (1689, pp. 288, 291) and Claeys (2013, pp. 20-21).

¹⁹⁰ Claeys (2013, p. 46).

¹⁹¹ Polanyi (1956, p. 315).

Exclusive Use Cannot Explain Property as a Scheduling Pattern

Like my account, J.E. Penner rejects the claim that property is a culturally relative conception. He posits, contra the modern orthodoxy in law, that an 'idea' of property transcends local customs. As a foundational point, it is exactly right and a long overdue reorientation for the study of property. The question is, what is the universal human idea of the property? The concept of mine embodied in the socially taught custom of when someone can and cannot say, "This is mine."

Similar to Claeys, Penner conceives of property in terms of a right "grounded by the interest we have in the use of things," though expressly without a labor mixing metaphor.¹⁹² Note the common diction. Both Penner and Claeys "ground" property in the use of things. Penner's ground is "the interest in exclusively determining the use of things."¹⁹³ How does an interest in the use of things ground a right? The common sense argument is that there must be a reason why we exclude others from using things. Unless you're a curmudgeonly Mister Wilson with a menacing neighbor kid, people don't go around excluding others for the sake of excluding others. The reason we exclude other people, Penner argues, is that we want to use the things ourselves.

Every animal "wants" to use things themselves.¹⁹⁴ Consider the feisty American red squirrel. A red squirrel excludes conspecifics from the pine nuts it has gathered by caching them (and defending its caches with impressive paroxysms of rage). If a squirrel didn't hide coniferous cones, its primary food source, an unguarded, neat and convenient pile of them would surely be consumed by a conspecific that happened upon it. The hiding squirrel has an interest in the nuts and the species a scheduling pattern in larder-hoarding them. Now consider brown bears. Brown bears also have an interest in eating nuts, and they have the morphology to cache them. But brown bears don't cache nuts. Why does grounding the scheduling pattern in the use of nuts fail in bears? Because something is missing from consideration. Bears and squirrels fill different ecological niches. Bears are omnivores and sit comfortably on top of the food chain. Compared to squirrels, the benefits are rather low, relative to the costs, for bears to cache nuts. With the slow feedback and innovation there is little value for a species-wide pattern of food caching to form in bears. Variations in the costs and benefits of exclusion would likewise fail to universally ground the human custom of property in the simple use of things. Exclusive use is a *consequence*, not the content, of the meaning of property in things. MINE singularly grounds mine in every human community.

Kantian A Priorism Cannot Account for the Moral Significance and Transmission of Property

Arthur Ripstein, a philosopher and legal scholar, identifies another value missing in the move to ground property in the exclusive use of things. Ripstein rejects the idea that the value of following the custom of property can be characterized "without reference to property-like concepts."¹⁹⁵ Specifically, he argues that the value in excluding others from using a thing cannot be characterized in terms of the

¹⁹² Penner (1997, p. 71).

¹⁹³ Penner (1997, p. 49).

¹⁹⁴ I am again using my human-tinted lenses to comprehend how red squirrels act. The semantic prime WANT is a universal human concept. See Wierzbicka (1996).

¹⁹⁵ Ripstein, Arthur. "Possession and Use," in *Philosophical Foundations of Property Law*, James Penner and Henry E. Smith (eds.). New York: Oxford University Press, 2013, pp. 156-181, p. 164.

use of something. Penner's theory mixes the moral valuation of the means with a valuation of the ends that need not be moral.

We do not deem a single act good—like excluding you from my thing—because in general it would be good for me to use the thing. Rather, in general it is good for me to use the thing because it is indeed right, i.e., fitting with the entire scheduling pattern or order of society, for me to exclude you from using it. As Ripstein summarizes, “the relevant value is not something separate, which the rules try to achieve or even instantiate...because the value exists in the rule,” to which he adds for Kantian good measure, “it is the form of interaction that has moral significance.”¹⁹⁶

Ripstein, however, doesn't show what the moral significance of property is. Just prior to the previous quotation he says that “in the case of property, each property owner is master of his or her property, as against all others. That is the justification of the rule in property.”¹⁹⁷ But what makes a rule of property moral? Elsewhere in a book length treatment of Kant's legal philosophy, he explains the Kantian argument regarding the physical control and use of things external to our bodies. The short answer—without getting into the sticky aprioristic details of Kant's Universal Principle of Right, the Principle of Acquired Rights, and his conception of freedom—is that it would be morally wrong not to have rules of property.¹⁹⁸ While the logical conclusion of a universal proposition and a postulate may well be that it would be “illegitimate” to have “anything less than fully private rights of property,” it clearly does not follow that rules regarding the physical control and use of things are *moral* shared practices.¹⁹⁹ After all, such rules could simply be socially transmitted, like the capuchins' use of hammer and anvil stones to crack nuts, or they could even be genetically acquired, like the ants' use of leaves to transport liquid foods.

The moral significance of property is built upon valuations of the claim, “This is mine.” The valuation of this normative speech act is secondary to the comprehension of it. I do something in the physical world when I say, “This is mine,” and other people then judge the claim-act to be good or bad.²⁰⁰ We, in the full jointly-attending meaning of the word, combine the idea of the act itself with the abstract concepts GOOD or BAD. We do not merely apprehend the bare physical movement of the act; we contemplate the act for itself.²⁰¹

What makes us want to contemplate our action for its own sake? We are a symbolic-thinking, motive-ascribing species, which means we abstract the thinking and feeling from which an action proceeds and then deem the action to fit or not fit with the order of the group's scheduling pattern. But that we do so is not in itself the contemplation of actions for their own sakes. Something more is required

¹⁹⁶ Ripstein (2013, p. 176).

¹⁹⁷ Ripstein (2013, p. 176).

¹⁹⁸ Ripstein, Arthur. *Force and Freedom: Kant's Legal and Political Philosophy*. Cambridge: Harvard University Press, 2009.

¹⁹⁹ For the details in Kantian terms, see Ripstein (2009, p. 62, italics added): “First,...the only way that a person could have an entitlement to an external object of choice is if that person had the entitlement formally, because having means subject to your choice is prior to using them for any particular purpose. Second,...the exercise of acquired rights is consistent with the freedom of others, because it never deprives another person of something that person already has. *So anything less than fully private rights of property...would create a restriction on freedom that was illegitimate based on something other than freedom.*”

²⁰⁰ See also: Rose, Carol. M. 1985. “Possession as the Origin Property,” *University of Chicago Law Review*, 52, 73-88.

²⁰¹ Alexander (1933).

to elevate actions to the subject of attentive consideration for their own sakes. That something more is the primate impulse for sociality and the connatural pleasure of being in the company of conspecifics. A solitary mammal with symbolic thought—if such an animal could even acquire symbolic thought—would not self-direct its attention to the actions of others so as to become interested in them and consequently in its own actions for their own sakes. Adam Smith sums it up beautifully when he considers the counterfactual condition of *Homo sapiens*:²⁰²

Were it possible that a human creature could grow up to manhood in some solitary place, without any communication with his own species, he could no more think of his own character, of the propriety or demerit of his own sentiments and conduct, of the beauty or deformity of his own mind, than of the beauty or deformity of his own face...Bring him into society, and he is immediately provided with the mirror which he wanted before. It is placed in the countenance and behaviour of those he lives with, which always mark when they enter into, and when they disapprove of his sentiments; and it is here that he first views the propriety and impropriety of his own passions, the beauty and deformity of his own mind...He will observe that mankind approve of some of [his passions], and are disgusted by others. He will be elevated in the one case, and cast down in the other; his desires and aversions, his joys and sorrows,...will now, therefore, interest him deeply, and often call upon his most attentive consideration.

If we ask, why do people consider stealing to be morally bad, the answer is that they disapprove because, through empathy, they feel the resentment of others from upsetting the expectations of the group's order, an order which is the product of generations of humankind. The morality of property is objective in that it is an external social formation independent of the thinking and feeling of any individual. Though the morality of property is not subjective, meaning that it doesn't exist only in the thoughts and feelings of the individual, it is not purely objective either. Every individual that submits to this external social formation personally commits an 'I' to following the rules of property.

Following the rule for the sake of following the rule is to submit to its authority, and authority is precisely the kind of the property-like concept that Ripstein invokes to explain how property works: "the problem to which exclusion is the solution is one of determining who has authority over what."²⁰³ When a *domina* says, "This is mine," to anyone, including a bailee, she is invoking the concept of authority. Authority of someone over something is only half of the equation.²⁰⁴ Why would the bailee accept that authority? Because he follows the rule of property for its own sake, but also because *he learned from his mentors* to follow the rule for its own sake. A crucial step in forming an ethicizing animal is to accept someone as an authority on how to conduct one's self. The *domina* here and now is a composite eidolon of all the teachers the bailee accepted as a moral authority and from whom he subsequently learned the rules of property. Accepting someone as an authority is more than submitting to the dominance of the brawniest bully, which is merely yielding to the basic impulse to avoid pain. Accepting someone as an authority involves the teacher and the taught jointly attending to the same end: following the rule of property for its own sake.

