

HARVESTING INTELLECTUAL PROPERTY:
INSPIRED BEGINNINGS AND “WORK-MAKES-
WORK,” TWO STAGES IN THE CREATIVE
PROCESSES OF ARTISTS AND INNOVATORS

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This Article is part of a larger empirical study based on face-to-face interviews with artists, scientists, engineers, their lawyers, agents, and business partners. The book-length project involves the collecting and analysis of stories from artists, scientists, and engineers about how and why they create and innovate. It also collects stories from their employers, business partners, managers, and lawyers about their role in facilitating the process of creating and innovating. The book's aim is to make sense of the intersection between intellectual property law and creative and innovative activity, specifically to discern how intellectual property intervenes in the careers of the artists and scientists. This Article is an overview of the first two chapters of the book. The first is entitled “Inspired Beginnings” and explains how people describe the embarkation on a life's work in art and science mostly as a function of intrinsic or serendipitous forces. The second chapter is entitled “The Work of Craft: Work Makes Work” and explores the varied ways the interviewees describe their daily work in terms of the pleasure of sitting in a defined space (lab, studio, study) and focusing on

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the details of a project. This second chapter also discusses how work is described in terms of natural metaphors (e.g., harvesting or fishing) and the possible ramifications of this rhetoric for intellectual property law and policy.

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INTRODUCTION

This Article is part of a larger empirical study based on face-to-face interviews with artists, scientists, engineers, their lawyers, agents and business partners. The book-length project involves the collecting and analysis of stories from artists, scientists and engineers about how and why they create and innovate. It also collects stories from employers, business partners, managers and lawyers about their role in facilitating the process of creating and innovating. The book's aim is to make sense of the intersection between intellectual property law and creative and innovative activity. Specifically, its goal is to unpack the motives behind creative and innovative activity and to discern how intellectual property intervenes in the careers of the artists and scientists.

This Article is an overview of the first two chapters of the book. The first chapter is entitled "Inspired Beginnings" and explains how people describe the embarkation on a life's work in art and science mostly as a function of intrinsic or serendipitous forces. The second chapter is entitled "The Work of Craft: Work Makes Work" and explores the varied ways the interviewees describe their daily work in terms of the pleasure of working in a defined space (a lab, studio, or study) and hewing their project, shaping it. This chapter also dis-

cusses how work is described in terms of natural metaphors (harvesting or fishing) and the possible ramifications of this rhetoric for intellectual property law and policy.

Part I of this Article situates this study in the context of other empirical projects that investigate intellectual property law and practice. Part II discusses the project design in more detail. And Part III explores the transcripts, sharing the words and stories of those interviewed for what they say about beginnings and daily work of creation and innovation in the arts and sciences. Specifically, Part III imposes certain structures on the interviews that I see emerging after close attention to language patterns and narrative repetitions within the transcripts themselves. In Part III and in Part IV, I discuss some modest implications this empirical study might have for intellectual property law and policy.

I. CONTEXT: THE PLACE OF THIS PROJECT

Although incentivizing the “progress of science and the useful arts” has been the putative goal of intellectual property law (IP) since the United States’ constitutional beginnings, more than two hundred years later, we remain unsure whether IP protection works as we hope.¹ There are, in fact, few empirical studies describing how and why artists and scientists do what they do and whether or how the law has a role in their activities.²

The empirical scholarship on IP follows two tracks, loosely defined. One focuses on whether protecting IP impedes innovation rather than promotes it. These scholars usually focus on legal hurdles to output.³ They debate the existence and effect of the fabled “anti-commons,”⁴ measuring its effect in patent law generally through filed

1 See Raymond Shih Ray Ku et al., *Does Copyright Law Promote Creativity? An Empirical Analysis of Copyright’s Bounty*, 62 VAND. L. REV. 1669, 1680–85 (2009) (describing the ubiquity of the IP incentive story despite a lack of empirical evidence in support).

2 See Ben DePoorter et al., *Copyright Abolition and Attribution*, 5 REV. L. & ECON. 1063, 1066–67 (2009) (describing limits of research on copyright incentives); Jeanne Fromer, *A Psychology of Intellectual Property*, 104 NW. U. L. REV. 1441, 1458–59 (2010) (describing limitations of empirical research on incentives); Wendy J. Gordon, *Rendering Copyright unto Caesar: On Taking Incentives Seriously*, 71 U. CHI. L. REV. 75, 89 (2004) (discussing the lack of empirical research on copyright incentives and how “[m]ore objective criteria must be sought”); cf. Jonathan M. Barnett, *Is Intellectual Property Trivial?*, 157 U. PA. L. REV. 1691, 1696, 1700–09 (2009) (describing a variety of empirical studies that assess alternatives to intellectual property in business contexts).

3 See Michael A. Heller & Rebecca S. Eisenberg, *Can Patents Deter Innovation? The Anticommons in Biomedical Research*, 280 SCI. 698, 698–99 (1998).

