Introduction

Intellectual property is all around us. We have grown so accustomed to the idea that it is easy to forget how strange it is. But it is strange. Glossy brochures of the World Intellectual Property Organization may tell us that intellectual property rights are like any other property right. Learned law professors may patiently explain that there is no reason why property rights should not apply to intangible resources. No matter. When one thinks about it, the concept of owning an intangible product of the mind is strange and exotic. What does it mean to own an idea? How did we come to think and speak this way about this increasingly important part of our economic, cultural, and social life? This is what this book is about.

One starting point for answering these questions is the notion of expansion. In 1918 Justice Louis Brandeis wrote: "The general rule of law is, that the noblest of human productions – knowledge, truths ascertained, conceptions, and ideas – become, after voluntary communication to others, free as the air to common use."[1] When Brandeis wrote those words, intellectual property rights had already grown in coverage and strength beyond what anyone could have imagined a century earlier. Today intellectual property rights have expanded further, most likely well beyond what Brandeis could have imagined. Exclusive legal rights have been asserted (with a varying degree of success) in an astonishing range of intangibles, including yoga sequences, methods of playing golf, a system for hedging investment risk, genetic sequences, and the appearance of a street performer dressed as a mostly naked cowboy, to name just a few

[1] *International News Service v. Associated Press*, 248 U.S. 215, 250 (1918).

recent examples. One is tempted to wonder whether we have crossed the line where Brandeis's rule flips and the freedom to use ideas becomes the exception. James Boyle has dubbed this process the second enclosure movement, the intellectual resources equivalent of the eighteenth-century English process in which open land used in common was converted into tightly controlled private property.[2]

If we are in the midst of a second enclosure movement – whether it started in recent decades as some seem to think or has been unfolding for centuries – what could explain it? The immediate suspects are technology and economics. Much of the wealth in our society is in the form of informational resources of the kind covered by intellectual property rights, rather than land or other tangibles. This raises the stakes of private control of these intangible sources of wealth through intellectual property rights. Historically, technological development fueled this process. New technology gave rise to new valuable intellectual resources – anything from an innovative industrial process to motion pictures – and helped create markets for their exploitation. For better or worse, this resulted in increased private demand and public interest in the legal mechanisms for controlling and allocating the value of these resources. This narrative explains much. But it leaves out another powerful factor, namely ideas. The expansion of intellectual property rights is the result not only of technological development and economic demand but also of a specific set of ideas. Over the last three centuries our culture has developed a unique ideology that gives meaning to the notion of owning ideas. While deeply influenced by technology and economics, this ideology was not merely their intellectual reflection. Ideas about ownership of intangibles have exerted their own semi-autonomous force in interaction with those other factors. They form the intellectual origins of the second enclosure movement.

Some of the history of the modern ideology of owning intangibles in England and the Continent has been thoroughly explored, especially in the context of copyright. In a nutshell, the practices and regulations out of which intellectual property grew existed at least since the fifteenth century. They were not seen, however, as either "intellectual" or "property." While certain entitlements existed in regard to technology-related economic activities and later book publishing, they were not understood as ownership of an intangible object. New ideas of ownership

[2] James Boyle, "The Second Enclosure Movement and the Construction of the Public Domain," 66 *Law Contemp. Probs.* 33 (2003).

of property rights in the intellectual product of one's mind began to appear around the early eighteenth century. By the end of the century, the ideological foundations of both patents and copyright had been transformed. Both fields came to be dominated by a version of possessive individualism applied to intellectual creation. At the heart of this new construct stood the individual – either author or inventor – who through his mental labor creates new ideas. This individual was now seen as the owner of his intellectual creation.

When the American copyright and patent regimes were created in the last two decades of the century, this new framework was already well established. It is tempting, therefore, to think about the modern authorship-ownership framework as embedded in the DNA of the American intellectual property system. Following this assumption one may envision the tremendous growth of American intellectual property since the modest beginnings of the 1780s as a natural and necessary unfolding of this inceptive genetic code. To be sure, technology developed, new markets opened up, and vast new opportunities for commercializing information appeared. But the process was one of extending the original authorship-based model of intellectual property to new domains, perfecting its tenets and adapting it to new circumstances. It was nothing of the sort. The nineteenth century was a crucial formative era for intellectual property. New elements that were anything but natural extensions of the original authorship ideology developed and became central within intellectual property law and its underlying conceptual foundation. And yet the constitutive image of the authorial owner refused to depart. Even as individual authorship disappeared from the law (or failed to appear in the first place), its Cheshire cat smile kept hovering over it. Sometimes it exerted real force, at other times it elicited mere lip service, and in yet others it took perverse forms. What emerged early in the twentieth century, after a gradual but profound process of change, was a thoroughly new intellectual framework. This book examines the development of this modern framework of intellectual property in the context of the two oldest and most important branches of the field: patent and copyright.