²⁰² Smith (1759, p. 110).

²⁰³ Ripstein (2013, p. 174).

²⁰⁴ Notice the preposition *over* and compare "the authority of someone over something" with "something under the authority of someone." Aren't prepositions marvelous?

And the In Rem Theory is Too Simple

The legal scholars Thomas Merrill and Henry Smith have spent over 15 years blazing a new trail in the scholarship of property.²⁰⁵ The trail is an economic one, marked with instrumental values and transaction costs. On their account, property “is the right to a thing, good against the world” and works the way it does because it “emerges from the process of solving the problem of how to serve use interests in a roughly cost-effective way.”²⁰⁶ If you and I dispute that a particular spear can serve both our interests simultaneously, the local adjudicator must decide whether any action can be taken to remove the spear from your physical control. The question in settling a dispute like this is not whether any action will be taken against you or me personally. Rather, the question is whether any action will be taken against the thing itself to forcefully transfer its physical control to me. The former is what the Romans called an *actio in personam* (action against the person) and the latter an *actio in rem* (action against the thing).²⁰⁷ The cost-minimizing way of dealing with numerous such disputes is not to sort through the web of personal social relations in each and every case, but to bring the thing itself to the foreground and decide by the dictates of custom who can and cannot say, “This spear is mine.” Once only one of us can say, “This is mine,” the other can say nothing upon being excluded from the thing.

Smith argues that the reason property is the “law of things” is that it is informationally less costly to decide who can exclude others from using something than it is to specify the social relations between each person regarding the affirmative use of something.²⁰⁸ When you come across a spear lying around on the ground, you know that you cannot take physical control of it without needing to know anything about any social relations, such as who I am, how I relate to you, what I use it for, what I cannot use it for, who else might have an interest using in it, how they might relate to you, etc., etc. The complement of the set of things for which you can say, “This is mine,” is the set of things for which you cannot say, “This is mine.” If you cannot say, “This is mine,” you do not have the authority to assert physical control over the spear. And because I can say, “This is mine,” I have the authority to exclude you from using my spear. What everyone needs to know is that simple.

Smith, though, takes this simplicity too far. It is one thing to assume that exclusion is “a convenient starting point” for minimizing the information costs of delineating mine and thine, “a rough first cut—and only that—at serving the purposes of property.”²⁰⁹ But in making exclusion the starting point it is quite another thing to reduce the problem of how property works to two dimensions, “by

²⁰⁵ See, e.g., Merrill, Thomas W. and Henry E. Smith. 2000. “Optimal Standardization in the Law of Property: The *Numerus Clausus* Principle,” *Yale Law Journal*, 110, 1-70; Merrill, Thomas W. and Henry E. Smith. 2001. “What Happened to Property in Law and Economics,” *Yale Law Journal*, 111, 357-398; and Merrill, Thomas W. and Henry E. Smith. 2007. “The Morality of Property,” *William and Mary Law Review*, 48, 1849-1895.

²⁰⁶ Merrill and Smith (2001, p. 358), and Smith, Henry E. 2012. “Property as the Law of Things,” *Harvard Law Review*, 125, 1691-1726, pp. 1704.

²⁰⁷ Long, George. “Actio,” in *A Dictionary of Greek and Roman Antiquities*. William Smith (ed.). London: Samuel Bentley, 1842, pp. 7-11. Here the Latin preposition *in* means “against,” and takes the accusative and not ablative case. The action is imposed from the outside on the person or thing.

²⁰⁸ Smith (2012). This conception stands in stark contrast to modern legal thought, which treats property as a bundle of rights, a thicket of social relations in which “things form the mere backdrop...and a largely dispensable one at that” (Smith 2012, p. 1691). Merrill and Smith invert the modern picture of bundle of rights.

²⁰⁹ Smith (2012, p. 1705).

defining the thing in an on/off manner.”²¹⁰ Either the swan is her ‘property,’ or it is not. Information costs are indeed a problem that shapes the custom, but as I explain in Part I, they are not *the* problem from which property emerges in humans. Smith places the physical thing front and center in his theory of property, but the thing resides in Edwin Abbott’s Flatland as the domain of a simple indicator function. Just as A Square cannot comprehend A Sphere while in two dimensions, so an indicator function cannot account for the third dimension of morality at work in property. The value judgments that support property are, *pace* Smith, part and parcel of the concepts by which we practice property. At the very core of property is the moral claim, “This is mine.” To make a myriad of these moral claims compossible, rules and order emerge as embodiments of how, why, and to what extent people have property in things. Property operates in the three-dimensional Spaceland of human action regarding things. *She has property in the swan*. The person and the custom are as important as the thing itself.

6. Disputes Explicate How We Cognize Property, Out of Which a Clear Rule Emerges

The Custom for Created Goods is First-in-Hand

Among the property cases that every (common) law student learns is the landmark English case of the chimney sweeper’s boy and the jewel. The official record of *Armory v. Delamirie* (1722) summarizes the dispute in one extended sentence:

The plaintiff being a chimney sweeper's boy found a jewel and carried it to the defendant's shop (who was a goldsmith) to know what it was, and delivered it into the hands of the apprentice, who under pretence of weighing it, took out the stones, and calling to the master to let him know it came to three halfpence, the master offered the boy the money, who refused to take it, and insisted to have the thing again; whereupon the apprentice delivered him back the socket without the stones.²¹¹

A gem set in a ring is not something found in the common state of nature. Someone created the composite object and thereby could by custom say, “This ring is mine.” Moreover, every person (and only a person) who happens upon a jewel lying around in some soot recognizes it as a composite object, one meaning of which is that someone at some time exclusively, particularly, peculiarly, and properly had property in it. But when that someone is unknown or no longer around to say, “That ring is mine,” what happens to the property in it? Can someone else have property in the ring? If so, who becomes the next person to have property in the ring, and how does one acquire property in it?

Recall the work that words do on the physical world when I say, “This ring is not mine, it is yours.” Vocalizing those eight simple sounds changes how you and I think about the physical world. If the ring was mine, but I am unknown or no longer around, how would Marc Armory and Paul de Lamerie (the court reporter misspelled the defendant’s name) cognize the ring? I cannot affect how they think about the ring because I’m not around to make such a claim. As far as Armory and de Lamerie are concerned, any property in the ring has been suspended. It could reappear if I reappear to say, “This ring is mine,” but until then, there is no property in the ring.

Until I do in fact return, or if there is no reason to expect that I may return, the prudent course of action is for someone else to enjoy the thing and claim it with MINE. The question is, who? Who can say

²¹⁰ Smith (2012, p. 1709).

²¹¹ 1 Strange 505 (1722), *The English Reports* (1378-1865), 93, p. 664.

about the ring, “It is mine,” such that other people will think (1) that he has a good reason to say, “This ring is mine,” and (2) that no one else can say, “That ring is mine”? Armory or de Lamerie? Because such a situation is not uncommon, humans have a scheduling pattern that constitutes a set of expectations about what people can do regarding such things, viz., the custom is that the first person to find the thing, especially to grasp the thing with his hands, can say, “This is mine.” This is nearly how Lord Chief Justice John Pratt rules: “That the finder of a jewel, though he does not by such finding acquire an absolute property or ownership, yet he has such a property as will enable him to keep it against all but the rightful owner, and consequently may maintain trover.”²¹²

Of the two claimants, Pratt awards the ring to the one who first had it in hand and laid claim to it, though, as the legal anthropologist Simon Roberts notes, the chief justice’s statement is somewhat imprecise. Whatever property Armory may have had in the ring, it did not bind “all but the rightful owner,” but only all persons without a better claim to say, “This ring is mine.”²¹³ Relative to de Lamerie, Armory first grasped the ring, but someone else relative to Armory could have also turned up in the future to say, “That is ring is mine,” and that person need not be the person who “rightfully” had property in the ring before it was lost.²¹⁴ What this means is that *Armory v. Delamirie* may not illustrate so starkly “the fact that a right to possess will accrue from the mere fact of possessing” or that “the mere taking possession of a thing creates a right to its exclusive possession.”²¹⁵ As the legal scholar Robin Hickey argues, albeit with a different line of reasoning, “the proposition that possession, without more, generates title” is a late 19th century interpretation of the early 18th century case.²¹⁶ *Armory* may simply illustrate the first-in-hand custom by which someone can say, “This is mine.”

Especially if the Thing is Your Creation

On the evening of April 6, 1869, Thomas Haslem instructed two employees to rake horse manure into piles off to the side of a public highway in Stamford, Connecticut.²¹⁷ After two hours of work, Haslem left the scene at 8:00 p.m., intending to cart the 18 piles to his land the next day. The next morning William Lockwood saw the manure and asked the borough warden if anyone had asked for permission to take the manure from the road. No one had asked. By noon Lockwood had removed the piles from the highway and applied them to his fields. Haslem asked to be compensated for the piles valued at \$6 (roughly equivalent to \$108 today), but Lockwood refused.

