Intellectual Priority
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How does an unowned thing come to be owned? And what determines who becomes its owner? Property law has traditionally responded to both questions with the same answer: claiming. A resource belonging to no one becomes owned only when someone claims it, and the person who claims it is the person who becomes its owner. The award of property rights thus depends on the unilateral action of those who are to receive them, action typically consisting of what is called “possession” of the resource to be claimed.

This claiming model has several significant features relevant to the discussion that follows. First, it elevates the importance of time. Anyone seeking to make a resource her own not only must do whatever is required to assert a claim, but must do so before anyone else. A premium is therefore placed on speed.¹ Second, the idea of possession used to describe the conduct required to make a claim typically entails

¹ The way in which time enters the picture is easily misunderstood. This system of claiming is often referred to as a “first-in-time” or “first possession” rule, but this can be misleading. All rules for awarding rights to unowned resources are first-in-time rules to that the extent rights, once awarded, cannot then be re-awarded to someone else. The first person to purchase an entitlement at an auction, for example, will be protected against purchasers at subsequent auctions. This is a reflection not of the content of the rules for acquiring unowned resources but of the rules for acquiring owned ones. That said, because participants in a claiming system control the point in time when a resource goes from being owned to unowned—that is, a property right is awarded simply because a person did something—time becomes an important part of the equation, even though this is for reasons having to do with the structure and duration of entitlements, rather than the rules governing their original creation.
certain actions necessary to the eventual use, consumption, or enjoyment of a resource.\textsuperscript{2} Like time, these kinds of actions play a central role in the claiming process.

Thus, from the standpoint of contests among rivals seeking the same resource, the system of possessory claiming makes the award of property rights depend on who gets there first, with “there” defined as some measure of progress toward use or consumption of the resource to be claimed. In this latter respect, the possessory claiming model differs from other sorts of claiming rules, such as a rule of claiming by sign-up or purchase. In both respects, it differs from mechanisms for awarding property rights that do not involve claiming, such as auctions or administrative assignments to those whom officials think will make best use of a particular resource.

One final noteworthy feature of the possessory claiming system is its flexibility. The legal concept of possession around which the process centers is at once well understood and elusive. In its specifics, it can vary considerably from context to context, with the differences seldom explained or even recognized. Partly this variation is a result of the way the idea of possession naturally plays out differently as the form of the resource to be possessed changes. The act of possessing a small object like an apple, which one cannot enter inside, will entail a very different sort of action from the act of possessing a zone of space, which cannot be held in one’s hand. But the possession standard also changes as the mixture of concerns that lie behind the system of possessory claiming changes. Actions similar in a purely physical sense might count as possession for one sort of resource but not for another. Merely looking at an

\textsuperscript{2} See Carol M. Rose, Possession as the Origin of Property, 52 U. CHI. L. REV. 73, 88 (1985) (concluding the “texts” of the possession doctrine “are those of cultivation, manufacture, and development.”).
abandoned ship on land does not give any rights to it, for example, but looking at an abandoned ship at the bottom of the sea may well do so.\textsuperscript{3}

Again, differences like these are best described (and, eventually, explained) in terms of timing. The protocols for claiming and possession could recognize an exclusive right to a resource early in the process of development and production, as for sunken ships, or they could wait until matters have progressed further along, as for those on land. In fact, rules governing the award of rights over unowned resources tend to follow one of two basic approaches to the timing issue, one of which favors early awards and the other late ones. Sometimes, the law recognizes an exclusive right in a resource in the first person who undertakes substantial efforts to acquire it, what we call a first committed searcher rule. Other times exclusivity is only awarded once the resource has been subdued or reduced to control, a rule of actual capture.\textsuperscript{4} As we will suggest, the reasons for preferring one or the other of these approaches in any given context—that is, for preferring early or late awards of property rights—reveal the driving concerns behind the possessory claiming model that so dominates the law of property.

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We offer the foregoing observations not for their own sake, but as prologue to discussion of what may seem to some an altogether different topic, the laws of


\textsuperscript{4} The word “capture” has sometimes been used to refer to situations where possession gives a person rights in only a particular unit within a larger group, rather than the larger group itself: a bucketful of water drawn from a stream, for example, as opposed to the whole stream. See Lueck. This is a potentially confusing usage because it tends to conflate the scope of the asset that a person claims with the conduct necessary to establish a claim. As used here, “capture” refers to standards akin to actual possession, in which a person must achieve physical control or its equivalent, rather than simply take substantial steps in preparation for doing so.
intellectual property. In fact, however, the possessory claiming model is also the predominant organizational scheme in IP law. Indeed, IP is arguably its more significant manifestation. While the assignment of rights in unowned things might seem a largely theoretical problem for resources like land, most of which was claimed long ago, IP law is constantly tasked with the assignment of rights in resources having no previous owner. Ubiquity is therefore one reason to seek a better understanding of the way this structure works for IP. And it is by no means the only one. However difficult the concept of possession is to define for physical objects, it is considerably more so for wholly intangible items. Custom and intuition provide less reliable safety nets, making a good theoretical grip on the issue all the more valuable.