4 See *id.*

cases,⁵ citation indexes in biomedical fields specifically,⁶ and in the manner of follow-on user innovation in manufacturing.⁷ Some scholars also ask—but do not really measure—the effect of an anti-commons in artistic communities, as in the music and film industries in our digital era.⁸

Some of the research, particularly in the communities where copyright protection dominates, tends to be less empirical and more anecdotal, grounded in policy or philosophy debates rather than systematic qualitative or quantitative analysis of innovative practices.⁹ Many of the prominent legal scholars in this area debate fundamental questions about the importance of the public domain for self-expression and continued innovation and focus less on demonstrating with empirical methods the efficacy of the social welfare function of intellectual property systems.¹⁰ These policy debates have been influential in structuring legal proposals, but more empirical work is needed to explain the asserted common sense behind these proposals.¹¹ Especially in the copyright realm where the legislation has been notoriously piece-meal and special-interest driven,¹² data on the manner in which copyright law is imagined and harnessed (or not) to spur creativity and recoup its costs seems of paramount importance to furthering the policy debate. This study will begin to fill this empirical gap.

For the most part, these studies explain that intellectual property law is not working as expected: the promise of intellectual property protection does not necessarily lead to more or efficient investment in

5 See JAMES BESSEN & MICHAEL J. MEURER, *PATENT FAILURE* 16–19 (2009); ADAM B. JAFFE & JOSH LERNER, *INNOVATION AND ITS DISCONTENTS* 13–16 (2004).

6 See FIONA MURRAY & SCOTT STERN, *Do Formal Intellectual Property Rights Hinder the Free Flow of Scientific Knowledge? An Empirical Test of the Anti-Commons Hypothesis*, 63 J. ECON. BEHAV. & ORG. 648, 664–67 (2007); JOHN P. WALSH ET AL., *Views from the Bench: Patents and Material Transfers*, 309 SCIENCE 2002, 2002–03 (2005).

7 See FRED GAULT & ERIC VON HIPPEL, *The Prevalence of User Innovation and Free Innovation Transfers: Implications for Statistical Indicators and Innovative Policy* 2 (MIT Sloan Sch. of Mgmt., Working Paper No. 4722-09, 2009), available at <http://web.mit.edu/evhippel/www/papers/Fred%20and%20Eric%20SSRN%202009.pdf>

8 See JOANNA DEMERS, *STEAL THIS MUSIC* 112 (2006); WILLIAM W. FISHER III, *PROMISES TO KEEP* 181 (2004).

9 See FISHER, *supra* note 8, at 1–10; LAWRENCE LESSIG, *THE FUTURE OF IDEAS* 3–16 (2001); JESSICA LITMAN, *DIGITAL COPYRIGHT* 11–14, 151–70 (2001).

10 See JAMES BOYLE, *SHAMANS, SOFTWARE, AND SPLEENS* 44 (1996); JONATHAN ZITTRAIN, *THE END OF THE INTERNET* 4–5 (2008); JACK M. BALKIN, *The Future of Free Expression in a Digital Age*, 36 PEPP. L. REV. 427, 427–29 (2009); PAMELA SAMUELSON, *Enriching Discourse on Public Domains*, 55 DUKE L.J. 783, 784–86 (2006).

11 See, e.g., PAMELA SAMUELSON, *Preliminary Thoughts on Copyright Reform Project*, 2007 UTAH L. REV. 551, 556–57.

12 See LITMAN, *supra* note 9, at 22–24.

innovation. The present study builds on the existing research to investigate this finding about the limits of intellectual property law. It does so, however, more directly from the perspective of those professionals working in creative fields and, if available, towards intellectual property protection. Notably, my research looks at the role of intellectual property law *before* it manifests as litigated cases. It focuses on perceptions of IP by creative and innovative communities outside the law's formal reach. Learning how the intellectual property law is perceived and applied before conflict arises may provide a new insight into the causes of the law's reported successes and failures.

The other branch of empirical IP scholarship investigates the informal norm systems that develop in the absence, or instead, of formal and public IP law. Some of these scholars focus on specific community norms that establish nonpecuniary (or nonmarket) incentives to innovate, for example in communities' aspirations to advance society and knowledge generally,¹³ satisfy curiosity¹⁴ or build reputation.¹⁵ Other scholars delve deeply into specific communities to ask whether community norms are an effective substitute for intellectual property where IP protection is unavailable or ineffective.¹⁶ In these case studies, scholars ask whether members of the community experience its informal norms as providing adequate protection for the value of their creations, for whatever reason they want to protect it: monetary, reputation, or otherwise. The current project supplements these studies by asking a prior question. Rather than evaluating the structure and efficacy of some form of IP regime (whether formal or norma-

13 See CHRISTOPHER M. KELTY, *TWO BITS* 3–5 (2008); Robert P. Merges, *Property Rights Theory and the Commons: The Case of Scientific Research*, 13 *SOC. PHIL. & POL'Y*, 145, 145–53 (1996); Arti Kaur Rai, *Regulating Scientific Research: Intellectual Property Rights and the Norms of Science*, 94 *NW. U. L. REV.* 77, 79–80 (1999).

14 See Katherine J. Strandburg, *Curiosity-Driven Research and University Technology Transfer*, in 16 *ADVANCES IN THE STUDY OF ENTREPRENEURSHIP, INNOVATION AND ECONOMIC GROWTH* 97 (Gary Libecap ed., 2005).