At the end of the eighteenth century the fields of patent and copyright were in a state of deep transition. To an extent, each of the fields reflected its new official understanding as a universal regime of creators' property rights in the product of their minds. In important respects, however, they retained many of their former features. In essence, the traditional privileges of publishers and entrepreneurs were universalized and

bestowed on authors and inventors. In the following century this basic framework was subjected to various pressures: the claims of economic interests, competing ideological commitments, and new social conditions. The end result of this process was a new conceptual synthesis of ownership of ideas.

Was there a general pattern? Recent accounts suggest that a major theme of nineteenth-century American intellectual property was "the democratization of invention."[3] According to these accounts invention was democratized in the sense that hard-to-obtain privileges, bestowed sparingly on a small elite, were supplanted by generally accessible, universal rights. Procedural and substantive barriers to entry were lowered. Patents and copyrights became available to all on satisfaction of standardized general criteria designed to maximize the public benefits of the regime. The result was the harnessing of the creative energy of a broad swath of technological and cultural innovators who could enjoy some of the social value of their innovation through property rights. There is much truth to this account. Around the middle of the nineteenth century invention was indeed democratized in America. So was incorporation. The structural similarity between the democratization of invention and the rise of incorporation as a generally available form of doing business is striking. The latter story, however, has familiar later chapters. By the end of the nineteenth century the "democratization" of incorporation brought about the incorporation of America. Numerous individuals and small firms continued to rely on the useful mechanism of the corporation, but the period's most important and enduring phenomenon was the rise of big business. Democratization was followed by enormous concentration of wealth and power in a new market dominated by large, hierarchical private organizations. Something similar happened with the democratization of invention. In the late nineteenth century, "democratized" intellectual property rights became important tools for big business, and their form was adapted to the new corporate environment. The eighteenth-century individualism of authorial ownership met corporate liberalism. What emerged was a new synthesis. Authorship became authorship incorporated.

As happened in other contexts, the official individualist image of the field was not discarded by the new framework of authorship incorporated. Even as important aspects of intellectual property rights came to rest

[3] B. Zorina Khan, *The Democratization of Invention: Patents and Copyrights in American Economic Development, 1790–1920* (Cambridge: Cambridge University Press, 2005).

on other premises, the constitutive myth of the field remained that of the individual author or inventor who owns the product of his or her mind. This resulted in a variety of curious legal and conceptual forms. Some elements of the intellectual framework of owning ideas were simply underdetermined or open to a wide range of interpretations under the abstract authorial ownership construct. For example, the premise that authors and inventors own their intellectual creation left ample room for maneuver on the questions of what it was exactly that was owned and what it meant to own it. Here it was a variety of other ideological and economic forces that shaped the concrete meaning of owning ideas. In other contexts official authorship ideology came into direct conflict with other powerful influences. The assumption of strong originality as the hallmark of the genius creator, for example, clashed both with economic demands for broad availability of intellectual property rights and with a new prevalent image of intellectual commodities whose value is determined by the market alone. The result of such conflict was intricate ideological concepts embodying contradictory assumptions as well as mechanisms for mediating these contradictions.

What emerged at the dawn of the twentieth century was a new ideological scheme for giving meaning to the idea of intellectual property. Its anatomy was roughly as follows. One set of concepts constituted the creator-owner entitled to property rights by defining the essential qualities of this figure. Another cluster of ideas applied to what was being owned. It created a concept of an intangible object to which legal rights applied. A third and related group of ideas gave meaning to the notion of owning an intellectual object. These ideas defined the relationship between the owner and others in regard to the postulated intangible object.

The book is organized around this structure of meaning in its copyright and patent variants. Chapter 1 lays down the foundation for understanding the legal and conceptual transformations of the nineteenth century by explaining the background of the English, colonial, and state origins of American intellectual property law. It shows how at the eve of creating the federal regimes the practices of copyright and patent were already grounded in a new abstract ideology of authorship and yet lacked a well-developed framework of owning ideas along the three dimensions described above.

Chapters 2 and 4 focus on the concept of the genius creator in its copyright and patent iterations: the author and the inventor. In each of these fields the abstract defining feature of authors – intellectual creation – was instantiated in specific institutional arrangements. These

arrangements revolved around a focal organizing notion: originality in copyright and the inventive faculty in patent. In this way each field developed its own version of the image of the individual creator and placed it at its ideological center. At the same time, each field radically limited the practical significance of the ideological image, often containing concrete rules at direct odds with it. In this way by the end of the nineteenth century intellectual property law became caught in a paradox. It was all about original authorship and had little to do with it. One aspect of elaborating the concept of authorship related to the nature of the claim of the individual author on the state. In both patent and copyright there emerged a particular understanding of these claims as "rights" rather than "privileges." Whether intellectual property rights were philosophically grounded in natural rights or public utility, they acquired the institutional form of universal entitlements open to all and accompanied by a duty of the state to grant and enforce them on a formally equal basis.