This paper attempts to make sense of existing rules for the timing of IP claims. It provides a comprehensive analysis of the issue of claiming-through-possession in IP law, what we call the problem of intellectual priority. Drawing from the property theory literature, the article develops a basic framework to guide decisions about the timing of IP awards. On the one hand, a relatively large investment necessary to produce a particular IP good militates in favor of a relatively early award of IP rights. On the other, a relatively high likelihood that a party receiving IP rights will fail to follow through with commercial development militates in favor of awarding the rights relatively late in the game. And between these two poles, concerns about notice and administrability militate in favor of awarding rights pursuant to a limited set of salient and well-understood temporal landmarks.

The Article proceeds as follows. Part I discusses different approaches to the award of rights in the law of property. Part II examines the underlying rationales for various
approaches to possessory claiming and establishes a general framework to guide inquiries into the timing of property awards. Part III examines the approach toward analogous timing issues in patent, trademark, and copyright law. Part IV seeks to apply the general framework developed in the paper to IP law and suggests some areas of reform in current IP practices.

I. Claiming in Property Law

Property law makes extensive use of possessory claiming rules when it comes to awarding property rights in previously unowned resources. Courts have applied variants to everything from wild animals to land to manure. Yet behind the basic doctrinal similarity across a wide range of resource contexts, there is considerable diversity in the particulars of different rules for claiming.

A. Two Models

Imagine a timeline that begins at the earliest moment it is possible to think about a resource belonging to a particular person and ends with consumption or commercial exchange. In awarding property rights, legal systems typically gravitate toward either of two different points along that continuum. One possibility is to award a property right once a person demonstrates the ability to control a resource as a factual matter. The other is to award a property right when a person demonstrates the intent to establish such control and takes certain concrete steps toward doing so, even though actual control has not been obtained. It is altogether possible to look to other points in time, whether earlier, later, or somewhere in between. But by and large, these are the points
around which the doctrines of property law tend to coalesce. Two classic examples from the property canon offer clear illustrations of each.

The first comes from the decision in *Pierson v. Post*, a staple of first-year property curricula in the United States. The case involved a hunter who had been chasing a wild fox, only to lose the animal to a farmer who emerged suddenly and quickly killed it. The hunter sued the farmer to recover the value of the animal’s pelt but the court sided with the farmer. While the dissent argued it was sufficient to claim a wild animal if “the pursuer be within reach, or have a reasonable prospect ... of taking” it, the majority found concluded mere pursuit was inadequate. The case is taken to stand for the proposition that to acquire property rights in an animal, it is necessary to reduce the animal to physical control, or at least mortally wound it so that physical control appears a foregone conclusion. It is a paradigmatic example of an actual capture rule.

The second example comes from the practices of nineteenth century whalers, as described in Robert Ellickson’s famous study. The general rule developed among whalers was similar to the rule in *Pierson*. A whaler had an exclusive claim to a whale only when the whale was harpooned and the harpoon was attached to the whaler’s boat. Known as the “fast-fish, loose-fish” principle, it too was a rule of actual capture. There was at least one significant exception to the rule, however, similar to the kind of rule urged by the dissent in *Pierson*. In whaling grounds where the more aggressive sperm whale species was hunted, a different norm applied. In these territories, the general rule was that a whaler had an exclusive claim to a whale if the whaler was the first to lance the whale with a harpoon and if the harpoon remained stuck in the whale’s side, so long as the whaler continued in active pursuit of the whale and regardless of
whether the harpoon remained connected to the harpoon boat. In other words, a whaler could acquire a claim to a whale earlier in the game, not upon actual capture but upon demonstration of a serious commitment to eventual capture. Known as the “iron-holds-the-whale” doctrine, this represents a first committed searcher rule.

It should be noted that a first committed searcher rule is frequently coupled with an actual capture requirement. Eventual capture is frequently a perquisite to the award of a durable property right, even where a first committed searcher rule is used. The first committed searcher rule is central to the claiming process, however, because it provides the priority rule used to resolve disputes between two otherwise valid claims. It establishes the point in time used to resolve the contest between them.

**B. Three Concerns**

The ready explanation for these two different types of priority rules is that they reflect two competing considerations and the way the balance between them differs in different contexts. If a property right is awarded early, there is a greater risk the person who receives the right will fail to complete the proverbial hunt. If a property right is awarded late, there is a risk that unsuccessful competitors will have expended considerable effort in their own attempts at capture and, moreover, that the very prospect that this might happen will discourage would-be hunters from setting out in the first place. By and large, the law will tend to favor the sort of rule appropriate to the mix between these competing concerns present for a given resource.

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This basic trade-off can be seen in both the features that were common to the different whaling norms and the ways those norms differed from one another. As Ellickson notes, none of the whaling communities adopted a rule awarding exclusive rights in a whale to the first crew to lower a boat in pursuit. That would be too soon, both because it would create incentives to get boats in the water earlier than would be optimal and because it would risk awarding the prize to someone less capable of completing the task of capture. On the other hand, neither did any of the whaling communities wait until a whale had actually been killed to assign claims to the animal. Among other difficulties, such a rule would have risked rewarding free-riders seeking to benefit from the significant efforts others had already made to subdue a whale.

The same basic concerns help account for differences among the norms that developed among whalers as well. Sperm whales tend to be relatively fast swimmers and vigorous fighters, prone to diving when harpooned. Waiting until a sperm whale had been brought under actual control before giving a whaler a claim to the animal risked failing to reward those whose early efforts made later capture possible. The iron-holds-the-whale rule therefore seems to have been adapted to conditions presented in sperm whale fisheries. The right whales predominant in other fisheries, by contrast, were comparatively slow swimmers with docile temperaments. There was little need to award possession sooner, and waiting until the whale had been brought under actual control ensured that the whale went to the person who had “performed the hardest part of the hunt.”

