RIGHT ON TIME: A REPLY TO PROFESSORS ALLEN, CLAEYS, EPSTEIN, GORDON, HOLBROOK, MOSSOFF, ROSE, AND VAN HOUWELING

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A simple observation started us off in writing *Right on Time*.[1] Studying and teaching intellectual property law, we noticed striking parallels between traditional first possession rules in property law and analagous rules governing the acquisition of patent, copyright, and trademark rights. We thought that established first possession principles could illuminate the workings of IP law. As we dug in, however, it became increasingly clear that our premise wasn't quite right. While many penetrating commentators had said many penetrating things about first possession, the leading treatments tended to focus on significant individual aspects of the overall issue. What we could not find was a synthetic treatment that knitted together the accumulated insights in the literature in a comprehensive way, showing how the different parts of the puzzle relate to one another. And so our project grew. The final article sought to accomplish two goals: first, to set out a unified theoretical framework for first possession of the sort that seemed to be missing from the literature and, second, as originally planned, to apply that framework to patent, copyright, and trademark law to show both the similarities and differences with real and tangible property.

We framed the problem in terms of time. We argued that in both physical and intellectual property, a similar set of considerations came into play, setting up a recurring trade-off between the benefits and drawbacks of earlier versus later awards. At the same time, however, we stressed that the trade-off played out differently in different contexts and for different types of resources. Further, the core trade-off was itself subject to major modification in light of a variety of practical, largely information-related and communicative concerns involving notice to third parties, systemic simplicity and intuitiveness, and ease of administration. Notwithstanding this diversity and contextual complexity, we sought to assemble a comprehensive list of the variables that come into play in crafting possessory rules and to articulate basic principles about how they fit together.

Our goals were thus reasonably ambitious, and it is immensely gratifying to have elicited responses from eight leading property and intellectual property

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[1] Dotan Oliar & James Y. Stern, *Right on Time: First Possession in Property and Intellectual Property Law*, 99 B.U. L. REV. 395 (2019).

scholars, all of whom influenced our own thinking in developing our thesis. We are even more gratified by their kind words about the fruits of our labors. But like them, we are probably more interested in points of departure than in our many areas of agreement. Our attempt to articulate an omnibus account of the dynamics of first possession systems was always going to be vulnerable to charges that some variables deserved greater emphasis than we could give them, and several of the thoughtful responses to our article single out elements of the first possession story for greater attention. These comments have spurred some further thinking on our part and in some cases called attention to aspects of our original article that may need clarification, and we are grateful to the editors of this journal for the chance to add a few additional words to the conversation. Principally, we feel fortunate to participate in a collective enterprise of illuminating the nature of first possession. Several of the responses focused on what might loosely be called the notice problem, although that concern is intertwined with other administrability issues. Professor Holbrook stresses that acts of possession must be "sufficiently public" to the relevant audiences to enable them to understand that possession has occurred.[2] Professor Claeys makes the intriguing, ironic, and—we think—correct suggestion that, for certain types of what were traditionally nonstatutory forms of IP, secrecy may serve a notice function.[3] And in reiterating the significance of administrability and notice-giving concerns, which were central to her seminal 1985 article on first possession,[4] Professor Rose notes the role that custom can play in softening the edges of first possession norms in the context of smaller, more close-knit, and

[2] Timothy R. Holbrook, *The Importance of Communication to Possession in IP*, 100 B.U. L. REV. ONLINE 16, 18 (2020).

[3] Eric R. Claeys, *Claim Communication in Intellectual Property: A Comment on* Right on Time, 100 B.U. L. REV. ONLINE 4, 7-8 (2020). *Cf.* Rockwell Graphic Sys., Inc. v. DEV Indus., Inc., 925 F.2d 174, 177 (7th Cir. 1991) (defendants in trade secrecy action not entitled to summary judgment in suit involving alleged copying of drawings stamped with a legend stating that they contained proprietary material). Although we are inclined to agree that secrecy can provide a degree of notice, we think the bulk of the work in these areas is generally performed by the more basic limitation implied by secrecy that protection is only available against copyists, supplemented by general principles of misappropriation (protection only for copying that is considered wrongful). A copyist may not know that she is copying a protected work, but she at least knows that she is copying. In this sense, the "hot news" misappropriation doctrine, which does not require secrecy, is not conceptually exceptional. *See* Int'l News Serv. v. Associated Press, 248 U.S. 215, 238, 243 (1918). Nor do we think copying is the only available device to deal with these issues. Infringement of unregistered trademarks extends to unwitting infrginers, but protection requires use in commerce, and, for descriptive (and some other) marks, the establishment of consumer recognition (secondary meaning), and liabilty is generally limited to competitors or participants in related markets, which tends to approximate conditions in which notice is likely.