The trial court ruled in favor of Lockwood saying that “the facts proved the plaintiff had not made out a sufficient interest in, or right of possession to” the piles of manure. The Connecticut Supreme Court, however, found in *Haslem v. Lockwood* (1871) that the lower court had erred. When the manure fell from

²¹² 1 Strange 505 (1722), *The English Reports* (1378-1865), 93, p. 664.

²¹³ Roberts, Simon. 1982. “More Lost than Found,” *Modern Law Review*, 45, 683-689.

²¹⁴ Roberts (1982; p. 686).

²¹⁵ Birks, Peter. *English Private Law*, 1st Edition. New York: Oxford University Press, 2000, paragraph 4.40, and Swadling, William. 2008. “Ignorance and Unjust Enrichment,” *Oxford Journal of Legal Studies*, 28(4), 627-658, p. 650.

²¹⁶ Hickey, Robin. “*Armory v. Delamirie* (1722): Possession, Obligation, and the Evolution of Relative Title to Goods,” in *Landmark Cases in Property Law*. Simon Douglas, Robin Hickey, and Emma Waring (eds.). Portland: Hart Publishing, 2015, pp. 131-150, p. 143.

²¹⁷ *Haslem v. Lockwood*, 37 (Connecticut 1871) 500.

the horses and the riders continued on their way, the manure is considered to be abandoned and that Haslem should have been allowed a reasonable amount of time to return and cart away the manure.

There is no property in manure abandoned along a public road. When Haslem's employees raked the manure into piles, however, they created something no longer in the common state placed in nature. Manure doesn't fall in tidy heaps. By ancient custom Haslem could thereby say, "These piles are mine." No one was present when Lockwood came by the unguarded, neat and convenient piles, and like an American red squirrel, he made off with his adventitious find. Red squirrels, however, can't cognize external objects as creations, nor can they jointly attend to the heaper's end in creating the piles of manure. But humans like Lockwood can. And by working so quickly, including a trip to the warden and back, Lockwood knew that the scheduling pattern of people who heap 18 piles of manure for two hours included returning to the scene to collect them.²¹⁸ Arguing, as Lockwood did, that Haslem did not have property in the manure until it was removed from the public road was self-serving. Locke's barrage of questions seems appropriate here, for the moment of removal from the road is an arbitrary intermediate point in collecting the manure from the highway and depositing it on your field. *The moment we create an object it is first-in-hand* (so to speak in the case of a pile of manure). When we create an object, we create the property in the object, provided, of course, that the creating act fits with the myriad of other customs operating in the background.

But also if the Thing is in the Common State Placed by Nature

If there is a property case more widely discussed in law schools and legal scholarship than *Armory v. Delamirie*, it is the New York case of the fox that got away until it didn't, or *Pierson v. Post* (1805).²¹⁹ Sometime between 1800 and 1803, Lodowick Post wounded a fox and was pursuing it on an unowned Long Island beach when Jesse Pierson, knowing that Post was in pursuit but without a clear line of sight, interloped, killed the fox, and took it with his very hands.²²⁰ The justice of the peace ruled for Post, who argued that he was in hot pursuit with his hounds. By Locke's standard, he had mixed his labor with that fox and thought that he could therefore say, "That fox is mine." Moreover, Pierson was just being plain rude, disappointing him of what he expected. Pierson, though, thought another custom, also practiced from time immemorial, applied in this case: Only upon taking a wild animal's natural liberty by killing or trapping it can someone say, "This fox is mine." After each party spent an estimated £1,000 on lawyers' fees (a tiny fortune worth approximately \$100,000 today), the New York Supreme Court reversed the decision and awarded the fox to Pierson.²²¹

Unlike a composite created object, a wild animal on a public beach is in the common state placed in nature. No one has property in a fox as it freely roams its home range. Moreover, its scheduling pattern regarding humans calls for evading anyone who attempts to put property via a bullet in it. Out of this additional cost of acquiring property in a thing emerged another of the uncountable customs that qualifies the Lockean custom of when someone can say, "This varmint is mine." Any labor is insufficient, and in particular, the pursuit of a fox is insufficient. Until you have actual physical control of the wild animal, you

²¹⁸ While obvious, it is not irrelevant that Lockwood also knew that the piles wouldn't be exerting any natural liberty that day.

²¹⁹ 3 Cai. R. 175 (New York Supreme Court 1805).

²²⁰ Berger, Bethany R. 2006. "It's not about the Fox: The Untold History of *Pierson v. Post*," *Duke Law Journal*, 55(6), 1089–1143.

²²¹ Fernandez, Angela. 2009. "The Lost Record of 'Pierson v Post,' the Famous Fox Case," *Law and History Review*, 27(1), 149–178.

do not have property in it. When hunting wild animals on public land, the first person to deprive the animal of its natural liberty is the person who can say, “This animal is mine.”

The Custom may Evolve to First-to-Work-Upon, if Costs are High

Sometime in the mid-19th century, the crew of the American whaling ship *Rainbow*, managed by Gifford, harpooned a finback whale in the Sea of Okhotsk, located east of Siberia and north of Japan.²²² The line was originally attached to the ship, but somehow the whale escaped with the iron and the line still fastened in it. Gifford continued to pursue the whale, but the crew of the *Hercules*, owned by Swift, did not see the *Rainbow* in pursuit. The *Hercules* shot, killed, and captured the whale, but had not yet cut into it when Gifford appeared on the scene. The two ships, both based out of whaling capital of New Bedford, Massachusetts, established that one of Gifford’s harpoons was indeed in the whale. Following the American whaling custom of iron-holds-the-whale, Swift then relinquished the physical control of the whale to Gifford.²²³ The iron-holds-the-whale custom was that as long as a ship remained in pursuit of a harpooned whale, the pursuer maintained property in the whale provided the original marked harpoon remained in the whale and the claim was made before the subsequent ship had begun rendering the whale.

Upon returning home, Swift sued Gifford to reclaim the whale. Citing *Pierson v. Post*, among other cases, he argued “that the rule of law is, that wild animals become property only when fully and actually taken into possession.” Moreover, the iron-holds-the-whale custom was “in contravention of this rule of law,” “not universal,” and “unreasonable.” While Swift did not make this argument, 18th century British whalers (who hunted right whales off the coast of Greenland) adhered to a different custom called fast-fish-loose-fish.²²⁴ If a harpooned whale was held fast to the ship, the harpooner maintained property in the whale. But if, for whatever reason, the ship no longer maintained its attachment to the whale, the loose fish was fair game for any other ship.

The court held in *Swift v. Gifford* (1872) that iron-holds-the-whale custom was a reasonable and applicable to this dispute. The different decisions in *Pierson v. Post* and *Swift v. Gifford* illustrate the critical importance of scheduling patterns in understanding how property works. In Coke’s language of property (*She has property in the swan*), the relationships between the hunters and property, and the prey and property loom large. There’s more at play than the relationship between the hunters and their prey, than the physical facts of who delivered the mortal blow and assumed physical control of the animal. *Pierson* has property in the fox because over the course of human history the ancient custom of fast-varmint-loose-varmint emerged to reduce the transaction costs of hunting land mammals. The custom of projectile-holds-the-varmint or pursuit-holds-the-varmint could have emerged, but they didn’t because they didn’t fit the scheduling patterns of the hunters, their prey, and the hunters regarding their prey. American whalers inherited the English rule of first-fish-loose-fish, but when it didn’t fit the scheduling patterns of their new leviathanic prey, they increasingly adopted a new custom that reduced the transaction costs of hunting a mammal that was far too large and too far at sea for humans to ever hunt

²²² *Swift v. Gifford*, 23 Federal Cases 558 (D. Massachusetts 1872) (No. 13,696).

²²³ Ellickson, Robert C. 1989. “A Hypothesis of Wealth-Maximizing Norms: Evidence from the Whaling Industry,” *Journal of Law, Economics, and Organization*, 5, 83–97.

²²⁴ Ellickson (1989).

in ancient times.²²⁵ Gifford has property in the whale because humans, armed with some new technology, adapted a new scheduling pattern to a new kind of prey.

A common feature to all these cases is that the contextual custom contains an element of firstness, first in hand (created or not) or first worked upon with intent to finish the job. Why is firstness important? Because another feature common to all these cases is that the thing in question is itself not contained in something that someone can say, “This is mine.” Except for *Armory*, which is silent on the issue, the person acquires property in the thing in a location that no one can say, “This location is mine.” How important is firstness when the thing in question is contained in something that someone can say, “This is mine”? For judges, it’s rather important, if not decisive; for us, it’s immaterial, literally and figuratively.