6 Ellickson, 89.
This early/late dichotomy is moderated by a third core concern, which might loosely be called the institutional problem. Not all points along the possessory timeline are created equal; some criteria of possession furnish clearer and more readily understood signals than others. Thus, Ellickson suggests, the fast-fish, loose-fish rule was more cut-and-dried than the iron-holds-the-whale rule, and it functioned as a default principle that gave way only when the practicalities of particular whale species made it unworkable. Institutional considerations encourage the use of possessory criteria that are easily administered and that help give actors notice of one another’s actions.

The basic trade-off we have identified can be seen across a range of resource contexts. Higher upfront investment costs tend to push the law toward awarding rights or defining possession in terms of an earlier phase in the development of the resource. Greater risks that development will not be completed push the law toward a later award of rights. And issues of notice and communication channel the legal responses to these concerns toward comparatively salient focal points—or prompt the creation of formalized mechanisms, like claim-filing registries.

Land law offers one of the more vivid examples of an actual capture-type rule. Over the course of the nineteenth century, the U.S. Government sought to dispose of the greater portion of its western land holdings, which by 1850 amounted to more than 1.2 billion acres. Initially, it opted for a system of fixed-price sales and auctions. Over time, however, it increasingly shifted toward a program based instead on possession. Building on so-called preemption legislation first adopted in the 1830s, which gave formal recognition to the claims of land squatters, the Homestead Act of 1862,
essentially allowed anyone to claim a tract simply by cultivating and living on it for five years.\textsuperscript{7} The Timber Culture Act of 1873 likewise allowed claimants to obtain free land, provided a quarter of the tract was used to cultivate trees.

The consistent theme across the period was a shift away from early awards of property rights (often, however, at a prohibitively high price) in favor of awards based on actual use and improvement, a change that aligned the law with widespread informal practices among settlers. Here the risk of lost investment was relatively slight: settlers might expend considerable resources in journeying west, but if the land they wanted was already being worked by someone else, that investment could be salvaged by claiming some other parcel. By contrast, the danger of awarding title to land at an earlier point was significant, at least in the absence of high claiming fees. The numerous land rushes occurring throughout the nineteenth century, even under the homesteading system, hint at the kind of land grab that might have occurred in the absence of homesteading requirements—pointless racing that would often have awarded assets to those with little intention of actually using them. And notably, a standard based on actual occupation of the land helped reduce the cost of administering and policing the system, by working with those in actual possession, i.e., squatters, rather than against them.\textsuperscript{8}

In fact, rules requiring capture are widespread. Homerun baseballs hit into the stands at baseball games are one example. Conferring ownership of a baseball on one

\textsuperscript{7} See also DeSoto: “Even the celebrated Homestead Act of 1862, which entitled settlers to 160 acres of free land simply for agreeing to live on it and develop it, was less an act of official generosity than the recognition of a fait accompli: Americans had been settling—and improving—the land extralegally for decades.”

\textsuperscript{8} See Allen.
spectator prior to actual possession would present insuperable line-drawing problems and risk awarding the ball to someone less likely to catch it. And duplicative efforts by multiple people to catch the same ball don't seem like waste at all, just part of the fun of the game. Water law offers another example. Both the riparian and prior appropriation doctrines require a person claiming water to make some “diversion” of the water.\(^9\) Rules analogous to an actual capture requirement are also common outside the domain of formal property law. One business firm that has been cultivating a potential customer has no right to prevent a competitor from swooping in and landing the deal instead through otherwise fair trade practices. Bounty hunters typically cannot claim their reward until their prey has been captured, and if a rival manages to collar the fugitive first, they are out of luck. And so on.

First committed searcher rules also appear in a variety of legal situations, however. As noted above, it has been held that a salvor can claim a sunken ship by photographing it—what the court called “telepossession,”—in order to avoid wasteful duplication of effort in trying to salvage the vessel. Miners rely on the customary doctrine known as *pedis possessio* to protect them from rivals seeking to work the same prospect, even before any minerals have been found. In fact, the actual capture principle is loosened somewhat even in the paradigmatic case of wild animals. *Pierson v. Post* recognized that mortal wounding of an animal would suffice to confer exclusivity on a hunter, even if the animal had not been captured yet. Although water rights require a diversion, a number of states have introduced administrative claiming systems, which allow users to claim water before actual capture, provided actual use eventually follows.

\(^9\) See Tarlock.
And in everyday life, first committed searcher rules abound. Putting one’s turn signal on and hovering next to a car pulling out of a parking space is generally accepted as a sign to others that the spot, or at lest the chance to try and park in it, has been claimed.

II. Understanding Possession

In this Part, we expand on the simple model of first possession rules developed above, explaining its theoretical underpinnings and enriching the overall framework by introducing additional considerations.

In a purely theoretical sense, the optimal time at which a property right should be awarded is the point where marginal benefits and marginal costs associated with continued competition are equal. Roughly speaking, this is where the marginal benefit of ensuring a claimant will complete capture equal the marginal cost of disincentives to compete created by a fear of lost investment. The balance between early and late claiming is illustrated in Figure 1.
As we have said, however, the trade-off between early and late claiming is not as clean as this depiction suggests. Issues pertaining to notice and administration weigh in favor of certain discrete, identifiable points along the temporal axis.