Chapters 3 and 5 follow the development of the idea of an intangible object of property and of the meaning of ownership in such an object in the fields of copyright and patent respectively. A preliminary question about the ownership of intangibles pertains to the identity of the owner. The answer seems to follow inevitably from the grounding of the field in individual authorship: the owner is the author who created the intangible through his or her mental powers. In the second half of the nineteenth century, however, the principle of authorial ownership came under increasing pressure from economic interests who trumpeted the "necessity" of shifting ownership away from individual creators. The result was a complex array of rules that in some contexts – most importantly that of employment – deprived creators of the status of owners. There also emerged a set of techniques for managing the tension between these rules and the ideological principle of authorial authorship.

Another aspect of owning intangibles related to the object being owned. In traditional property law one could point at a concrete physical object of property – a plot of land or a piece of jewelry. The physicality of property grounded ownership in a graspable phenomenon: a seemingly natural connection between the owner and the owned based on physical possession. It also endowed the object of property with clear physical boundaries that supposedly defined the scope of the legal right in an objective manner. The lack of physicality thus posed a serious challenge once the idea of intellectual property was taken seriously and had to be translated into concrete rules and practices. The initial response was to create a construct of a semi-materialist object of ownership, at once

intangible and endowed with qualities equivalent to those of owned physical objects. This construct was embodied in the concept of the "copy" in copyright and that of the mechanical design in patent. Each of those presented the object of ownership as an intellectual template capable of producing an endless series of identical material embodiments. Gradually, however, both fields developed a very different notion of the intangible owned object that relied on a distinction between essential essence and ephemeral form. The "work" in copyright and the "invention" in patent were reimagined as elusive intellectual essences capable of manifestation in numerous concrete forms.

This was exactly the point where the concept of the object of property interfaced with that of ownership. If the traditional idea of ownership was based on being able to exclude others from physical intrusion on the object of property, what did it mean to own an intangible? At first, it meant having the power to prevent others from making and selling exact physical reproductions of the original. Gradually, however, ownership came to mean something very different. Intellectual works or inventions came to be seen as intellectual commodities with potential value in numerous possible markets. Ownership became the right to internalize this market value by controlling the markets for all the concrete embodiments of the intellectual essence. Potential markets defined the broad scope of the intellectual object of ownership, which in turn defined relevant markets. A corollary set of new principles, such as copyright's distinction between ideas and expressions or the rule against patents in natural principles, defined the outer boundaries of ownership. These principles managed the rising tension between the broadening sweep of the new concept of ownership and a widespread anxiety over private ownership of knowledge.

All of this sounds very metaphysical, but the new ideological framework of owning ideas had very concrete implications. It is this underlying framework that explains the intellectual stakes in the central jurisprudential debates of nineteenth-century intellectual property law such as the American common law copyright debate or patent's battle over the ownership of principles. These debates were fueled by competing economic claims on the developing intellectual property system. What gave them concrete meaning and shaped their form, however, was the emerging ideology of owning intangibles. Even more important, this ideology helped shape actual legal institutions with specific real-world implications. Whether it was invoked explicitly or, as happened more often, was simply latent in legal rules and reasoning, it gave meaning

and coherence to a particular way of thinking about intellectual property rights and implementing them. It was this intellectual framework, for example, that explains why in the late nineteenth century it became self-evident that a translation was copyright infringement, while half a century earlier the prevalent view was that it was not because it was not a "copy." It also sheds light, to take another example, on how late-nineteenth-century jurists could define the patent scope on increasing levels of abstraction, insisting all along that all "knowledge" remained free. Last but not least, the new intellectual framework of intellectual property played an important role in reshaping the general understanding of property. Early in the nineteenth century the intellectual challenge faced by jurists was fitting the new strange creature of owning intangibles into a familiar framework of property. By the dawn of the twentieth century the new legal constructs developed in this effort came to shed new light on the general idea of property itself. They helped abstract the concept of property and detach it from a necessary connection to any physical relationship. To modern eyes property came to be seen as an abstract legal relationship among people allocating control over the value of any possible resource. Property, in other words, assumed its modern meaning within which intellectual property seems unremarkable.