15 See David Fagundes, *Talk Derby to Me: Emergent Intellectual Property Norms Governing Roller Derby Pseudonyms* 34–35, 39 (Mar. 15, 2011) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1755305.

16 See Emmanuelle Fauchart & Eric von Hippel, *Norms-Based Intellectual Property Systems: The Case of French Chefs*, 19 *ORG. SCI.* 187, 187–88 (2008) (looking at haute cuisine chefs); Catherine L. Fisk, *Credit Where It's Due: The Law and Norms of Attribution*, 95 *GEO. L.J.* 49, 101–07 (2006); Jacob Loshin, *Secrets Revealed: Protecting Magicians' Intellectual Property Without Law*, in *LAW AND MAGIC* 123, 123–25 (Christine A. Corcos ed., 2008); Dotan Oliar & Christopher Sprigman, *There's No Free Laugh (Anymore): The Emergence of Intellectual Property Norms and the Transformation of Stand-Up Comedy*, 94 *VA. L. REV.* 1787, 1795–98 (2008) (looking at comedians); Kal Raustiala & Christopher Sprigman, *The Piracy Paradox: Innovation and Intellectual Property in Fashion Design*, 92 *VA. L. REV.* 1687, 1698–1704 (2006).

tive), this study focuses first on the early stages of the creative process and investigates the impulse to innovate, seeking to uncover its relationship, if any, to the creators' understanding of the ability or inability to protect (and possibly commercialize) their work.

Some IP scholars suggest that creativity and innovation—whether or not tied to IP protection—is intimately connected with notions of personhood: individualism, self-expression, and freedom.¹⁷ This body of work has attempted to shift the IP debate (or at least diversify it) from law's economic justification to its humanistic role as a mechanism for self-fulfillment and community sustainability. Most of this work is theoretical or anecdotal. Understandably, therefore, there is need for more systematic analyses of these creative communities and innovative organizations, of the resources and tools required for their activities, and of the variety of methods used to sustain them.

This research project aims to be one such empirically grounded analysis. Specifically, this project investigates: (1) the expressed relationships between creativity and innovation and enforceable entitlements, which may inform us as to (2) whether or why the individuals and organizations protect through IP the value created, and when correlated to behavior, (3) the actual or enacted relationship between creativity and innovation and IP.

There are some ground breaking studies by psychologists and social scientists on the nature of creativity and innovation that inform this project. Studies such as Mihaly Csikszentmihalyi's *Creativity: Flow and the Psychology of Discovery and Innovation* and Howard Gardner's *Creating Minds*, explore creative personalities and the evaluative standards for creativity and innovation.¹⁸ This project draws on these works and highlights parallels or dissonances when relevant. But, this project does not focus on the *kinds* of people that produce creative or innovative work or on the values society places on it, as do these earlier, important works. Instead, this current project focuses on the motives and behaviors of the creators and innovators, the expressed

17 See, e.g., MARGARET JANE RADIN, REINTERPRETING PROPERTY 1 (1993); Julie E. Cohen, *The Place of the User in Copyright Law*, 74 *FORDHAM L. REV.* 347, 348–49 (2005); Wendy J. Gordon, *A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property*, 102 *YALE L.J.* 1533, 1535 (1993); Sonia K. Katyal, *Semiotic Disobedience*, 84 *WASH. U. L. REV.* 489, 496–97 (2006); Jessica Silbey, *The Mythical Beginnings of Intellectual Property*, 15 *GEO. MASON L. REV.* 319, 320–22 (2008); Madhavi Sunder, *IP³*, 59 *STAN. L. REV.* 257, 262–63 (2006); Rebecca Tushnet, *Payment in Credit: Copyright Law and Subcultural Creativity*, 70 *LAW & CONTEMP. PROBS.* 135, 136–39 (2007).

18 See MIHALY CSIKSZENTMIHALYI, *CREATIVITY* 12–16 (1996); HOWARD E. GARDNER, *CREATING MINDS* 4–5 (1993).

reasons they give for doing what they do, and the descriptions of mechanisms that help or hinder their choices in creative and innovative endeavors. This project is a study of the narrative and linguistic incarnations of innovation and creativity and how that language manifests as legal consciousness concerning intellectual property.

II. PROJECT DESIGN

In contrast to scholarship that focuses on output (the quality or number of things made), this project unpacks the role of incentives by analyzing the accounts people provide about how and why they do what they do. To be sure, isolating and analyzing “motives” is challenging. Nonetheless, this is the way law talks about IP. Without exception, courts, legislators, and lawyers describe the purpose of copyrights and patents as the necessary incentive for creative innovation.¹⁹ However, this utilitarian justification speaks of incentive without evidence of connection to lived experience.

Close attention to language and stories tells us things that quantitative studies—such as surveys—do not.²⁰ The language people use to describe their lives and work offers access to the cultural milieu of creativity and innovation, *including the law* that regulates their work and livelihood. Language—words and stories—make sense of the

19 See WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* 37–84 (2003); see also Diane Leenheer Zimmerman, *Copyright as Incentives: Did We Just Imagine That?*, 12 *THEORETICAL INQUIRIES L.* 29, 30 (2011) (critically examining the traditional justification of copyright law as providing creative incentive).