In the discussion that follows, we examine each of the three core concerns outlined here. We also identify a number of other important considerations that bear upon the trade-off between early and late assignments.

A. Costs of Early Awards

1. Failure to follow through

As we have said, the principal danger with early claiming is the risk that the party receiving the right early on will fail to complete the chase. This risk arises for three reasons. First, it may be that the early claiming rule will do a poor job selecting the party best situated to capture and make use of the resource. Because control over a resource is typically necessary in order to be able to make use of it and of any associated property rights, a rule requiring a claimant to demonstrate actual control before a right is awarded minimizes the potential mismatch between claimant and resource. Awarding rights before control has been demonstrated, by contrast, creates the possibility that the party receiving the right will not be able to control it and thus to follow through. The magnitude of this problem is a function of the degree and likelihood of misassignment and of the transaction costs that would prevent its correction through voluntary exchange.
A second reason to fear that a person who is assigned a property right early in the process will be less likely to follow through is that lack of competition may encourage complacency. This may be because actors feel a stronger attachment to resources they have exerted themselves to secure or a desire to recoup sunk costs. It may also arise from the tendency of monopolists to reduce output. And if development of a resource would produce significant external benefits, ending the competition early may under cut incentives necessary to ensure faster or more certain development.\(^\text{10}\)

2. Other early claiming issues

In addition to the possibility claimants will fail to follow through and capture the resource in question, early recognition of property rights carries a number of other risks. To the extent actual capture serves as an effective proxy for screening those claimants who place the highest value on a resource, early awards risk assigning the resource to the wrong party. Again, the harm resulting from misallocation of the entitlement as an initial matter depends on transaction costs, at least from the standpoint of allocative efficiency. The more difficult it is to move a resource to a higher valued user, the more important it is to try and ensure that user is its original recipient.

Early awards will tend to entail additional administration and policing costs since they start the legal clock sooner, though these should be compared to any savings in the costs of informal policing mechanisms and self-help if the award is delayed. In addition, early awards can present greater difficulties when it comes to specifying the

\(^{10}\) See discussion of colonial-era homesteading.
content of entitlements because the exact contours of the asset being claimed may be difficult to describe before the resource is in hand.

Finally, there is the cost of asserting the early claim. Any claiming protocol, establishing the conduct a person must perform to obtain a valuable entitlement, has the potential to distort behavior by encouraging individuals to engage in the required claiming conduct. A rule awarding a resource to the first committed searcher creates incentives to do whatever is necessary to qualify as a committed searcher and to do so at the earliest possible point in time. Unlike a capture requirement, which tends to require completion of some task necessary to eventual use or enjoyment of the resource being sought, mere search can include all sorts of conduct that does not contribute to successful or efficient resource development. Thus, in Ellickson’s example, if a whaling crew could claim a whale simply by lowering harpoon boats into the water, there would in all likelihood be a greater likelihood of that harpoon boats would be launched prematurely. The better course would be to wait until the ship was closer to the whale, which could be because it increases the likelihood of successful capture but could also be because it simply reduces the cost.

B. Costs of Late Awards

1. Wasteful Competition

The idea that competition would itself be viewed as a form of waste and an evil to be avoided may come as a surprise to the casual adherent of neoclassical economics. The superiority of free competition is only ever relative to its alternatives, however, and it always entails costs. In the context of competition for rights to unclaimed resources
under a system of possessory claiming, the basic problems with competition are three-fold.

First, competition will generally entail duplication of effort. If two hunters both pursue the same animal, only the successful one will reap the benefit of whatever time, energy, and money have been expended in the hunt. For the unsuccessful hunter, those investments are lost, except to the extent they can be repurposed for some other end. Second, the very fact that everyone but the winner of the competition for a resource will get nothing for their troubles is likely to discourage people from entering the competition in the first place. Of course, where competition entails wasteful duplication of effort, this might actually be a good thing—up to a point. But if everyone is afraid to make the investments necessary to win the race because of the risk of coming in second, the resource will go unclaimed and underutilized.

Finally, any expenditures to claim a resource—even those of the winner—may ultimately constitute a form of social loss. The most prominent example of this is what theorists refer to as “wasteful racing.” A system in which entitlements are awarded to the first person to capture a resource encourages claimants to capture resources as quickly as possible, which may often mean capture at a point in time earlier than they would in the absence of competition. In other words, they will seek out resources too soon from the standpoint of economic optimality and invest in their ability to capture and claim faster.

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11 This concern extends more broadly than the concern about wasteful duplication of effort. If a competitor is able to capitalize on a would-be claimant’s contributions, there is no social waste as such, but there is a private loss when the claimant is unable to recoup her costs. The disincentive to participation this creates can thus result in what is ultimately a social loss.
As Dean Lueck observes, the problem is not only about faster claiming. At least in theory:

Since competition for asset ownership must occur on some dimension, the investment problem is general: If individual cost advantages can be eliminated through investment in the techniques of acquiring property rights, then all methods of initially establishing property rights will completely dissipate the value of the resource.