[4] *See generally* Carol M. Rose, *Possession as the Origin of Property*, 52 U. CHI. L. REV. 73 (1985).

more heterogeneous sets of actors, enabling earlier awards than a hard-edged, actual-capture approach would permit.[5]

Professor Rose notes that the graphical illustration we provided in our article does not depict these administrability costs. That is true. In our article, we attempted to isolate what might be thought of as the primary or substantive considerations from those relating to practical administration, addressing the substantive variables first before turning to problems of implementation. While we hope our discussion in the article makes this clear, however, we agree that the problem is three-sided and that in many cases administrability considerations may largely eclipse the underlying substantive ones.

At the same time, however, it is important not to lose sight of the substantive trade-offs we described, even when concerns like notice-giving are paramount. For one thing, the substantive considerations help explain why a clear act is important (for instance, by letting competitors know when to call off the chase). For another, the communicative meaning of whatever actions might conceivably count as possession is itself shaped by judgments among participants about the rules that would make sense as claiming protocals. Sheer simplicity, which tends to favor a rule of actual capture, is not the only relevant variable, even among large, heterogenous groups of actors—as illustrated, for instance, by the majority's acknowledgement in *Pierson* that mortal wounding of a wild animal is sufficient to establish priority, even if hot pursuit is not.

Equally critically, as we pointed out in our article, there may be other mechanisms that are equally or more effective in addressing concerns related to communication and notice-giving, and when these devices are implemented, greater refinement in first possession rules becomes possible. This observation has special force with intellectual property rights, though it is not limited to that context. As we argued, notice-giving with IP is generally much easier . . . precisely because it is generally so much harder. Mere mental possession of an intellectual creation itself tells the world nothing, since no one can read the creator's mind. At the very least, an external manifestation is required: reduction to practice for patents, fixation in a tangible medium of expression for copyrights, and use in commerce for trademarks. Even then, however, the communicative value may be quite limited. Still other mechanisms are needed. Some of these are embedded in legal doctrine, like marking rules and copying-based liability. But the communcation issue can also be addressed institutionally, by creating some kind of public registry—which is what patent, copyright, and trademark law each do, in somewhat different ways. This is a more complex enterprise, but once instituted, it may relieve much of the pressure to supply notice that first possession doctrine otherwise faces. (This is also true where the dynamics of custom discussed by Professor Rose come into play.) As a result, the trade-off between early and late awards that we describe in our article is presented in purer form.

[5] Carol M. Rose, Right on Time*, But How Much Does It Cost?*, 100 B.U. L. REV. ONLINE 23, 25 (2020).

Finally, we would urge a note of caution with respect to Professor Rose's statement that "[f]irst possession has no natural meaning."[6] At some level, of course, communicative acts of all kinds have a certain arbitrariness and might, by convention or fiat, mean something other than what they do. But the acts that establish possession are not as arbitrary in manner of words that differ from one language to another. Possession is more like grimacing or pointing—actions that communicate in a fairly universal way by dint of instinct and a kind of blink-like reasoning process.[7] While our article stresses variations in the way possession is approached at the margins, these differences should not obscure commonalities. As we noted in the article, the requirement of possession has at least one singular advantage over other claiming protocals: The action it requires generally entails no waste because that action would be necessary to the ultimate enjoyment of the resource in any event.

Admittedly, the fit is not always perfect. Most significantly, conservation or passive forms of resource use tend to be left out of the picture, requiring sometimes substantial adjustments or interventions. But these forms of use tend to be secondary within property. Property systems exist to moderate human conflicts concerning resources, which necessarily involve at least one and usually two forms of active use. A purely passive stance toward our natural surroundings is untenable. Everyone needs to eat. Transformation of the world from the state in which it is presented prior to any human action is essential to human survival and, indeed, flourishing.

Though its focus is on the more rarefied domain of patent law, Professor Mossoff's analysis in his contribution to this symposium is instructive.[8] Professor Mossoff's essay discusses our treatment of the America Invents Act and stresses the importance of the requirement of actual invention in patent law. In his view, *both* the America Invents Act and the regime under the 1952 Patent Act that it displaced were rules of actual capture. His claim does highlight the more pliable nature of the characterization issue where intellectual property is concerned, as well as the tendency of actual capture rules to predominate. But the key lies in his insistence that property is ultimately about control over resources, which highlights the close connection between possession and property itself. Not only is there a general and widely recognizable conceptual structure to possession as a property-claiming mechanism, but there is also a close resemblance between possession and the ultimate rights it is used to secure. That connection is itself the foundation for the communicative value of posssession.