20 For background on and relevance of qualitative research, see, for example, UWE FLICK, *AN INTRODUCTION TO QUALITATIVE RESEARCH* (3d ed. 2006).

Qualitative research is of specific relevance to the study of social relations, owing to the fact of the pluralization of life worlds. . . . This pluralization requires a new sensitivity to the empirical study of issues. Advocates of postmodernism have argued that the era of big narratives and theories is over. Locally, temporally and situationally limited narratives are now required.

Id. at 11–12; see also MATTHEW B. MILES & A. MICHAEL HUBERMAN, *QUALITATIVE DATA ANALYSIS* 1–15 (2d ed. 1994) (describing approaches to qualitative analysis and some of the unique benefits as compared to quantitative research, including that “good qualitative data are more likely to lead to serendipitous findings and to new integrations; they help researchers to get beyond initial conceptions and to generate or revise conceptual frameworks. Finally, the findings from qualitative studies have a quality of ‘undeniability.’ Words, especially organized into incidents or stories, have a concrete, vivid, meaningful flavor that often proves far more convincing to a reader . . . than pages of summarized numbers.”).

world.²¹ Whether called narrative, rhetoric, or interpretation, stories explain or justify the situation in which we find ourselves.²² This includes the legal situation that frames (enables and constrains) creativity and innovation. At the same time, stories are inherently political.²³ They can justify the status quo or affect change.²⁴ Their repeated use (along with repeated words and phrases) reify or transform categories and expectations, which in turn structure relationships (legal and otherwise) in our communities.²⁵ Stories change the way we understand and remember personal and historical memories. Studying the stories told and the language used is of great importance for understanding how we live together in organized communities.

I have completed thirty face-to-face interviews, each of which are approximately ninety minutes long. The interviews are fairly split between legal or business professionals on the one hand and individual creators or innovators on the other. I aimed to diversify the interview subjects across the varied sciences and the arts. Because the sample is only thirty people at present, the below analysis of the transcripts is provisional. Interviews are ongoing. I have used what in qualitative research is called a “snowball sampling” method, which creates a stream of interview subjects based on referrals from those already interviewed.²⁶ The benefit of this kind of sampling method is that whenever possible, I am able to interview the artist or scientist, her business manager or employer, as well as her legal advisor. This provides diverse perspectives on various mechanisms and influences on the same creative and commercial activity. I am also able to select interviewees who I believe will have diverging views from those already interviewed based on recommendations from those who have already taken part in the study.²⁷

21 Although seemingly an undeniable principle, George Lakoff and Mark Johnson have written famously about it in *Metaphors We Live By* (1980).

22 See ROSS CHAMBERS, *STORY AND SITUATION* 212–13 (1984).

23 See Hayden White, *The Value of Narrativity in the Representation of Reality*, in *ON NARRATIVE* 1, 11 (W.J.T. Mitchell ed., 1980).

24 See Silbey, *supra* note 17, at 323–27 (describing the origin stories of intellectual property law as justifying certain social hierarchies); Jessica Silbey, *Comparative Tales of Origins and Access: The Future for Intellectual Property*, 61 *CASE W. RES. L. REV.* 195, 208–14 (2010) (describing changing narratives in relation to changing political structures of property entitlements).

25 The isolation and analysis of narrative components of selection, time and relationality coalesce to form a particular moral ordering or authority. See White, *supra* note 23, at 22.

26 See Jan E. Trost, *Statistically Nonrepresentative Stratified Sampling: A Sampling Technique for Qualitative Studies*, 9 *QUALITATIVE SOC.* 54, 54–57 (1986).

27 For more detail on the interview sampling, see *infra* app. A.

My interview protocol is standardized—the same questions are asked of nearly everyone—although some questions are more relevant to some interviewees than others. The protocol is designed to generate both an in-depth and open-ended conversation, in which I guide the interaction with scripted topics but I am always responsive to the interviewees' interventions and tangents.²⁸ I do not ask directly about IP and incentives, but instead access ideas about these topics from within the interviewees' everyday practice as well as through their personal and professional biography. I ask about how they make a living, whether it suits them, what they would change about it. I ask about their aspirations—if they could be doing or be anything in ten years, what would it be? I also ask about daily activities and concrete problems and pleasures they experience while working. Inevitably, they discuss a dispute about rights or control over their (or others') creative endeavors. Or they will describe professional or personal highs or lows relating to their work. They talk about how they work and with whom. They talk about professional relationships, whether they function optimally, and what puzzles or excites them about their professional lives. Interviewees are asked to suggest reasons for their career successes or failures, making comparisons when possible to others in the field who have been more or less successful. From these descriptions, I am able to glean attitudes as well as behaviors about creativity and innovation as well as law's varied interventions in their everyday life.

The interview transcripts form a database of language—cultural tropes and meanings—that describe how respondents think about their creative and inventive processes and the legal mechanisms that frame their work.²⁹ The transcripts evidence both *what people think* and *how they engage* in creative and inventive processes and intellectual property law. Understandably, the data is based on what is reported, and thus this study is foremost a project about popular consciousness about creative and innovative processes and its relationship to IP law. The interviews are evidence of the culturally circulating schema, memes, interpretations, and understandings of the intersections of creativity and the law. Inasmuch as the analysis of the transcripts also

28 For descriptions of interview methodology that informed mine, see generally ELLIOT G. MISHLER, *RESEARCH INTERVIEWING* 9–34 (1986), and JAMES P. SPRADLEY, *THE ETHNOGRAPHIC INTERVIEW* 4–8 (1979).