This rent dissipation only becomes a social loss, however, to the extent the dimension along which competition takes place encourages behavior that results in diminished social welfare. The rule of claiming by possession creates incentives, first, to take possession of resources and, second, to do so as soon as possible. The wasteful competition thesis in principle could apply equally to the possession component of the rule as to the first-in-time component. As a general matter, however, the possession requirement itself is well designed to avoid loss because it asks the claimant to do something she would have had to do anyway to use the resource the way she wanted. In contrast to a rule awarding a resource to whomever first ran to the top of the Empire State Building, for example, any loss created by the rule of possession by capture is unlikely to arise from the acts required to make a claim, but only from performing those acts too early.\(^\text{12}\)

Even for the timing component, the wasteful racing problem can easily be overstated. To be sure, in some natural resource contexts, accelerated claiming has

\(^{12}\text{Using possession as the touchstone to claiming does tilt the playing field in favor of certain uses of resources, to the detriment of those requiring preservation and conservation. This may be as much a product of asset delineation problems as it is of racing incentives. If one person owns the entire fishery, early claiming isn’t a problem. The use of individual members within the larger set as the size of the asset being claimed, rather than the larger set, drives these results.}\)
proven not only wasteful but positively destructive. But there are also less dramatic circumstances in which faster claiming has beneficial effects that may not be realized by the claimant and where actual capture-type rules align a claimant’s private interest with overall social good. Colonial-era homesteading legislation, for example, encouraged the rapid settlement of portions of the country where officials sought to establish British foothold, in order to forestall the French and Spanish.

In fact, there may be widespread benefits from incentives for faster claiming. Some property scholars have suggested that it is useful as a general matter for property rights to be distributed early in order to encourage husbanding of resources, provide legal clarity, and reduce the costs of legal administration. Thomas Merrill, for instance, sees the widespread use of what he refers to as the principle of accession in property law—the automatic awarding of property rights in one asset by virtue of ownership of another—as an effort to sidestep the whole claiming process. No contest is necessary to determine who owns the offspring of my cow or the minerals on my land (assuming they have not already be sold off). To the extent it is useful to have property rights awarded early for the sake of earliness, racing incentives created by the rule of capture may be a good thing.

2. Other costs

Delay in awarding property rights and ending the race to acquire a particular asset can also promote a number of other potentially wasteful pathologies. One cost of

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13 That is, the social value of faster claiming is not just less than the cost of achieving it, but actually negative. Examples oil fields, where pressure is needed to retain reserve and fish where stocks are needed to maintain population over time.
later awards is the use of self-help practices designed to replicate the sort of benefits that legal property rights would supply. This can include what we call *fencing* investments, lawful steps that impede others from successfully competing for possession by acquiring rights over other materials necessary to the chase and taking steps to prevent others from using them. A landowner is unlikely to allow other hunters on her land if she fears they will take game she wants for herself, and may very well construct a wall to keep them out. Similarly, self-help can include investments in *secrecy*, again designed to keep competitors from acquiring resources—here, information—necessary to successful capture. And it can include *sabotage* investments, efforts to harm a rival and thereby disable it as a competitor—a lobsterman who surreptitiously cuts the line to another’s trap, for instance, so that it cannot be recovered from the seabed.

Fencing and secrecy are alternatives (and supplements) to formal property rights, and while their costs must be considered, those costs must be weighed against the costs of administering property rights through law. It is possible that they provide a more efficient way of generating the results an earlier award of formal property rights would supply, and to whatever extent this is so, they should simply be reckoned a necessary cost. The same cannot be said of sabotage, however, which is harm for harm’s sake and presumptively destructive from the standpoint of overall social welfare.

Beyond this, later awards of property rights can produce social friction and acrimony by prolonging the period of competition and leaving the legal disposition of assets unsettled for a longer period of time. This friction can be subtle though pervasive.
but it can also be sharp and obvious—physical violence can be a very real possibility.\textsuperscript{14} Finally, later awards of property rights delay the benefits property rights are thought to supply. Earlier awards can provide greater security and allow for planning and trade. They allow for a wider array of possibilities in terms of developing an asset. Perhaps, for example, it makes sense to allocate more resources to the marketing of a resource early on than to the kind of physical cultivation that an actual capture requirement might demand. And early awards may make it easier to coordinate various parties who are needed in the development of asset and its follow-on uses, particularly where a diverse combination of specialists will have to make separate contributions to the project. It may be easier to assemble the necessary team when the legal disposition of the resource is secure.

\textbf{C. Focal Points and Signals}

The tradeoffs between the considerations described above must be approached with a full awareness of the institutional context in which they play out and the demands it imposes on the design of legal doctrines and administrative mechanisms. As we have said, although there is room for some fine-tuning in the application of first committed searcher and capture rules, the existence of these two poles makes clear that in reality, things don’t look much like the kind of smooth linear relationship between early and late claiming suggested in Figure 1. That idealized account is significantly reshaped by practical concerns of institutional design, and in particular, the need for rules centered on clear focal points, intuitive concepts, and common sense notions.

\textsuperscript{14} E.g., mining camps. See also: fights over wedding dresses, beanie babies, etc.
There are several reasons why this moderated approach is needed. First, it is important to adopt a concept of possession would-be competitors can easily observe and comprehend so that they know not to continue expending efforts to win a race that has already ended. Similarly, a clear standard for possession helps forestall conflict among would-be competitors, creating a system that can run largely on its own without heavy judicial or administrative supervision and reducing the likelihood of social discord. It also provides security of holdings, thereby encouraging actors to invest in the resources they have claimed and facilitating exchange. Finally, a relatively unambiguous definition of possession is important from the standpoint of the institutions charged with administering and policing a property system. The more nuanced the test for possession becomes, the more difficult it is for courts to obtain evidence and make the necessary judgments.