Firstness doesn’t Matter if Location Priorly Matters

In April, 1874, Herbert Durfee purchased an old safe and directed an agent to resell it. The agent offered to sell the safe to Orrin Jones, but he declined. The agent then left the safe with Jones “authorizing him to keep his books in it until it was sold or reclaimed.”²²⁶ Jones found a roll of banknotes worth \$165 in the lining of the inside wall of the safe, informed the agent of the money he had found, and offered to give the money to the agent to give to Durfee. The agent said that the money was not his or Durfee’s and advised Jones to deposit the funds somewhere “drawing interest until the rightful owner appeared.”²²⁷ When Durfee learned about the money from his agent, he first asked for the money from Jones, and when Jones refused him, Durfee “demanded the return of the safe and its contents, precisely as they existed when placed in [Jones’s] hands. [Jones] promptly gave up the safe, but retained the money.”²²⁸

Who has property in the banknotes found inside the wall of the safe, the bailee who finds the money in the walls of the safe, or the bailor who has property in the safe itself? The Rhode Island Supreme Court ruled in *Durfee v. Jones* (1877) that “the general rule undoubtedly is, that the finder of lost property is entitled to it as against all the world except the real owner, and that ordinarily the place where it is found does not make any difference.”²²⁹

I have my doubts. First, the place where one finds swans and foxes ordinarily matters. Lady Young has property in the swans . . . in her waters. The Queen has property in the swans . . . in her waters. Post would have property in the fox . . . in his woods. Secondly, if the court has *Armory* in mind, the location where *Armory* found the ring is unstated and irrelevant because the case was not between *Armory* and the owner of the building in which the ring was found.

By appending that location does not matter, the court tacitly acknowledges that no custom stands independent of other customs, and the custom of first-in-hand for lost items is no different. Judges may

²²⁵ Ellickson (1989). See also Wilson, Bart J., Taylor Jaworski, Andrew Smyth, and Karl Schurter. 2012. “The Ecological and Civil Mainsprings of Property: An Experimental Economic History of Whalers’ Rules of Capture,” *Journal of Law, Economics, and Organization*, 28(4), 617-656, who document how changing prey from “right whales” to “sperm whales” in a laboratory experiment increases the conflict among virtual whalers who endogenously follow a fast-fish-loose-fish rule.

²²⁶ *Durfee v. Jones*, 11 (Rhode Island 1877) 588.

²²⁷ *Durfee v. Jones*, 11 (Rhode Island 1877) 588.

²²⁸ *Durfee v. Jones*, 11 (Rhode Island 1877) 588.

²²⁹ *Durfee v. Jones*, 11 (Rhode Island 1877) 588.

accept that location does not matter as a matter of law, but everyday people do not. The psychologists Peter DeScioli and Rachel Karpoff asked 59 people to read a synopsis of the *Durfee* case and then report who they thought owned the item. Forty-seven ordinary people (80%) chose Durfee, citing what? The location of the money *in* the safe.²³⁰ It does not matter that the money was lost. It does not matter that Durfee was unaware of the money in the safe. And it does not matter that the money was never “in the protection of the safe as *his* safe, or so as to affect him with any responsibility for them.”²³¹ If Durfee has property in the safe—not ‘property,’ the physical object, but property, the universal and uniquely human custom by which Durfee can say, “This safe is mine”—, then Durfee has property in the money in the safe. Where the safe goes, so goes the property, and so goes the money in the lining. Because the safe contains both the property and the money, we cognize Durfee as having property in the money in the safe.²³²

If You have Property in Y and X is in Y, You have Property in X in Y

One year later *Durfee* serves as “the case more nearly in point than any other which has fallen under our observation,” which is to say that Durfee’s equivalent, Abner T. Bowen, also didn’t think that first-in-hand applies to something found inside something he has property in.²³³ Bowen and his partners owned a paper mill in Carroll County, Indiana and had purchased a bale of rags and paper in Kansas to be sorted in their facility near Delphi. In May, 1876, sixteen-year-old Ellen Quinn went to the paper mill in which her guardian and half-sister Anna Sullivan worked. (The litigants disputed whether Quinn also worked at the mill at time of the incident.) Among the paper and rags loose and scattered on the floor, Quinn found a clean unmarked envelope inside of which were two fifty-dollar bills (roughly equivalent to \$2,249 today). She asked the floor supervisor to determine if the money was real and then to return it. The supervisor took the money to Bowen who confirmed it was genuine. When Quinn asked for the money back from Bowen, he refused and instead offered her \$10.

Who has property in the banknotes found in an envelope from inside a bale of paper and rags, the person who finds the money in the envelope, or the person who has property in the bale inside his mill? The first case that the Indiana Supreme Court cites in *Bowen v. Sullivan* (1878) is *Armory v. Delamirie*:

Ever since the case of *Armory v. Delamirie*, 1 Strange, 505, in which a chimney-sweeper's boy, having found a jewel, left it with a goldsmith to ascertain what it was, was held entitled to recover it, the law has been steady and uniform that the finder of lost property has a right to retain it against all persons except the true owner.²³⁴

This is where Pratt’s imprecise statement becomes consequential. Bowen is not the “true owner,” but that’s neither here nor there. The question is whether Bowen or Quinn has a better claim to say, “This

²³⁰ DeScioli, Peter and Rachel Karpoff. 2015. “People’s Judgments about Classic Property Law Cases,” *Human Nature*, 26(2), 184-209.

²³¹ *Durfee v. Jones*, 11 (Rhode Island 1877) 588.

²³² Note how this also applies to the *Haslem* case. Haslem does not have property in the manure strewn along road. However, if Haslem, by custom, has property in the pile he creates, then he has property in the manure (contained) in the pile. Yes, the pile literally is manure, and the safe is not literally the money, but all abstract thought is metaphor, not literality. See fn. 86.

²³³ *Bowen v. Sullivan*, 62 (Indiana 1878) 281.

²³⁴ *Bowen v. Sullivan*, 62 (Indiana 1878) 281.

money is mine.” *Armory* may affirm the first-in-hand custom for subsequent graspers of this one ring, but that does not make the custom independent of context to rule all subsequent cases as precedent.

That location is irrelevant in *Armory* does not make location irrelevant here, which is why the Indiana Supreme Court considers *Durfee* to be the case more nearly in point. If the place where something is found ordinarily does not make any difference, then the prior court can hold “that, as the purchase was of the safe, not the safe and its contents, the money was not embraced in the purchase.”²³⁵ But wait. Didn’t Bowen “purchas[e] the envelope containing the bills by weight [thereby] purchas[ing] the bank-bills in question”?²³⁶ Also, aren’t bills made of paper? To which the court replied in effect, so what? “Their existence was unknown when the envelope was purchased, and their weight was so infinitesimally small, compared with their value, that we do not concur in this proposition. It is unreasonable.”²³⁷

If Bowen has property in the bale in his mill, then Bowen has property in the money in the envelope in the bale in his mill. Where the bale goes, so goes the property, and so goes the money in the envelope. Not only, does it not matter that Bowen was unaware of the money in the bale, it adds but another fact for a judge and jury to decide. Not only, does it not matter that the money was lost, it adds but another fact for a judge and jury to divine. And not only it does not matter that the weight of the money is infinitesimally small, it will become but another fact for a future court to determine what is and is not reasonably small.²³⁸ Because we cognize property as being contained in something with a well-defined boundary, interior, and exterior, perhaps we can use such clear physical demarcations to clarify and simplify the general rule of who can say, “This is mine.” If person A has property in a thing Y and another thing X is in Y, then A has property in X in Y. Notice that the proposition nicely encapsulates the principle of accession in chattels like cattle. If I have property in a pregnant cow, then I too have property in the calf before and after its birth.

The Rule is that Simple

Such a rule would make cases like *Jackson v. Steinberg* (1949) easier to decide. Laura Jackson worked as chambermaid for Karl Steinberg doing business as Arthur Hotel in Oregon. In the course of her duties, she found several \$100 bills “concealed carefully under [a] paper lining of [a] dresser drawer in [a] guest room.”²³⁹ When Steinberg was unable to find the original owner, Jackson asked Steinberg to return the money to her, but he refused.

Jackson argued that the money should be considered treasure trove. If something is treasure trove, then by ancient custom someone who does not have property in the place where the treasure is found can say, “This treasure is mine.” *The American and English Encyclopedia of Law* explains that “treasure trove, under law, must be hidden or concealed so long as to indicate that its owner, in all probability, is dead or unknown.”²⁴⁰ This was important to Jackson’s appeal to the Oregon Supreme Court

²³⁵ *Bowen v. Sullivan*, 62 (Indiana 1878) 281.

²³⁶ *Bowen v. Sullivan*, 62 (Indiana 1878) 281.

²³⁷ *Bowen v. Sullivan*, 62 (Indiana 1878) 281.

²³⁸ *Durfee v. Jones*, 11 (Rhode Island 1877) 588.

²³⁹ *Jackson v. Steinberg*, 186 (Oregon 1949) 129.

²⁴⁰ Williams, Charles F. (Supervisor). *The American and English Encyclopedia of Law*, Volume 26. Long Island, New York: Edward Thompson Company, 1894, p. 537.

because “there is no question” the scheduling pattern/duty of hotel cleaning staff is “to seek for and find valuable property left behind in guest rooms by guests, and to deliver such property to [Steinberg].”²⁴¹ Determining whether this found money is treasure trove, which is straightforwardly not the case here, could easily be a nontrivial fact to discern. What does it mean to be hidden or concealed? How long is so long? What is the probability that the owner is dead or unknown? Instead of asking and answering a barrage of questions, the sole question to ask is, who has property in the drawer of the hotel in which the money was found? Steinberg or Jackson? The end. Next case. Or better, there’s no case to begin with because the rule is clear.