29 All transcripts are uploaded into Atlas.ti, a qualitative analysis software program. The transcripts are coded based on inductively and deductively determined codes, once by a research assistant and then again by me (to correlate coding and insure intercoder reliability). For more discussion of the data analysis, see *infra* app. B.

reveals preferences acted upon by the interviewees through their descriptions of their work and its effects, the project also explores possible connections or disconnects between popular consciousness and self-reported behavior.

Qualitative analysis based on discursive patterns, language repetition and narrative structure provides a rich and complex picture of the work of creativity and innovation. So far, the data confirm some quantitative studies of IP law and policy. But the interviewees also dispute basic assumptions about individual and institutional decisions regarding IP's relation to creativity and innovation. This paper will begin the process (and the book will develop it further) of highlighting both concurrences with and divergences from IP law's rationales. I hope that the signal contribution of this project as a whole will be to supply *a thick description of the varieties of intellectual properties' interventions* in the lives of those interviewed. Analyzing these varied stories adds diversity to the stubbornly one-dimensional explanation for IP protection in the United States.

III. PROJECT FINDINGS

As one might imagine, law takes many forms in these interviews.³⁰ Law is not only the statutory or common law on which we tend to focus as lawyers. Diagramming or expounding upon the many varieties of legal forms in the interviews is beyond the scope of this paper, however.³¹ Suffice it to say that the law on the books—federal statutory IP law—is only one small slice of the kind of “law” that the interviewees mobilize or encounter in their professional lives. They evoke ideas of natural law, norms, and customs. They describe law as top-down and authoritative (a kind of public law emanating from a sovereign) as well as facile, relational, and capable of being shaped by individual will (a kind of private law, based on local custom and courtesy).³² These many varieties of legality form the context in which intellectual property claims arise and are debated. If anything, the varieties of law and legal consciousness present in these interviews strongly suggest that IP³³—as lived through the language and practices of those interviewed—is much more varied than the statutory

30 See Jessica M. Silbey, *What We Do When We Do Law and Popular Culture*, 27 *LAW & SOC. INQUIRY* 139, 147 n.7 (2002) (describing the breadth of law's possible manifestations in culture).

31 I expect to devote a portion of the book to this discussion.

32 For a helpful introduction to jurisprudence and the various theories of law, see generally BRIAN BIX, *JURISPRUDENCE* (5th ed. 2009).

33 For a definition of legal consciousness, see *NEW OXFORD COMPANION TO LAW* 695–96 (Peter Cane & Joanne Conaghan eds., 2008).

and common law we encounter in court decisions and tend to use as the basis of our theories driving law reform.

A. *Inspired Beginnings*

The discussion below traces the language of beginnings in the interviews. Mainstream discussions of IP incentives appear to presume a conflation of extrinsic motivations with intrinsic motivations or, at least, a hierarchical relation between the two.³⁴ As the Supreme Court has famously written in the context of copyright, quoting Samuel Johnson, “[n]o man but a blockhead ever wrote, except for money.”³⁵ In other words, we work primarily to earn a living. Despite being a driver in the IP law and the policy discussions, pecuniary gains based on the right to exclude others or extract rent from use of creative or innovative work is at best obliquely mentioned and at worst entirely absent from the interviews.

The absence of an economic incentive *in the beginning* correlates with recent studies that highlight the role of intellectual challenge and personal interest as intrinsic motivations.³⁶ Studies also track the positive role of attribution and contributing social value as extrinsic motivations.³⁷ Curiosity compels asking those who do hard work that

The concept of legal consciousness is used to name analytically the understandings and meanings of law circulating in social relations. Legal consciousness refers to what people do as well as say about the law. It is understood to be part of a reciprocal process in which the meanings given by individuals to their world become patterned, stabilized and objectified.

Id.

34 Some relevant academic literature distinguishes between incentives and motives. See, e.g., Henry Sauerman & Wesley Cohen, *What Makes Them Tick? Employee Motives and Firm Innovation 2* (Nat’l Bureau of Econ. Research, Working Paper No. 14443, 2008), available at <http://www.nber.org/papers/w14443>. Sauerman and Cohen describe benefits that are contingent on effort or performance as incentives, whereas individual’s *preferences* for the contingent work benefits are called motives. At this stage of the current project’s analysis and for clarity purposes, I prefer *extrinsic* versus *intrinsic* motives, and consider both of them “incentives” of a kind.

35 *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 584 (1994) (quoting Samuel Johnson, 3 *BOSWELL’S LIFE OF JOHNSON* 19 (George Hill ed., 1934) (alteration in original)).

36 See Henry Sauerermann et al., *Doing Well or Doing Good? The Motives, Incentives, and Commercial Activities of Academic Scientists and Engineers* (June 15, 2010) (unpublished manuscript), available at <http://www2.druid.dk/conferences/viewpaper.php?id=501180&cf=43>; see also Strandburg, *supra* note 14, at 95 (arguing that, at the margin, scientific researchers are more likely to respond to incentives like productivity and autonomy as opposed to wealth maximization).