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[6] *Id.*

[7] *Cf.* Mark Dingemanse et al., *Arbitrariness, Iconicity, and Systematicity in Language*, 19 TRENDS IN COGNITIVE SCI. 603, 603 (2015) ("The notion that the form of a word bears an arbitrary relation to its meaning accounts only partly for the attested relations between form and meaning in the languages of the world.").

[8] Adam Mossoff, *The U.S. Patent System Was (and Is) a Rule-of-Capture Property Rights Regime*, 100 B.U. L. REV. ONLINE 19 (2020).

So to return to the symbolism of possession: In her famous article, Professor Rose suggested there is something particularly western about the notion of first possession—"the articulation of a specific vocabulary within a structure of symbols approved and understood by a commercial people"[9]—but we have our doubts that the human species is as heterogeneous as this suggests. Possession is a means to establish individual claims to individual things, and while there are disputes about the propriety or strength of such claims in different resource contexts, the reason for such claims where they are recognized is, in the first place, to enable (though not necessarily to mandate) human transformation from a natural state. And so even setting aside a deeper connection to possession as a matter of biological instinct,[10] it is enough that possession communicates meaning intuitively by expressing, among other things, an intent to use, as well as demonstrating a degree of commitment and capabilty of doing so. In short, it seems likely that the noncommunicative advantages of possession-based rules for claiming resources contribute to their communicative capacity—for commerical and noncommerical peoples alike.

The second principal theme of various responses was the role of transaction costs. One reason the timing of first possession rules can matter is because it may influence the identity of the party who is ultimately awarded a property entitlement, and one metric of the efficiency of a particular rule is its relative tendency to select higher-valuing users, and in particular, parties more likely to be able to complete the process of developing a resource for ultimate use. In general, we argued, later awards, as under a rule of actual capture, are more likely to avoid costs arising from misallocation, largely because more information becomes available over time and later awards more closely correspond with ultimate use. Later awards, on the other hand, may be more susceptible to violence or sabotage and may prolong costly, multiparty races to appropriate resources.

Professor Epstein suggests that misallocation simply is not a concern because parties can reallocate through trade.[11] That, however, assumes an absence of transaction cost barriers, which are often substantial. Why not auction off a patent for a cure for cancer and let the market do its work? The answer is that this seems more likely to chill competition than to facilitate it. As we were careful to note in our article, the magnitude of the relative cost of misallocation is a function of the degree of misallocation and the extent of transaction cost barriers.

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[9] *See* Rose, *supra* note 4, at 88.

[10] *See* Ori Friedman & Karen R. Neary, *First Possession Beyond the Law: Adults' and Young Children's Intuitions About Ownership*, 83 TUL. L. REV. 679, 680 (2009); Jeffrey Evans Stake, *The Property "Instinct,"* 359 PHIL. TRANSACTIONS ROYAL SOC'Y B 1763 (2004); *see also* D. Benjamin Barros, *The Biology of Possession*, 20 WIDENER L.J. 291 (2011).

[11] *See* Richard A. Epstein, *The Acquisition of Property Rights in Animals: A Brief Comment on Oliar and Stern:* Right on Time: First Possession in Property and Intellectual Property, 100 B.U. L. REV. ONLINE 11, 12 (2020).

While recognizing that we did discuss transaction costs, Professor Allen writes that we should have emphasized them even more, arguing that they are "the critical factor"[12] and taking issue with us for combining transaction costs analysis with a neoclassical insight. We do not see the two as necessarily incongruent, and we are not sure that adopting his preferred alternative baseline as a starting point for the analysis would be a substantial step forward. In his view, "*but for* transaction costs, an early allocation of ownership is always better than a later one."[13] But in a hypothetical world with zero transaction costs, late allocations of ownership would not necessarily be inferior to early ones. In such a world, parties would costlessly transact over the time at which property rights should be allocated, regardless of the time set by the legal system. Nor is misallocation the only problem to be addressed. For example, our article noted that early awards may encourage behavior that turns out to be unnecessary to ultimate resource use because it is more remote in time and less information about the resource is available. As noted earlier, a singular advantage of possession as traditionally conceived is that it entails the performance of actions necessary to ultimate consumption. In this way, it avoids the creation of incentives to perform actions that have no social value in themselves, but that advantage may be more pronounced for later awards than for earlier ones. In any event, to the very considerable extent transaction costs do impede trade, it is important to understand how to get the timing of awards right, which entails, among other considerations, minimizing the risk of misassignment.