The other key feature of this case for the court to determine was whether the money was lost or mislaid, because as every first year law student learns, the subtle difference matters. If the money was mislaid, precedent would award the money to Steinberg. But if the money was lost, it would go to Jackson. The origins of this split hair lie in our last two cases, which precede all of these cases but *Armory* and *Pierson*.

And a Difficult Case Indicates How to Test the Rule

In October, 1847, Bridges, as the British say, called on the shop of Messrs. Byfield & Hawkesworth.²⁴² As he was leaving, he found a small parcel on the floor, which he opened up with the attending clerk. Inside was £65 (approximately \$6,926 in today’s US dollars). Bridges gave the money to Hawkesworth to keep until the owner claimed it. After three years elapsed, during which time Hawkesworth advertised in *The Times* that the banknotes had been found, no one claimed the money. Bridges then requested the money be returned to him, which Hawkesworth refused.

Who has property in the banknotes found in the parcel in the shop? The shopkeeper who has property in the shop or the customer who found the parcel in the shop? The County Court of Westminster ruled for Hawkesworth, but Bridges appealed to the Court of the Queen’s Bench, who reversed the decision. As we shall see, *Bridges v. Hawkesworth* (1851) is a difficult case that demonstrates the limits of the synthesis and analysis in this paper. It is precisely because of such limits, however, that *Bridges* is, with hindsight, a poor case to serve as precedent for above cases that would follow and appeal to it.

The Queen’s Bench first reiterates the rule espoused in *Armory*: “The general right of the finder to any article which has been lost, as against all the world, except the true owner, was established in the case of *Armory v. Delamirie*, which has never been disputed. *This right would clearly have accrued to the plaintiff had the notes been picked up by him outside the shop of the defendant...*” (italics added).²⁴³ The case, moreover, “resolves itself into the single point on which it appears that the learned judge decided it, namely, whether the circumstance of the notes being found inside the defendant’s shop gives him, the defendant, the right to have them as against the plaintiff, who found them. There is no authority in our law to be found directly on point.”²⁴⁴ The court also noted that Hawkesworth was not aware of the parcel and hence, unlike an innkeeper, “the notes were never in the custody of the defendant, nor within the

²⁴¹ *Jackson v. Steinberg*, 186 (Oregon 1949) 129.

²⁴² *Bridges v. Hawkesworth*, 21 (*Law Journal, Queen’s Bench* 1851) 75, 15 *The Jurist* 1079.

²⁴³ *Bridges v. Hawkesworth*, 21 (*Law Journal, Queen’s Bench* 1851) 75, 15 *The Jurist* 1079.

²⁴⁴ *Bridges v. Hawkesworth*, 21 (*Law Journal, Queen’s Bench* 1851) 75, 15 *The Jurist* 1079.

protection of his house.” Nor were the notes intentionally placed with Hawkesworth. They appeared to be lost. “We find, therefore, no circumstances in this case to take it out of the general rule of law, that the finder of a lost article is entitled to it as against all persons except the real owner, and we think that that rule must prevail, and that the learned judge was mistaken in holding that the place in which they were found makes any legal difference.”

Hawkesworth disputed *Armory* precisely on the basis that the parcel was found in his store. As the court noted, if Bridges had picked up the parcel outside the shop, Hawkesworth clearly could not say, “Those notes are mine.” The court appears to question why a mere few yards should matter. A mere few yards matters decisively in *The Case of the Swans*, which has the added difficulty that the object in question exercises natural liberty concerning the border in question. As noted above, the mind does the marvelous work of instantaneously replacing the Queen’s notion of MINE with Lady Young’s whether or not Lady Young knows a swan is in her waters or not. The Keeper of the Queen’s Swans cannot find swans in Lady Young’s private waters precisely because the boundary matters.

So why does the boundary *not* matter for the Queen’s Bench, but matter for the learned judge of the county court? Perhaps because the spatial container that the context conveys to the mind is less clear, less defined for the judges of the Queen’s Bench than for the learned judge. If one perceives the parcel as located on a regularly traversed thoroughfare, more akin to a Long Island beach or Stamford highway, then first-in-hand would appear to be the controlling custom. But if one perceives the parcel as contained within the well-defined boundaries of the shop, one would so qualify the first-in-hand custom.

DeScioli and Karpoff find that people agree with the Queen’s Bench. Of the 60 people who read the *Bridges v. Hawkesworth* scenario, forty-five (75%) side with Bridges.²⁴⁵ And therein lies the problem with *Bridges* setting a precedent for Jones, Bowen, and Jackson to argue that location is plainly irrelevant to where the item is found. The safe, the bale in the mill, and the drawer in the hotel are more readily perceived as contextually *containing property and the thing in question* than a path towards the exit of a store.

This may then explain why the original judge in *McAvoy v. Medina* went out of his way to justify awarding the found item to the proprietor (Medina) and not the customer-finder (McAvoy), thereby annoying American law students ever since with the fine distinction of lost versus mislaid items.²⁴⁶ In this case, the plaintiff customer found a pocketbook on a table in the defendant’s barbershop.

The Massachusetts Supreme Judicial Court opens its reasoning in *McAvoy* citing *Bridges*, bound by the “the settled law that the finder of lost property has a valid claim to the same against all the world except the true owner, generally that the place in which it is found creates no exception to this rule.”²⁴⁷ It would seem quite easy for the judge in *McAvoy* to apply *Bridges* and be done with the case, but the physical context doesn’t have the same feel. The pocketbook was not on the ground on a path on the way

²⁴⁵ DeScioli, Peter and Rachel Karpoff. 2015. “People’s Judgments about Classic Property Law Cases,” *Human Nature*, 26(2), 184-209.

²⁴⁶ *McAvoy v. Medina*, 11 Allen (Massachusetts 1866) 548.

²⁴⁷ *McAvoy v. Medina*, 11 Allen (Massachusetts 1866) 548.

to an exit (note the prepositions), but on a table inside the barbershop. The in-ness is more salient for a table in a shop than a path on the floor of a shop. But the boundary in *Bridges* wasn't modestly ruled as a grey area, but as irrelevant. So to get out from underneath of *Bridges*, the judge in *McAvoy* had to differentiate the case, not on the stark physical facts of the location, but on the intentions of the person who lost the pocketbook as divined from the physical facts of the location. And so, the pocketbook is not "to be treated as lost property in that sense in which a finder has a valid claim to hold the same until called for by the true owner," but rather as mislaid, a term not used by the supreme court but one that would be subsequently and broadly adopted to distinguish *McAvoy* from *Bridges*.

McAvoy consequently raises the possibility to postdict how DeScioli and Karpoff's volunteers would decide this case. If, as I argue, there is more in-ness, more defined containment of the item in *McAvoy* than *Bridges*, then a higher percentage of people would choose Medina than Hawkesworth, which is 25% and statistically less than likely than a flip of a coin. Furthermore, if there is less in-ness, less defined containment of the item in *McAvoy* than in *Durfee*, then we would also postdict that fewer people would side with Medina than *Durfee*, which is 80% and statistically more than likely than a flip of a coin. What do we find? Voilà! The results fall neatly in between. Of the 59 people surveyed, 26 (44%) choose Medina, which is statistically not different from flipping a coin.²⁴⁸ As Ellickson says of the evidence in favor of his whaling norm hypothesis, "any ex post explanation risks being too pat, and this one is no exception."²⁴⁹ But it does lead us to the following testable proposition for an ex ante experiment.²⁵⁰ The more defined the containment of X in Y, the more people will adhere to the proposition that if A has property in Y and X is in Y, then A has property in X in Y.

In an alternate timeline if *Durfee* and *McAvoy* had preceded *Bridges*, we might have precedents that more closely coincide with how ordinary people cognize property. And even if the Queen's Bench had upheld the lower court in *Bridges*, despite conflicting with how a supermajority people think about that case, we would still have a clearer general rule consistent with how our species cognizes the meaning of the custom.

7. Economics then is about Property, not Property Rights

Any study of how *Homo sapiens* "manages its scarce resources" or "produc[es], distribut[es], and consum[es]...goods and services" would be incomplete without property and the concept of MINE.²⁵¹ That is my claim.

Every modern principles of economics textbook contains some discussion of property rights, not property, in an introductory chapter. For N. Gregory Mankiw "property rights are the ability of an individual to own and exercise control over scarce resources."²⁵² For Paul Krugman and Robin Wells,

²⁴⁸ DeScioli, Peter and Rachel Karpoff. 2015. "People's Judgments about Classic Property Law Cases," *Human Nature*, 26(2), 184-209.

²⁴⁹ Ellickson (1989, p. 95).

²⁵⁰ See also Wilson et al. (2012).

²⁵¹ Mankiw, N. Gregory. *Principles of Economics*, 7th Edition. Stamford, CT: Cengage Learning, 2015, p. 4, and Krugman, Paul and Robin Wells. *Economics*, 2nd Edition. New York: Worth Publishers, 2009, p. 2.