37 See DePoorter et al., *supra* note 2, at 1071–72 (citing work regarding varieties of social recognition and other nonpecuniary rewards); Fisk, *supra* note 16, at 53–67

is not immediately recognized as valuable or important by an external audience (such as writing a draft novel or conducting a scientific experiment), “how did you get into this line of work?” or “what prompted you to embark on that project?” In asking interviewees questions such as these, I expected to hear a variety of answers, including “to earn a living.” But this was rarely the response. Indeed, when pushed, many interviewees expressed surprise at the fact that they could earn a modest living from their artistic or scientific work about which they were passionate.

The below descriptions of the beginnings of professional lives in the arts or sciences is not a substitute for the economic incentive that purports to drive or justify intellectual property protection. But the diversity with which the interviewees describe the reasons why they embarked on a life of innovation in the creative and scientific fields stands in stark contrast to the monolithic language of monetary incentives that dominates intellectual property law and policy. It also illuminates the varied ways in which creativity and innovation takes root in the fabric of our lives. Additionally, it begins us on a path to understanding how these roots and off-shoots are integrated into social organizations and legal relations.

Linguistic and thematic patterns emerge from the interviews regarding the beginnings of work. Broadly speaking, interviewees describe the beginnings of creative or innovative endeavors in terms of four diverse, but related, characteristics: (1) serendipity or luck (taking advantage of a moment); (2) intrinsic or natural forces (inevitability of a discovery); (3) play and pleasure (freedom and joy of exploration); and (4) need or urgency (puzzles or problems to solve).

1. Natural Forces and Serendipity

Several interviewees compared the moment they knew they created something worthwhile to an alarm going off. Here is a journalist and novelist describing a beginning of a writing project: “It feels like you are almost like a filter, with a little alarm, and the alarm is, ‘Oh, that’s a story. You know, that’s a story that people would be . . . inter-

(2006) (describing why attribution matters); Rebecca Tushnet, *Economies of Desire: Fair Use and Marketplace Assumptions*, 51 WM. & MARY L. REV. 513, 517–18 (2009) (describing the importance of attribution and pleasure in producing creative work); see also Peter S. Menell & Suzanne Scotchmer, *Intellectual Property Law*, in 2 HANDBOOK OF LAW AND ECONOMICS 1473, 1479–1524 (A. Mitchell Polinsky & Steven Shavell eds., 2007) (describing how the relationship between patent protection and innovation is complex and often diverges from the overly simplistic incentive story).

ested in reading about’”³⁸ This alarm is an external signal indicating that it’s time to dig in and work on the project. It also marks an internal moment of clarity and purpose. A software engineer describes a similar moment when he discovered his next entrepreneurial project: “It was so obvious . . . it was so clear to us that the presence was going to have to move out to the network . . . that is the moment of invention, it’s not like, sitting around drawing a drawing, it’s actually like a little when you see the concepts coming together”³⁹ Both the above writer and software engineer took leaps of faith to pursue their respective work when lacking external validation or encouragement. They would invest a lot of time, labor, and money in their projects and risked never being told that they had made something worth their time and energy. As described, the metaphorical alarm bell was a sign to them that they could move forward with confidence. They describe the beginnings of invention or discovery in terms of forces beyond their own power. Rather than rely on their own subjective hopes or beliefs, the alarm—a symbol of time and readiness—justified moving forward, in their mind, as if someone was waving a flag to say: the time is now, this is it.

In lieu of the technical mechanisms of a disembodied alarm, the interviews also contain metaphors for creative moments or invention related to nature or magic. The above-cited software engineer, like the below-cited web-designer, describes the beginning as a mirage, something before his eyes that, in an unexplained and thrilling way, makes itself perceptible with clarity to him. For the software engineer above, the beginning of the project was the “moment of invention” which was not about the act of sketching or brainstorming (“drawing a drawing”)⁴⁰ but instead when the idea appeared before him (“you see concepts com[e] together”).⁴¹ He does not describe this moment of invention as coming about of his own will but magically of its own force. A web-designer echoed this sentiment in terms of a portal he was asked to create: “[W]e did the research on how their business was organized, and it was almost—it was one of those things where it was almost obvious what needed to happen, and all I needed to do was

38 Interview with CG, Journalist & Novelist, in Brookline, Mass. (Sept. 5, 2009). As part of the human research protocol, all interviewees were promised anonymity. I use letter codes for research identification purposes only.

39 Interview with ARD, Software Engineer & Entrepreneur, in Bos., Mass. (June 17, 2008).

40 *Id.*

41 *Id.*

kind of not mess it up, you know?”⁴² As with the alarm, the magic of the appearance of an idea compels these writers and engineers forward. One needs a sign from nature (or God, or whatever your mystical preference) to encourage the commitment of time and labor that the work will entail.

In addition to the magic of discovery, some interviewees explain their beginnings as writers or scientists in terms of a serendipitous confluence of forces. This is, again, a description of fortuity but one that is rooted less in natural (or supernatural) forces and more in material reality: people they know and places they’ve been. Below, a children’s book author talks about her beginnings and combines the natural alarm experience with the luck of working in publishing and knowing people in the right places.