Allen also claims that our "argument that the costs of first possession increase over time or that they are a function of the specific mechanism is false" because a host of respected economists have shown that every allocation based on first possession results in a "full dissipation at the margin."[14] The models that result in full rent dissipation often assume similarly situated agents acting under symmetric information. This prediction may more accurately describe races

[12] Douglas W. Allen, Right on Time: *Not Quite Right on Economics*, 100 B.U. L. REV. ONLINE 1, 2 (2020). Allen takes some issue with the illustration provided in Figure 1. He raises possible scenarios of costs and benefits which do not follow the benefit and cost structures assumed in the depiction. In doing that, Allen fights the hypothetical. As we make clear, our discussion is limited to Figure 1's assumptions. These assumptions guarantee the existence of a unique solution to the question we pose, namely what is the optimal time to allocate property rights. As we acknowledged, other cost and benefit curves are possible. These may impose a greater informational burden on society under a first possession regime, or make other claiming mechanisms superior to first possession. These alternative cost and benefit structures we left outside the scope of our paper. And while Allen takes issue with the use of time as an axis in our graph, rather than quantities of a good produced (which he believes would be appropriate for conducting marginal cost and benefit analysis), we see nothing wrong in doing so given that we did so clearly (e.g., by explicitly referring to the "marginal costs and benefits of waiting."). Allen seems to have nevertheless understood what we were saying, and we trust that other economically oriented readers will as well.

[13] *Id.* at 3.

[14] *Id.* at 3 & n.12.

such as land rushes, or races to inventions that are "obvious" in the patent context. But that isn't how IP law generally works. In the patenting context, rights are only granted for inventions that are "nonobvious," a requirement that tends to guard against full rent dissipation.[15] Often, patenting activity is done by an agent who is the first to uniquely see a technological opportunity worth pursuing. In this context, it is reasonable to assume that the level of rent dissipation would depend on the particulars of the claiming mechanism. Otherwise, if all first possession mechanisms would result in full rent dissipation, society should be indifferent between types of first possession mechanisms and, indeed, indifferent as to the value of allocating property rights at all.[16] Moreover, we provided a number of reasons to think that at least *social* cost, as opposed to private cost, may vary with timing, at least in a world of positive transaction costs. Early awards, for instance, take place at a time when less information is known about resource attributes and uses, which tends to make misassignment more likely, while later awards may result in greater levels of violence among competitors simply because more opportunity for conflict is presented. Private dissipation may also provide social benefits, as Allen himself has shown in the context of western land settlement[17] and as John Duffy has shown in the context of patents.[18] And, we would stress—harkening back to our previous discussion of administrability and notice—different timing rules may have significant effects on the ease with which the system itself is maintained.

Finally, in a slightly different vein, Professor Gordon raises some "red flags" about *Right on Time* in the course of an extended discussion of her concerns about unjustified lengthening of copyright terms. She further charges us with working within a tradition that thinks primarily about the maintenance and husbanding of existing resources rather than with incentivizing the creation of new works.[19]

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[15] *Accord* John F. Duffy, *A Timing Approach to Patentability*, 12 LEWIS & CLARK L. REV. 343, 344-46 (2008).

[16] Our point here is in line with Allen's footnote 13, in which he notes that rent does not dissipate fully when race participants have different cost structures. We thus fail to understand why Allen would admonish us with a general theoretical point in the text—suggesting that under all assumptions races always result in full rent dissipation—and then contradict his point in the footnote—where he acknowledges that under reasonable assumptions of creator heterogeneity, which we share, dissipation is not complete.

[17] *See generally* Douglas W. Allen, *Homesteading and Property Rights; or, "How the West was Really Won*," 34 J.L. & ECON. 1 (1991).

[18] *See generally* John F. Duffy, *Rethinking the Prospect Theory of Patents*, 71 U. CHI. L. REV. 439 (2004).