²⁵² Mankiw (2015, p. 12). An "ability" is a pretty weak term to anchor such an important definition, but it is the same one that Yoram Barzel uses. See Barzel, Yoram. *Economic Analysis of Property Rights*. New York: Cambridge University Press, 1997.

“property rights are the rights of owners of valuable items, whether resources or goods, to dispose of those items as they choose.”²⁵³ Property rights are important, because as Mankiw explains:

Market economies need institutions to enforce property rights so individuals can own and control scarce resources. A farmer won’t grow food if she expects her crop to be stolen; a restaurant won’t serve meals unless it is assured that customers will pay before they leave; and an entertainment company won’t produce DVDs if too many potential customers avoid paying by making illegal copies. We all rely on government-provided police and courts to enforce our rights over the things we produce—and the invisible hand counts on our ability to enforce our rights.²⁵⁴

Krugman and Wells explain that “property rights are what make the mutually beneficial transactions in the used-textbook market, or any market, possible.”²⁵⁵ They also tack on that “markets generally fail due to incomplete property rights.”²⁵⁶ But apart from these few sentences, property rights largely go unmentioned in introductions to the study of economics until a much later chapter on public goods and common resources (with literally one sentence in between on patents as a property right to encourage invention).²⁵⁷ When things go awry in the world due to commerce, like with toxic effluents in rivers and rhinoceroses on the verge of extinction, then property rights become important in economics. But until then, not much needs to be discussed about property rights in Principles of Economics.

These references in modern textbooks reflect the important influence of Armen Alchian and Harold Demsetz, who first provided a framework for diagnosing problems and proffering solutions that economists historically could not satisfactorily account for. Demsetz, for example, famously discusses how the Montagnes on the Labrador peninsula organized themselves before and after a market for beaver pelts developed.²⁵⁸ When the benefits change relative to the costs, property rights emerge to constrain the individual. But over the last 50 years economists have not really done much more with Alchian’s and Demsetz’s groundbreaking lead than report how different patterns of property rights lead to different patterns of behavior. We continue to frame the persistent problems and the property rights solutions in terms of the external world imposing itself on the individual. Recall why Mankiw argues that property rights are important. We have to constrain the thieves that dine and dash and steal crops. Why yes, we must and we do. But is the government the reason why children follow their parents’ example and not steal? Property is much more than a check on aberrant, anti-social thievery. Why indeed is property pro-social and the expected norm? How is property pro-social in economics and how does economics contribute to property becoming the expected norm? Imagine the work that could to be done to document and explain how MINE promotes social harmony and prosperity.

Or take Alchian and Demsetz’s disturbing example.²⁵⁹ We have to find a way to constrain the Canadian hunters who crush baby seals’ skulls with heavy clubs and skin them alive. Why yes, a set of

²⁵³ Krugman and Wells (2009, p. 111). Note the circularity with which property rights are defined. Rarely do economists not define and use the term circularly.

²⁵⁴ Mankiw (2015, p. 12).

²⁵⁵ Krugman and Wells (2009, pp. 111-112).

²⁵⁶ Krugman and Wells (2009, pp. 112).

²⁵⁷ See, e.g., both Krugman and Wells (2009) and Mankiw (2015).

²⁵⁸ Demsetz, Harold. 1967. “Toward a Theory of Property Rights,” *American Economic Review (Papers & Proceedings)*, 57(2), 347–359.

²⁵⁹ Alchian, Armen A. and Harold Demsetz. 1973. “The Property Rights Paradigm,” *Journal of Economic History*, 33(1), 16–27.

rules that fails to exclude others from using resource can lead to “barbaric and cruel” conduct.²⁶⁰ But something critical is missing from economics if what we say about the first-come, first-served system is that it “forces persons to behave in ways that are thought to be immoral.”²⁶¹ We can do better than blaming the rules for “encouraging” immoral behavior, than saying, in essence, the costs and benefits made them do it. We have 50 years of examples identifying the relative costs and benefits of when property rights do and do not emerge. How do the rules of property integrate, or fail to integrate, with other customs to form a sense of how to conduct ourselves rightly? Imagine the conversations we could have with our friends in the humanities.²⁶²

The Language of ‘Property Rights’ Contains a Tacit Assumption

The stumbling block to overcome is to accept that property is not just an external restraint imposed upon the individual, but that property socializes the individual’s conduct to fit with the external world, to fit with what is right. Moreover, we have to come to grips that distributing and consuming goods and services is an integral part of that socializing and ethicizing process.²⁶³ One fear is that if we acknowledge that we actively accept property as a custom taught by our authoritative mentors, its rules will tend to appear arbitrary. We can overcome this fear if we treat property as a custom, because as a custom, property is dialogic. Every action regarding property is a two-way dialogue among those who practice the custom. The highly abstract and universal custom of *Thou shalt not steal* keeps customary rules like first-in-hand active, and the application of the rule reaffirms the abstract custom, as in *Pierson v. Post*. But the current application of the rule also modifies the custom by amalgamating into the background all of the nuances of its application.²⁶⁴ For example, the costs of hunting a fox were not such that Post had a case for a rule of projectile-holds-the-varmint. Change the prey to finback whales, however, and *Swift v. Gifford* illustrates how the custom of *Thou shalt not steal* keeps the rule of first-in-hand active *except* for situations in which a new customary rule has emerged in response to new technologies and new costs of a new kind of prey. Property is neither monologically exterior to us, as Swift maintained, nor monologically interior to us, as Post seemed to wish.²⁶⁵

The language of economics reveals that economists think property works as an external restraint. Krugman and Wells say property rights are “rights...to dispose of items.” Alchian defines property rights as “the rights of individuals to the use of resources.”²⁶⁶ When Alchian and Demsetz ask, “What consequences for social interaction flow from a particular structure of property rights?”, they are asking about how consequences flow from a particular structure of property rights to social interactions.²⁶⁷ The word *rights* doesn’t stand by itself. In each instance another little word follows, to wit, *to*. Whether as a

²⁶⁰ Alchian and Demsetz (1973, p. 20).

²⁶¹ Alchian and Demsetz (1973, p. 20).

²⁶² Or just imagine having conversations with friends in the humanities.

²⁶³ McCloskey, Deirdre N. *The Bourgeois Virtues: Ethics for an Age of Commerce*. Chicago: University of Chicago Press, 2006.

²⁶⁴ See Wilson (2015b).

²⁶⁵ As I mentioned above, one of Swift’s argument was that the iron-holds-the-whale rule was “in contravention” to the rule of law. Swift was treating the rule of law as externally given, not dynamically applied to the fluctuating circumstances of time and place.

²⁶⁶ Alchian, Armen. 1965. “Some Economics of Property Rights,” *Il Politico*, 30, 816–829. (Reprinted from *The Collected Works of Armen A. Alchian: Vol. 2: Property Rights and Economic Behavior*, Liberty Fund, Indianapolis, IN, 2006, p. 53.)

²⁶⁷ Alchian and Demsetz (1973, p. 17).

preposition or an infinitive particle, the word *to* points in the direction of what comes next, a noun or a verb. In English, a right doesn't stand alone; it points to something like free speech, due process, a speedy trial, etc.

What this means is that economic discourse relies heavily on a particular type of spatial-geometric representation for the conception of property rights. In Alchian and Demsetz's metaphor, consequences *flow from* the structure of property rights *to* social interactions. Alchian's general form of a property right is, "Person A has the right to the use of Y." The preposition *to* is doing some important work. Recall the example of *He ran to the hills*.²⁶⁸ The runner is physically located away from the hills but headed in that direction. In economics we represent a property right as something external to an action involving a thing. A property right points toward an action involving Y. Figure 1 compares that mental representation with my hypothesis that people cognize property as located in Y.

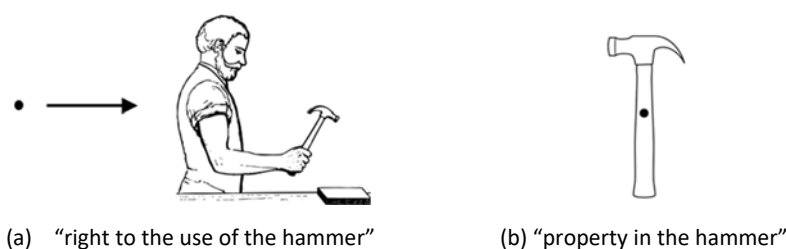


Figure 1. Mental Representations of *to* and *in* after Tyler and Evans

Let's drill down on what the representations convey. In panel (a) the dot represents the abstract concept of a RIGHT. A right is a substantive that hangs in the air. It cleaves to nothing; it's just out there. The right is not part of the physical scene of a person using a hammer. It is disembodied from the person using a hammer and disemphicalized from the hammer. The right is being imposed on the scene from outside the scene. If we remove the dot, the scene merely represents someone using a hammer. While the words represented are *the use of the hammer*, hammers don't use themselves. For a hammer to be in use, there must be someone to use it. That someone is a person, not any animal. Using a hammer also involves using other things.