[W]hile I was at Scholastic, my son at that time was about six years old, and I was reading books to him, and I went to bed one Saturday night remembering the book that I had read to him over and over and *over* again. And during the night, I had an idea for a book, and when I woke up in the morning, it was about half written. And I got it on paper, showed it to a friend at Scholastic who said—and I will never forget these words—“[Carol] you’re a writer!” And then I became a writer.⁴³

This respondent explains how the work of being an editor at Scholastic press and of being a mother astonishingly combined to make her into a writer. But she also describes the moment of recognition—“I am a writer!”—as coming after a creation event that felt intrinsic and springing uncontrolled from within her as with the above-cited engineers and journalist.

It is common to hear “creation stories” that render the moment of inspiration for a scientific theory or poem into myth.⁴⁴ Both serendipitous and natural forces conspire to characterize these creation stories as beyond the control of those who will be credited with the creation or invention. The interviewees appear to relish the lack of responsibility attributable to their own conscious behavior. In this

42 Interview with MB, Information Architect & Web-Designer, in Brookline, Mass. (Sept. 26, 2008).

43 Interview with BH, Children’s Book Author, in Foxboro, Mass. (June 16, 2010) (name has been changed to preserve anonymity).

44 See Silbey, *supra* note 17, at 320, 323 (describing “origin stories” as myths to justify a social or legal status). The story of Isaac Newton and the apple tree is one such story. The origin of the lyrics of the Star Spangled Banner (written by Francis Scott Key after watching a battle during the War of 1812) is another. See also CSIK-SZENTMIHALYI, *supra* note 18, at 102–04 (describing the “aha” moment as arriving after a period of incubation).

vein, below a musician describes the inspiration for one of her most popular songs as an accidental confluence of natural beauty and canine companionship. Like the above-cited innovators, this musician experienced the making of valuable creative work as appearing to her nearly fully formed.

I was walking [my dog] . . . [I]t was the most beautiful night. I wasn't trying to write a song; I was just walking with her. And the song, it was one of those weird songs that just came to me in my head . . . I heard the music. The whole thing came to me on the course of a two-and-a-half-mile walk. Got back to the car, wrote it down on a map of New England . . . I didn't have anything else in the car. And it was like, there. It was complete.⁴⁵

This musician goes on to say that “[this] almost never happens” but that she is so grateful it did because it was the popularity of that song that ended up paying for unexpected medical care her dog would need later.

And so then almost a year later—April of this year—literally the morning I was taking [her] to the vet, opened the front door—I mean literally with her and the suitcase, like out the door to go to our vet—the mailman is standing there, hands me this big envelope from satellite radio. I open it up, and it's \$1,600. And I just squealed. . . . I was like, “You have got to be kidding!” Because . . . I knew we were going in for a big surgery, and I didn't know what it would cost, but I—you know, you never think about that. . . . [T]hat's what credit cards are for. But, you know . . . it was primarily for that song. . . . And so it was just . . . really amazing.⁴⁶

To this musician, the conception and writing of a popular song so quickly was both mysterious and rare, but it was explained a year later when the money was necessary for her dog's life-saving surgery. Like an unexpected gift, this musician relishes the arrival and the benefit the song brings her.

In a very different creative milieu but with similar language and sentiment, a theoretical chemist describes the origins of one of his major breakthroughs in modeling molecular behavior as one effect of the unusual circumstance of dating a mathematician.

[A] lot of stuff I just sort of learned myself, I mean just through random, accidental types of things. I mean, for example, my girlfriend when I was at [grad school] happened to be an applied mathematician, so I read some books and I talked a lot with her and her friends, and I just learned all the applied math stuff by doing that.

45 Interview with MH, Singer-Songwriter, in Somerville, Mass. (Dec. 14, 2009).

46 *Id.*

And then it turned out that a lot of that stuff was useful in doing theoretical chemistry . . . but a lot of people in chemistry didn't know that stuff because they hadn't had this experience.⁴⁷

This language of accidents, randomness, and “happened to be” describes a lack of control and a fortuity. It also demonstrates a willingness to embrace chance but to do so in the course of one's own specific time and space. The children's book writer concretely anchors her “aha” moment to the fact of her being a parent and an editor. The musician ties her song's origin to seeing the night sky and appreciating her dog's companionship. This chemist situates his own breakthrough experience in terms of his voracious reading habits and his love life. This same chemist attributes scientific genius (what he calls “superstars”) to essential qualities of a person's mind rather than to learned behavior or habit.⁴⁸ This coincides with the above-described notions that important or worthwhile innovations often originate with forces beyond one's control.

These interviews describe creation as both serendipitous (a function of situations or experiences that are unplanned and beyond one's consciousness) and organic (being driven by natural forces). But key to these accounts is that these individuals take advantage of the serendipity or natural forces.⁴⁹ They are moved to make something of the “aha” moment, as if *called* to write the song, the book, or the algorithm. These accounts indicate that they recognize value in what becomes “their” innovation from external signals but it becomes aesthetic or scientific work only when they act to harvest it.