[19] *See generally* Wendy J. Gordon, *Response to Oliar & Stern: On Duration, the Idea/Expression Dichotomy, and Time*, 100 B.U. L. REV. 33 (2020). Professor Gordon also chides us for our discussion of copyright's idea-expression dichotomy, imputing to us the view that "timing is at the core" of the doctrine. *Id.* at 45 (emphasis deleted). That is not our position, certainly in the sense that she seems to mean. Our article reviewed Learned Hand's "levels of abstraction" analysis of the idea-expression distinction,, quoting key portions of his

These may be fair critiques—but not of our Article. First, the question of the optimal timing of copyright awards, which we discuss in our Article, is analytically distinct from the question of copyright's optimal duration, which we do not. Copyright entitlements may be granted early or late in the course of developing expressive works, and, regardless, they may last for short or long durations. Second, property maintenance considerations are not the focus of our Article. We do not concern ourselves much with the question of how the timing of resource allocation affects the efficiency of resource use. Instead, we are mainly concerned with how the timing of allocation affects whether a resource will be created at all. We are concerned, for example, with premature grants to authors and inventors because we fear that these authors and inventors will not actually be capable of completing the work of authorship or invention they set out to create. Incentives to create are, thus, front and center in our framework.

We also wish to emphasize that our analysis is not intended to detract from the important role of the public domain. The yoking of concerns about unwarranted IP expansion appears, at least in part, to be based on attributing to us the view—which we do not share—that "virtually any intangible should be privately owned."[20] But again, our analysis is limited to situations where private ownership is thought to be appropriate. As we noted in connection with our graphical representation of the timing trade-off, in cases where the assumption that the benefits of private rights outweigh their costs is violated, we doubt that first possession should be used; other candidates for resource management become viable candidates, including common ownership.[21]

Far from endorsing ownership of all, or even virtualy all, intangibles—a position that would not only be unworkable but incoherent—our discussion expressly relied upon the value of the public domain. For instance, drawing from Professor Duffy's work, we noted that a significant potential social benefit of earlier awards for rights that have a fixed duration is that material enters the public domain sooner and the earlier award may effectively shorten the term of protection.[22] The first possession framework can and does operate to limit IP protection in other important ways as well, a point underscored in other contributions to this symposium. As Professor Van Houweling observes, one of

seminal opinion in *Nichols v. Universal*, 45 F.2d 119 (2d Cir. 1930), in order to to show how the approach he laid out fits with our time-based framework. Gordon acknowledges the possibility that we were "merely fleshing out Learned Hand's abstractions test," but dismisses the idea because the doctrine is not framed in terms of "time of creation." Gordon at 45 n.43. Yet as the article explcitly provided, such a "fleshing out" is exactly what we sought to do. *See* Oliar & Stern, *supra* note 1, at 439 ("Hand's Levels of Abstraction test, as it has come to be called, can be reframed in terms of our now-familiar possessory continuum.").

[20] Gordon, *supra* note 19, at 37.

[21] Oliar & Stern, *supra* note 1, at 407 n.50 ("When these assumptions are violated, first possession may not be a suitable candidate for allocating property rights over previously unowned resources, which is consistent with alternative social mechanisms for resource management, such as common property or auctions.").

[22] *See generally* Duffy, *supra* note 18.

the unusual features of intellectual property fields like copyright and trademark is that failed attempts at possession can bring materials to the public domain permanently.[23] Similarly, as Professor Holbrook notes, excessive delay in seeking protection may also prevent a claimant from acquiring rights, even if the claimant was originally first to possess.[24] We appreciate Professor Gordon's thoughtful reminder not to forget "the classic economics" of copyright and patent, but we would add that not every important question in IP law centers on intellectual property's Great Existential Question—how much IP, if any, should we have?—and the accompanying academic angst that we are getting it wrong. Whatever the force of concerns about IP expansion or a shift away from an access-innovation focus in other contexts, we do not think they undermine the conclusions drawn in our study of IP claiming and first possession rules.

The various contributions to this symposium have further highlighted for us the remarkable combination of nuance and simplicity that characterizes first possession and the problem of timing. Ours is ultimately no more than "one view of the cathedral," and the thoughtful responses we received from all the contributors reinforce the importance of different angles from which to view the problem. Even so, we think certain fundamentals are worth establishing, and we continue to believe that it is possible to speak of the basic concerns that drive first possession doctrine in a unified way, and that in doing so, it is possible not only to illuminate ancient debates about wild animals and land rushes but to draw lessons for the frontiers of modern law and the all-important domain of intellectual property.

[23] *See generally* Molly Shaffer Van Houweling, *Failed First Possession and the Permanent Public Domain*, 100 B.U. L. REV. ONLINE 28 (2020).

[24] Holbrook, *supra* note 2, at 20.