III. Timing of Claims in IP Law

In this section, we turn our attention to IP law and survey the treatment of timing issues in patent, trademark, and copyright.

A. Patent

One area in which the mechanism used to award individual IP rights has received particular attention recently is patent law. The America Invents Act (AIA)
changed U.S. patent law from a first-to-invent system to a first-to-file system or first-to-invent-and-file.\textsuperscript{15}

Invention is a process starting from conception of the inventive idea and ending with its reduction to practice, a process that can be analogized to the of hunting foxes and whales. At the founding of the United States and continuing for more than two centuries, our patent system followed a first committed searcher rule. If party A conceived of an invention first, then party B conceived of it, but party B reduced to practice, after which party A did so, the patent would nevertheless go to A, the first committed patentee, provided she was committed to and did not unduly delay in reducing the patent to practice at every point following B's conception. To evaluate whether A was indeed a committed searcher, the Patent Office would hold an “interference proceeding” in which it would determine whether A pursued her patent with reasonable diligence.

But this long-standing practice changed with the AIA. Now our patent system is better described as one that follows the rule of capture. Even if someone else sets out in pursuit of an invention before the competition and is thus the first committed searcher, the race goes on and may very well be won by someone else. In the scenario described above, the patent would go to B because B was the first to reduce the patent to practice.\textsuperscript{16}

\textsuperscript{15} Still more precisely, U.S. law awards patents to the first to invent and then either file or publicly disclose, whether by written description, commercial sale, or otherwise making available to the public. See 35 U.S.C. § 102.
\textsuperscript{16} Filing a complete and enabling application with the PTO qualifies as constructive reduction to practice.
Notwithstanding the AIA, American law continues to award patents relatively early in the development process. In particular, the relatively minimal showing necessary in order to satisfy the requirement of utility makes it possible to receive a patent at a relatively preliminary stage. Claimants need not show that an invention is commercially feasible or valuable. And patent law allows claims based on constructive, rather than actual, reduction to practice. A claimant does not have to build an invention to patent it, only to provide a description adequate to allow one skilled in the art to build it.

B. Trademark

Different impulses can be seen at work in trademark law. In some areas, there has been a move toward later awards of trademark rights. In contrast to trademarks considered inherently distinctive, descriptive trademarks are protected only if they have acquired secondary meaning. At one point what happens in the case of priority disputes? Suppose party A first invests in creating secondary meaning, and then party B does so, but Party B is the first to achieve secondary meaning? It used to be the case that some courts had begun to develop would apply a first committed searcher rule and award the trademark to party A under the doctrine of “secondary meaning in the making,” which allowed for trademark protection before secondary meaning had actually been acquired. Ultimately, however, this line of doctrine was abandoned, and trademark protection is available today only after secondary meaning has attached to a

\[17\] In addition to the priority rules described here, the time bar in patent law makes patentability depend on filing for patent protection relatively early, even if there is no danger of being beaten by a competitor.
mark considered to be descriptive. In other words, the race for secondary meaning continues until something like actual capture has been achieved.

But there are also countervailing trends. Traditionally, trademark protection was available only after a mark had been used in a commercial transaction. In 1988, however, Congress amended the Lanham Act and for the first time allowed trademark registration based on “intent to use,” rather than actual use. Intent to use registration still requires actual use within a limited period of time and registration based on actual use is still available. But those seeking to end the race early can do so through intent to use registration. Along similar lines, trademark law also allows the developer of a trademark to claim protection based on publicity preceding actual use of a trademark, so long as the publicity represents an “analogous use,” meaning that it is similar in terms of audience and timeframe to later actual use of a mark. In other words, a claimant can end the race and establish priority at an earlier point in time, before actual use.

Earlier claiming is also made possible by evidentiary presumptions in trademark law. A descriptive mark is presumed to have acquired secondary meaning after five years of substantially continuous and exclusive use in commerce or five years after being registered in the U.S. Patent and Trademark Office’s Supplemental Register. While these are only presumptions, without a successful rebuttal, they allow claimants to obtain protection for descriptive trademarks before secondary meaning has actually been acquired, and, in the case of the Supplemental Registry, even before use in commerce.
C. Copyright

On its face, copyright law seems less to be organized as a system of temporal priority than patent and trademark law. In principle, a copyright holder has no rights against others who generate the same idea through their own independent creative efforts. Nevertheless, earlier creation—at least where coupled with publication—makes it much harder to establish that subsequent creations were genuinely independent. Indeed, it will often make it difficult or impossible for the later creation to be independent. Once a person has heard the story of Superman, he simply cannot invent the character on his own. Getting there first thus matters a great deal, and so what counts as “there” again becomes central to understanding how claiming works in copyright.

The line in copyright seems to be drawn relatively early. Mere conception of an idea is insufficient, but once there is a fixed expression, copyright protection is triggered. This system is a relatively recent development. Prior to 1978, copyright was not available until formalities including registration with the Copyright Office had been completed. In addition, legislation enacted in 2005 allows protection to attach even earlier, creating a “preregistration” procedure that allows copyright protection to be obtained prior to publication.