In panel (b) the dot represents the abstract concept of PROPERTY. Property is a substantive inside the hammer. There is no person. There is no action. There is just a physical thing with property cognitively contained in it. A characteristic of the hammer itself is that there is property in it. The property is part of the hammer. If we remove the dot, the scene merely represents a hammer.

²⁶⁸ In Latin *to* takes the accusative case.

Now consider representations of the same noun phrases, but prepended with “She has”: *She has a right to the use of the hammer* and *She has property in the hammer*. The English transitive word *have* is durative of Proto-Germanic from the Proto-Indo-European **keh₂p-*, meaning to take, seize, catch, i.e., to grasp with one’s hands.²⁶⁹ Figure 2 contrasts a literal representation of these two sentences.



(a) “She has a right to the use of the hammer.”



(b) “She has property in the hammer.”

Figure 2. Representations of *She has...*

The physicality of *She has property in the hammer* remains in panel (b). To grasp the property in the hammer, the woman grasps the hammer that contains the property. The property is literally within her grasp. (That’s how easy it is to synecdochize the custom.) We cognize the abstract features of the physical. To grasp *a right to the use of the hammer*, however, the woman in panel (a) grasps an amorphous concept. Something else must give it form. But I anticipate.

The first point of this graphical excursion is to reiterate from the introduction, with the thesis now developed, that the conception of property rights as “the right to the use of *Y*” is too modern, too complex, and possibly too Anglo to explain how humans cognize property. We can’t escape the modernity of how of our minds work, and I’m not discounting the value of the contemporary notion of property rights to explain the world. So let me be clear. The property right paradigm is a significant advancement in the study of economics, dare I say a Nobel-Prize-worthy contribution by Alchian and Demsetz. But the conceptual complexity of this explanation inverts the simplicity with which property works in practice. More to the point, this conceptual complexity introduces a masked assumption about how property works. What I am proposing is a basic set of concepts that fits with how actual people, from the Pleistocene plain to 17th century Quebec and the modern world today, cognize property in things.

Property is a Fundamental Principle of Economics

Krugman and Wells merely note in passing that property rights make mutually beneficial transactions in markets possible. How does property make mutually beneficial exchange possible if, as I argue, property means more than restraining the thief in all of us just itching to get out? Parents don’t teach their children the word for MINE; they learn it all on their own. Parents also don’t teach their children the following rules of MINE: (1) if I like it, it’s mine, (2) if I see it, it’s mine, (3) if it’s in my hand, it’s mine, (4) if it looks like mine, it’s mine, (5) if I can take it from you, it’s mine, and (6) if I had it a little while ago, it’s mine.²⁷⁰ Yet no human parent in any age or community lets these untaught rules of MINE stand

²⁶⁹ See <https://en.wiktionary.org/wiki/have>. Last accessed 17 August 2016.

²⁷⁰ See Google image search for “Kid’s Property Laws,” author(s) unknown.

unchecked, even for children raised by pirates.²⁷¹ Every generation of parents socially transmits to their children the rules of how *not* to acquire something. Parents teach and their children learn the rules of when you can say, “This is mine,” and reciprocally, the rules of when someone else can say, “This is mine.” As arbitrary as they may initially appear, children accept the authority of these rules because they accept their parent as an authority on how to conduct one’s self. They follow the rule for the sake of the following the rule, and they learn with age to follow the rule for its bearing on their character.

The problem is not that humans aren’t taught the rules of when you can say, “This is mine” and “That is yours.” The problem is who is included in the reciprocal set of those to whom I respect and say, “That is yours.” If only the personally known members of the small group or tribe count as those to whom I say, “That is yours,” then historically everyone else is in the personally unknown set of those who can be plundered.²⁷² Actually, the problem is primevally much worse than that. Alien primates, including humans for all but tiny fraction of our history, are an instant homicidal threat. If five male chimpanzees happen upon a sixth not from their tribe, four each grab a limb while the fifth attacks the most vulnerable parts of the anatomy, beginning with the genitals. Or if you would like the authentic *Homo sapiens* experience, cross paths with a pair of natives in a Bolivian jungle so that you can feel the reciprocal instinctual fear of encountering strangers alone in the wild.²⁷³ It was a remarkable event in our history when the first person—Ridley speculates in all likelihood that it was a woman—proposed exchanging one thing for another thing with an alien enemy.²⁷⁴ We are the only species that regularly does this. As Ridley expands upon, any old primate can exchange favors, like backscratching and sex, for food, but only humans routinely truck, barter, and exchange one thing for another with people we do not personally know.²⁷⁵

To make exchange work between instinctual homicidal enemies, it would seem that the conspecifics would necessarily (1) need symbolic thought and (2) share a core set of primitive concepts.²⁷⁶ Exchange for mutual benefit requires the mind to think outside the here and now. Suppose Eve has eggs and happens upon Hava who has some hemp. Eve thinks, “I want hemp” and wonders whether this person wants something like eggs. To exchange Eve must imagine a future state of the world in which she has hemp and Hava eggs. To propose an exchange, Eve communicates the thoughts in her head to Hava. Setting the eggs in front of Hava, she asks, “Do you want this?” Then pointing to the hemp she says, “I want that.” To do this, Eve must hold several symbols of the present in her mind: (1) a future Hava (2) who sets in front of her in the future (3) some future hemp (4) to a future herself. The future Hava points to the Hava in front of Eve, but is symbolic because the future Hava does not directly refer to the Hava standing in front of Eve. Eve could have chosen *not* to set the eggs in front of Hava (something Hava could likewise imagine outside the here and now).

Jointly attending to Eve’s goal, Hava could respond in many ways. She could, while pointing at the eggs, say, “I don’t want that.” Or she could attempt to take the eggs and run. Why would Hava need to

²⁷¹ Leeson, Peter T. *The Invisible Hook: The Hidden Economics of Pirates*. Princeton: Princeton University Press, 2009.

²⁷² See Wilson (2015) and references therein.

²⁷³ Conversation with the field anthropologist Hillard Kaplan who experienced just that.

²⁷⁴ Ridley (2010).

²⁷⁵ Ridley (2010).

²⁷⁶ Wilson (2015). See Table 1 in Goddard and Wierbicka (2016) for a current list of universal semantic primes, which includes, for our purposes: I, YOU, SOMETHING ~ THING, PERSON, THIS, WANT, DON’T WANT, SAY, (is) MINE, NOT, and CAN.

run? Because Eve would still say, “Those are mine.” It would be bad for Eve to have no eggs and no hemp, and so she would respond accordingly to that harm.

Or, Hava could set the hemp down in front of Eve and say, “This is not mine, this is yours.” At that very moment the physical world has not changed, but how Eve and Hava now think about the world has. Up until that moment Eve could pick up the eggs and leave. Unless Hava had ill intentions all along, she would simply turn around and leave. But once Hava says, “This is not mine, this is yours” about the hemp, Hava cannot pick up the hemp and Eve cannot touch the eggs without each responding to the discordant act.²⁷⁷ The concepts of MINE and YOURS (you can say about it: “this is mine”) change how we think about things in the external world. Hava can at will think about and with MINE all she wants, but until she vocalizes some sounds, until she says the words, “This is not mine, this is yours” the concepts of MINE and YOURS do no work in the external world. Saying “This is not mine, this is yours” puts Eve’s and Hava’s minds in dialogue with each other and the external world.

All voluntary exchanges in the physical human world rely on the reciprocal thoughts of “This is not mine, this is yours” whether they are explicitly voiced or not. While the concept of MINE is at the constituent core of what makes exchanging things possible, it is the joint and reciprocal attention to the meaning of “This is not mine, this is yours” that makes exchanging things possible. As Adam Smith says, “Give me that which I want, and you shall have this which you want, is the meaning of every such offer.”²⁷⁸ The universal of meaning of “This is not mine, this is yours” explains how *Homo sapiens* universally distributes and consumes goods in a way that no other animal does. In short, “This is not mine, this is yours” is a basic principle of the study of economics.

What happens if the basic principle “This is not mine, this is yours” cannot be said of something, say like rhinoceroses and elephants? If by decree no one can say, “This ivory is mine,” then no one can say, “This ivory is not mine, this is yours.” To call such a situation “market failure” means that we *expect* voluntary exchange to operate as it does for things like eggs and hemp. Why should we expect voluntary exchange to work the same for rhinoceroses and elephants when a basic principle is absent? Markets don’t fail rhinoceroses and elephants. People fail rhinoceroses and elephants. Nor is MINE an inherently immoral concept. How we act on MINE can be repulsive, wasteful, and immoral, or it can be marvelous, prudent, and moral. MINE is neither an economic panacea, nor the Rousseauian font of human misfortune and horror. MINE is a universal human concept, acted upon for good and for ill, but it only becomes the semantic core for property when people reciprocally and jointly recognize some things as mine and other things as yours.