How does one go about thinking about the profound change of intellectual property during the long nineteenth century? There are many ways. This book is an intellectual history. It is premised on the assumption that ideas are important as a motivating force in human history, rather than being just echoes of economic or social developments. Accordingly the focus of the book is the development of ideas about intellectual property. To be sure, such ideas did not develop in a closed intellectual sphere. Systems of ideas are shaped in interaction with social and economic practices. In this work discussions of social, economic and technological developments are limited. They appear at the background as the necessary context for understanding the development of ideas.

Furthermore, this is an intellectual history written, so to speak, from the top down rather than from below. It is concerned with the official, public ideology of owning ideas. While this work locates this ideology in institutional and social context, it is not a close study of the social practices through which it was implemented and given meaning in the lives and actions of specific individuals. This means that the primary sources on which this work draws are mainly of the formal and highly intellectualized sort: legal treatises, appellate court opinions, Supreme Court briefs, and newspaper articles. The dangers of this sort of approach

are known. It risks producing a stylized version of ideas far removed from social reality that has little to do with the concrete experiences of actual historical actors. There are also advantages, however. Concentrating on these sources allows widening the lens and capturing a broad image of the framework of owning ideas. This framework played an important role in constructing specific, practical experiences of intellectual property. It is painfully obvious that intellectual property is a constructed human concept. Treatise writers, judges writing opinions, and lawyers crafting legal arguments were those who most directly and explicitly wrestled with the conceptual challenges of owning ideas. There is a good reason to assume, however, that the concepts they manufactured diffused beyond the limited sphere of professional, abstract writing, not because most inventors or authors spent their time reading legal treatises, but owing to various agents of transmission. The new ideology of owning ideas was embedded in operative legal rules and concepts. Intellectual property is an area where the rules matter a great deal in shaping everyday practices. Patent agents drafting patents, lawyers counseling clients and later holding top positions in corporations, and even the semi-professional and general press all acted as intermediaries. These agents were in the business of going back and forth between the intellectualized sources of law and ideology and the messy work of building and maintaining the plumbing of commercial, technological, and political life. In doing so they converted the abstract ideology of owning ideas into concrete practices and arguments, thereby spreading it beyond the small mandarin circle where it was created. Specific studies of these intermediaries and the social practices of intellectual property, both existing and future ones, are sure to refine, enrich, and correct the sort of bird's-eye image of intellectual property ideology offered here. Hopefully they will also benefit from it.

Studying the history of intellectual property as intellectual history gives rise to another question not explored closely here but worth commenting on briefly. Social and economic forces shape ideas. Specifically, this work makes frequent references to the influence of economic interests on legal rules and the concepts underlying them. But what was the causal mechanism? How were laws and ideas embedded in them shaped by economic interests? In many cases there was no mystery involved. Large parts of intellectual property law, especially copyright, were reshaped through legislation. Here the familiar dynamics of interest group politics was at work. Lobbying is woven into the history of American intellectual property from the travels of Noah Webster designed to spur state legislatures

and later Congress into action to late-nineteenth-century campaigns orchestrated by trade associations. Other crucial aspects of the transformation of intellectual property unfolded mainly through litigation. Adjudication works differently from legislation. But it has its own mechanisms that allow influence, sometimes disproportionate influence, of economic power on the outcome of the process. These include superior legal representation and other systemic advantages of repeat players such as the ability to strategize and play for the rules. In some areas changing social circumstances made the demands of dominant economic interests, whether pursued through lobbying or litigation, seem natural or even necessary. For example, the shift to production of many technological and expressive innovations in centralized, corporate settings made employee–creators seem as subordinate wage-laborers rather than genius authors. This made employers' claim for ownership of their employees' intellectual product both natural and easier to accept. Similarly, the increasingly sophisticated ways in which publishers developed and exploited secondary markets for books, such as the ones for translations, created a sense that it was "necessary" for copyright to cover these secondary markets. And then there was also the feedback loop of ideas. Once certain ways of thinking about intellectual property got a foothold they tended to have a cumulative effect, paving the way for the next wave of claims. The photography industry, for instance, had to overcome many obstacles before its product was fully accepted as a standard area within the coverage of copyright. Motion pictures had a much easier time. It was both because clever lawyers managed to squeeze film into the technical legal category of photographs and, more important, because photography's struggle for recognition already established the conceptual foundation for unshackling copyright from its traditional print-bound orientation. Causation, in other words, ran both ways. Economic interests and their demands shaped ideas. But it was also the case that ideas shaped economic interests and their interaction with making and manipulating the law. While the primary focus of this work is ideas, I also hope to highlight this dynamic and how it produced the modern intellectual framework of intellectual property.

One other theme that runs through this work is the dialectic of change through constancy. Two methodological concepts from two intellectual traditions usually seen as being a world apart capture the premise of this theme. The first is path dependence. Path dependence refers to the phenomenon of past actions constraining subsequent ones even when the circumstances that motivated them are no longer relevant. A classic