That said, copyright law has some features that push toward later protection. Registration provides significant benefits pre-registration and unregistered copyrights do not, and registration marks a later point on the development timeline, after pre-registration and after production of a fixed expression. Certain informal equivalents or
substitutes for copyright law also seem to favor later claiming. Norms among stand-up comedians and joke-writers grant a kind of authorship right to the creators of individual jokes. Rather than focus on the moment of creation, however, those norms award rights on the basis of later occurrences. A joke is said to belong to the first comedian to tell it on national television or, in the case of jokes sent in to television programs like the Tonight Show, to the first comedian to have faxed the joke in to the show’s producers. The first person to write or even tell the joke loses if someone else is first to send it in.

IV. Applications and Extensions

As a general matter, the basic framework for understanding possession outlined in Part II can be applied to IP. The problems of wasteful racing, failure to follow through, and strong legal “toeholds” remain. There are some differences, however.

For several reasons, early awards might be particularly valuable in the IP context as a general matter. Unlike the traditional model for property rights, the rights conferred by the patent and copyright statutes are for limited durations. For this reason, John Duffy argues that by allowing creators to file for IP protection before their works are ready for commercialization, the system can be see as one that allows creators to bid against one another for shorter periods of exclusivity, transferring producers’ private surplus to the public.¹⁸ Early awards might also be valuable for IP because it is much more difficult to learn about what rivals are up to than with physical assets. If a person is either chasing after or in actual possession of a physical object others know not to waste their time pursuing it for themselves. Since intellectual goods are not so visible,

¹⁸ Doesn’t work for TM.
the potential for duplicative effort is much greater. In addition, the existence of and vital role played by centralized registries in IP law helps uncouple problems of notice from capture-type rules. Not only is it the case that the act of “capture” lacks the kind of communicative value for intangible goods it has for physical ones, but waiting until capture occurs is in any event less necessary from the standpoint of communicating information given the use of registries.

On the other hand, the nature of IP goods also offers some reasons to be chary of early awards of exclusivity rights. Delineating the boundaries of both the protected asset itself and the rights that attach to it is generally more difficult for intangible goods than for tangible ones. What is true for property rights generally is especially so for IP: the earlier a right is awarded, the more difficult it is to specify its content—the extreme case being the description of an idea that has not yet been thought of. After all, it is precisely information about the good that is lacking when an informational good is still in its formative stages. For this reason, it might be expected that early claiming in IP will be especially likely to include misspecifications or to be more vague, risking greater conflict with other rights and uncertainty more generally. And while rivals pursuing the same basic idea cannot observe each other as easily as they can with physical objects, neither are they placed in close physical proximity likely to lead to violence in the way that lends support for early awards of property rights in the context of some physical items.

A. Patent and Copyright Contrasted
The fact that our patent system has—or had—mechanisms that awarded the right to the first committed searcher make sense in light of the theory, as patents are very often extremely expensive to acquire in a way copyrights frequently are not. And inventors face not only high upfront investment costs but often a greater probability of losing their investments. The likelihood of two inventors discovering the very same technology is greater than the likelihood that two creators will generate the same work. It seems far more probable that two firms would both invent aspirin than that two painters would both paint *Night Hawks*. Furthermore, inventors typically face a more serious threat from products and ideas similar to their own. One piece of technology will typically serve as an economic substitute for another technology that does the same thing by a different means. Demand for creative works is likely to be more inelastic in many instances—a person might want to see all the good political thrillers Hollywood can produce in a year. Indeed, one thriller may stimulate, rather than suppress, demand for similar ones.

For all these reasons, we would generally expect inventors to need greater protection from competitors during the process of generating their intellectual goods than creators of artistic works. Simply put, developing new pharmaceuticals often costs more than half a billion dollars, and no company would invest this amount without having the security of the patent at a relatively early stage. The utility requirement in patent law generally gives pharmaceutical investors that security. Compare patent law to copyright where ownership is generally awarded at the moment of capture—when the copyrighted work is fixed. This is, in essence, the moment where an abstract idea about a story line is reduced to actual practice. On average, the costs of copyrighted
works are less than those of patents, and the claiming moment is later, as the theory would suggest.

But not all patents and not all copyrights are alike. While some patents are extremely expensive to procur, such as pharmaceuticals, not all of them are so. The costs of some patents, such as software patents, may not be that high. At the same time, while many copyrighted works – such as an email, a text message, a short poem, a photo taken with an automatic camera – is very low, the costs of some copyrighted works, such as some Hollywood movies, is very high. In other words, there is variability in costs, and some patents may look more like some copyrights in terms of cost than to other patents.

This suggests that some differentiation should perhaps be allowed in the application of doctrine as to the moment of claiming. Lemley and Burk have called attention to the use of what they call “policy levers,” the way some doctrines in patent law are interpreted differently for different subject matters, even though the legal requirement remains the same in formal terms. Claiming and priority may be one of the most apt places in which to take advantage of the levers that the law affords. The preceding discussion suggests, for example, that a court or patent examiner analyzing whether a patent satisfies the utility requirement should take into account the cost of developing the type of patent at issue, allowing earlier patent awards for higher cost technologies than for lower ones.\(^9\)

\(^{19}\) Within the limits of proper adjudicative and interpretive methodology.
The AIA may have gotten the policy wrong. The AIA was justified in large measure as an effort to align U.S. law with patent policies of other countries. But the goal of legal harmonization does not tell us whose law ought to change when different jurisdictions have different laws, only that someone’s has to. It is not clear that the AIA represents a step forward as a matter of sound patent policy. The better course might have been for others to move toward earlier patent awards, rather than for the U.S. to join the crowd that favors later ones (assuming, rather heroically, that this was a possibility). It is also possible the benefits of international harmonization are overbalanced by the costs of later patent awards. Since the cost of investment are high in patent law, a first committed searcher rule may very well be better, and more empirical data would be required whether we got the policy right. It certainly may be the case that we would be better off applying the first committed searcher rule to the most expensive subject matters—perhaps even pharmaceuticals only—and then applied the rule of capture to all others, just as some whales are subject to a first committed searcher rule, while the rest are subject to a rule of capture.