Property Rights are the Expectations Defined by Property, Not the Content of Property

My expectations as someone who can say, “This hammer is mine,” are that I can use it to pound a nail. That is, because I can say by custom, “This hammer is mine,” I can use the hammer to pound a nail. Other people’s expectations are also that I can use the hammer to pound a nail. The use of the hammer

²⁷⁷ Of course Hava (Eve) could grab the hemp (eggs) and run, but that is not her expectation the moment Hava says, “This is not mine, this is yours.”

²⁷⁸ Smith, Adam. *An Inquiry into the Nature and Causes of the Wealth of Nations*, Vol. I. Indianapolis, IN: Liberty Fund, 1776/1982, p. 26.

itself, however, is not the content of what it means to say, “This hammer is mine” or to have property in the hammer. Expectations that form from property are not the content of the meaning of property in things. Of course, I cannot use the hammer any possible way that I imagine, like indiscriminately as a weapon, but that’s not a constraint on the custom by which I can say, “This hammer is mine.” Property does not constrain my use of the hammer as a weapon; other abstract customs in the social system, like *Thou shalt not murder*, proscribe such uses of hammers.

Another expectation is that I can exclude you from using the hammer, and excluding you from using the hammer is likewise not the content of what it means to say, “This hammer is mine.” An appropriate response by others, if I have property in the hammer and say, “This hammer is mine,” is that they cannot say, “This hammer is mine.” Another appropriate response is for others not to use the hammer without my permission. Like with expectations, these responses are not the content of what it means to have property in the hammer. “This (thing) is mine” means THIS (THING) IS MINE in every language and cannot be deconstructed into any more primitive concepts. This conceptual and normative singularity serves as the core of property. The custom *in practice* constitutes a set of living expectations and appropriate responses to people’s actions.

Compare this with how Alchian and Demsetz introduce “The Structure of Rights” in their seminal 1973 article entitled, “The Property Right Paradigm:”

In common speech, we frequently speak of someone owning this land, that house, or these bonds. This conversational style undoubtedly is economical from the viewpoint of quick communication, but it masks the variety and complexity of the ownership relationship. What is owned are *rights to use* resources, including one’s body and mind, and these rights are always circumscribed, often by the prohibition of certain actions. To “own land” usually means to have the right to till (or not to till) the soil, to mine the soil, to *offer* those rights for sale, etc., but not to have the right to throw soil at a passerby, to use it to change the course of a stream, or to *force* someone to buy it. What are owned are socially recognized rights of action...It is not the resource itself which is owned; it is a bundle, or a portion, of rights to use a resource that is owned.²⁷⁹

Notice that Alchian and Demsetz de-thingify property in things in the tradition of legal realism. Property is not about things. Property is a bundle of incorporeal rights, i.e., moral/legal/“socially recognized” relations between people. They don’t define property rights in terms of what people do, say, know, and think about property in things, but in terms of the external consequences of what people do, say, know, and think about the property in things. If it is the consequences, not how people think about things, that matter, the things themselves become superfluous. Whereas property transcends the disjunction between the mind and the external world, the conception of property rights fixates on the external world to the exclusion of the internal mind. Mankiw doesn’t mention any internal ethic against stealing, that we don’t steal for the sake of not stealing, only that “we all rely on government-provided police and courts” to externally keep (other bad) people in line.²⁸⁰

When Alchian and Demsetz define “what is owned” by the expectations that follow from practicing the custom of property, it is, *pace* Alchian and Demsetz, the past participle that masks. Who

²⁷⁹ Alchian and Demsetz (1973, p. 17).

²⁸⁰ Mankiw (2015, p. 12).

verbs what? And why? In the active voice, the legal realist would say, “She owns a right to mine the soil.” That sounds a little awkward, but let’s go with it for the moment. Why can she say, “A right to mine the soil is mine,” and why can other people not say, “A right to mine the soil is mine”? Not because the woman “owns” the soil because that would mask the variety and complexity of the ownership relationship. What does such a right have to do with the woman, the soil, and the mining thereon? The language of a right is external to the woman, the soil, and the mining thereon. A right to mine the soil is disembodied from the woman and physically removed from the soil.

The right is furthermore imposed on the scene from outside the scene. A right, though, isn’t a “thing” in the physical world that imposes itself, so who imposes it? An assigner of rights? And how is the right imposed on the scene? Alchian and Demsetz continue their explanation of the structure of rights:

The strength with which rights are owned can be defined by the extent to which an owner’s decision about how a resource will be used actually determines the use. If the probability is “1” that an owner’s choice of how a particular right should be exercised actually dominates the decision process that governs actual use, then that owner can be said to own absolutely the particular right under consideration. For example, a person may have an absolute right to pick apples off a tree, but not to prune the tree.²⁸¹

The language of ‘rights’ and the focal attention on the use of a resource unnecessarily muddy the problem. The important economic question is not, “Which property rights exist?”, as if rights “exist” like a hammer physically exists.²⁸² Rather, the important economic question is, what is the human scheduling pattern regarding the tree and the apple? What do people do, say, know, and think about property in the tree and the apple? The irony is that the language of ‘rights,’ cannot escape the physical world. Legal realists physicalize abstract rights with the metaphor of a bundle of sticks, which we then talk about as “existing” like an actual stick exists.²⁸³ *Physicalizing the unphysical and dispensing with physical things is the inverse, I submit, of how human beings cognize property. We start with the thing and abstract the physical.* The problem with the former is that without the constraints of the physical world of people and things, legal realists are free to imagine what they can design about something they can know rather little, and their designs may very well not fit with what people do, say, know, and think about property in things. Exhibit A: *Durfee*. Exhibit B: *Bowen*. Exhibit C: Lost vs. mislaid items. Exhibit D: Employees as slaves.

If I have property in a tree, (1) I can say, “This tree is mine,” (2) other people know that what I say is true, and (3) other people cannot say, “This tree is mine.” MINE is the singular core of property. Just like with a pregnant cow, I have property in the apple before and after my tree produces it. One expectation of having property in the tree is that I can prune the tree, and another is that you cannot prune it. I also have the expectation that I can sell the apple or grant you permission to pick the apple. There is no need to invoke the amorphous concept of a right and introduce the *qualitas occulta* of some assigner who imposes the right on the scene. Nor do we need to define the problem in terms of the use of the apple, the consequences of property. If I can say, “This tree is mine,” I can sell you the apple or

²⁸¹ Alchian and Demsetz (1973, p. 17).

²⁸² Alchian and Demsetz (1973, p. 18).

²⁸³ For detailed discussion of the bundle of rights metaphor of property, pro and con, see Symposium. 2011. “Property: A Bundle of Rights?” *Econ Journal Watch*, 8(3), 193-291.

grant you permission to pick the apple. If I do either, implicitly by custom I am saying, “This apple is not mine, it is yours.” The content of property is in what you and I do, say, know, and think about property in the tree and the apple.

Property Rights are Unidirectional, but Human Action is Bidirectional

Our conception of property is rooted *in* the external world; it doesn’t hang in the air independent of the physical world. The legal realist assumes that the conception of a property right exists outside the physical world, which then, because humans think with such thoughts, can be articulated and applied at will to people in the physical world. And the legal centralist assumes that government enforcement is why ordinary people do not steal. The minds of the people, their scheduling patterns, and the things themselves are minor details. One consequence of thinking this way is that economic historians and political scientists—exemplified by such luminaries as Douglass North, John Wallis, Barry Weingast, Daron Acemoglu, and James Robinson—treat institutions as something to be added and stirred into human intercourse, to borrow Deirdre McCloskey’s apt metaphor (see again Figure 1a).²⁸⁴ If you merely change the “extractive institutions,” Acemoglu and Robinson claim, economists can “engineer prosperity.”²⁸⁵ No, as McCloskey rightly argues in three lengthy volumes on the Bourgeois era, not if there’s an “ethical failure” in the local scheduling pattern.²⁸⁶ What the external theory of property rights cannot explain is why the same institutions work with some groups of people and not with others. People’s conduct can be GOOD or BAD with respect to property. *Abstract ideas are what make the custom of property possible and abstract ideas are what can make it impossible.* There are no sufficient conditions for property and prosperity, only necessary ones.

The evidence in Part I critically calls the external theory of institutions into question for the case of property. The alternative theory I present situates the idea of property in a bidirectional relationship that extends to and from the minds of individuals and the moral scheduling pattern of their community. Moreover, we cognize property as located in the thing, and we use the meaning of property to do work in the physical world by changing how we comprehend the very things themselves. Property is the custom by which we jointly and reciprocally think with the abstract concepts of MINE and YOURS to perceive the physical world of things and people. One of the most consequential things about thinking with property is that it makes the routine exchange of things possible, which is the hallmark of humanity and the foundation of the study of economics.

²⁸⁴ North, Douglas C., John Joseph Wallis, and Barry R. Weingast. *Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History*. New York: Cambridge University Press, 2009; Acemoglu, Daron and James Robinson. *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. New York: Crown Business, 2012; and McCloskey (2016, ch. 15).

²⁸⁵ Acemoglu and Robinson (2012, p. 450).

²⁸⁶ See specifically, McCloskey (2016, p. 137).