B. Trademark Priorities

The framework developed in this article also sheds light on some aspects of trademark law, in particular the secondary meaning in the making doctrine. Developing a mark is often a costly endeavor. The prospect of establishing consumer goodwill over a course of years through advertisement and product quality, only in the end to lose a mark to someone else is discouraging to say the least. And the risk isn’t simply that simple competition will result in lost investments for those who lose the race. Trademark development presents special competitive difficulties because the process of
developing a trademark by its nature entails a particularly high degree of what we call *competitive overlap*.

What does this mean? Often the various preliminary investments needed to produce an IP good are capable of being appropriated by others in principle, but with trademarks, it is much easier for others to do so because the investment takes place within the public space of commercial exchange. A pharmaceutical company attempting to develop a new drug may be able to keep its research and findings secret. By contrast, a firm attempting to develop a brand name based on what is considered a descriptive term cannot do so because the creation of the brand itself turns on “acquired distinctiveness,” meaning that consumers have come to associate the mark with a particular commercial product. In other words, the course of conduct necessary to establish a mark, in other words, is the public dissemination of information within the relevant market. Rivals know what a firm is up to and they are able to reap the benefits of the efforts the firm has begun to make.

There is therefore a particularly serious risk that second comers will capitalize on the efforts of others—indeed, intentionally set out to do so—and free-ride on the investments of their competitors, particularly where the second comer is a larger firm. A secondary meaning in the making doctrine would forestall this kind of opportunism. It would protect the incentives of small first comers to invest in the mark, enabling them to choose a descriptive mark on an efficient timetable, rather than opt for an inherently distinctive mark that is worse for the product as a mnemonic device. By providing protection against trademark poachers, such a doctrine would enable greater use of descriptive marks and thereby reduce consumer search costs—the prime directive in
trademark law. Given the relatively straightforward case for early protection, we should not be surprised to see experimentation within the case law in this field. Awarding rights in descriptive marks early in time, while the firm is still chasing after secondary meaning and has not yet captured it, makes much sense.

Nevertheless, there are also reasons why a secondary meaning in the making doctrine might be problematic and an actual capture requirement should ultimately be maintained, and these reasons appear sufficient to defeat the case for such a first committed searcher rule. Chief among these is the disincentive effect of such a doctrine in terms of completing the hunt and accomplishing actual capture. Trademark law insists that rights in descriptive marks should only be awarded if the mark acquires distinctiveness. Although as a formal matter, a secondary meaning in the making regime would still require that secondary meaning eventually be achieved before true trademark rights issued, the existence of a preliminary period in which the first committed searcher has an exclusive chance to pursue secondary meaning comes very close to full trademark protection.

Interestingly, the reason this is so is also the reason why there might be a stronger case for a first committed searcher rule: competitive overlap. In the context of patents, even if a firm is given a period of time in which it has exclusive rights to claim the patent on a certain technology, if the firm is capable of inventing it, others nevertheless remain free to try and invent it themselves. Such an exclusivity right would offer some discouragement, but if they think there is a decent chance the firm with the exclusive right won’t follow through for whatever reason and that they will be able to succeed where the other firm has failed, they might well keep at it, whether because
they would sell their findings to the firm with the exclusive right or because they would claim the trademark once the exclusivity period expired.

Trademark is different. For the most part, if one firm is granted a period of exclusivity in which to establish a trademark, other firms cannot privately and separately undertake their own efforts to generate the mark. A rival’s use of the mark in commerce or marketing would interfere with the ability of the first committed searcher to accomplish the hunt. The nature of the first committed searcher’s right must therefore be such that it forbids others from using the mark during the period of exclusivity, and in this sense, it grants not just an exclusive chance at capture but something very close to the rights that follow from capture, even if it has not been achieved. This in turn can be expected to diminish the likelihood of follow-through, as well as to increase the costs of awarding rights when follow-through doesn’t take place since others would not be waiting in the wings, ready to reap the fruits of their own investments. In this way, the a first committed searcher rule would frustrate the major policy goal of trademark law where descriptive marks are concerned, and it therefore makes sense that the secondary meaning in the making doctrine has been abandoned, despite the rule’s many advantages.

Intent to use registration is another area of trademark law where timing questions predominate. The change from a rule of capture to a first committed searcher rule through intent to use registrations seems justified to us. Again, there is often a great investment before launching a trademark, and trademark owners need a measure of security before undertaking such investment. Before intent to use registrations, trademark owners solved the problem by making token uses of their marks. This was
the best they could do, and while it gave them some security of priority, it was not complete. It did not protect against the possibility that a mark one firm wanted to use had, without that firm’s knowledge, already been the subject of some other firm’s token use. In other words, the old rule’s principal disadvantage was a claiming mechanism that gave inadequate notice to others of that a claim had been made. Intent to use registration solves this problem by facilitating the transmission of information so that competitors know which marks have been claimed and which have not.