2. Urgency and Play

Two other reasons interviewees provide for embarking on an innovative project are (1) need or urgency and (2) play or pleasure. In everyday life, these sentiments are often opposed (“I need to do my laundry” not “I enjoy doing laundry;” “I have fun playing soccer” not “I must play soccer”). In these interviews, by contrast, need and pleasure are usually intertwined.

47 Interview with RF, Theoretical Chemist & Entrepreneur, in N.Y.C., N.Y. (July 7, 2010).

48 *See id.*

49 Csikszentmihalyi describes similar elements of creative processes (luck and serendipity) in his book *Creativity*. *See* CSIKSZENTMIHALYI, *supra* note 18, at 46–47. As with the interviews I describe, Csikszentmihalyi also considers that luck is not the only or most important element. “Luck . . . is also easy to overstate. . . . Being in the right place at the right time is clearly important. But many people never realize that they are standing in a propitious space/time convergence, and even fewer know what to do when the realization hits them.” *Id.* at 47.

Creativity theorists have written about the “problem finding” and “problem solving” mode of innovators and artists.⁵⁰ Csikszentmihalyi writes about three sources of problems in search of solutions: personal lives, domain-related (within a person’s field), and social pressures.⁵¹ He describes the problem as a “stimulus” triggering the creative process. “The creative process starts with a sense that there is a puzzle somewhere, or a task to be accomplished.”⁵² The interviews I conducted confirm this conclusion, except the stories my interviewees told concern acute problems in their personal or material lives and sometimes in the larger community. Csikszentmihalyi’s concept of “problem” was often on a larger intellectual or historical scale, as in exploring the problem of colonialism or disease.⁵³ The point to be made here is that problems big and small can be motivation for creative or innovative output.

One composer, who was a very successful chemical engineer earlier in life, describes the origins of his new career as a librettist and musical composer as a function of his parenting troubles. His son, who had perfect pitch, is also autistic and as a young boy had trouble joining group activities.

[W]e couldn’t get him involved in a conventional activity of any nature, and we didn’t really know why. It turns [out] he’s a high-functioning autistic But we didn’t know that. All we knew is that there was no way to get him to really explore his voice. . . . We went and we saw [the Children’s Opera] *Dracula*, and [my son] couldn’t sit still for it [But t]he kids who were in it just thought this was the greatest thing. And I decided that we’d go home and we’d write our own opera, because, you know, [my son] saw that his friends were in this opera. He could never do it, but if I were to write some music for him to sing on a subject that interested him . . . he would sing it, and we could sing together. So we talked about what kinds of stories he liked, and what caught his attention. . . . So I started writing some [operatic] music [for him].⁵⁴

Children feature frequently in origin stories, as we saw with the children’s book author above. Children and their needs are inextricably

50 See *id.* at 83, 95; see also Fromer, *supra* note 2, at 1444 (citing literature on “problem finding” and “problem solving” perspectives among scientists and artists).

51 See CSIKSZENTMIHALYI, *supra* note 18, at 83.

52 *Id.* at 95.

53 See *id.* at 94–95. The reason for this, in part, is due to the selection of his subjects, who were comprised of famous individuals in their field. My selection was not of “geniuses” but tried for a fair cross-section of industry actors.

54 Interview with DB, Music Composer & Chem. Eng’r, in Cambridge, Mass. (May 18, 2010).

bound with the structure of our professional lives and are often catalysts for creative or inventive output. This chemical engineer, who studied music theory in college, describes becoming a composer of operas to involve his child in music under circumstances that are conducive to his son's particular disability.

There are other stories of need or urgency with roots in everyday material life, which needs motivate the start of a new and innovative project. Below, an artist describes an experience when, as a young painter, the necessity of making do with very few art supplies shaped her future career to this day. When she was young painter in India on a Fulbright fellowship, she was preparing for an exhibition and her paints got lost in the mail.

I had arranged for this big exhibition that the embassy was going to sponsor, and I had no paint (laughter). And I was very lonely, and very nervous about—you know, here I was; what was I going to do? . . . I met a . . . senior Fulbright artist . . . and she was a sculptor. And I think—and she told me that she had been a painter, and that all the women sculptors had been painters. And so . . .—I think it gave me permission . . .—I was like, “Oh, if she can do it . . .” . . . And so I started making sculpture there. And in India, I could afford to work with materials and have people help me. . . . [But] I didn't have enough money to make big bronze sculpture to fill this exhibition, and I was going for a walk every evening, and a swim on the beach. And that was when the fisherman were bringing in their nets. And I started looking at those forms on the beach, and I thought, “Well, there's another approach to volumetric form, without weight.” And I could ship them around; they'd fold up, and they could be extended. And I'm still working with those ideas.⁵⁵

This sculptor's explanation is full of themes found throughout other interviews. She describes needing a reason or external sign to push her to try something new. She finds it in the inspiration of those who came before her (“if she can do it. . .”). Like the musician above describing her evening walk around the reservoir, this sculptor describes being inspired by natural and material forms around her and recognizing in those forms something of value to adapt for her own art. But also motivating her shift from painting to sculpting was the urgency of time constraints and her lack of material resources. She needed to fill the gallery halls, yet her paints were lost, and she lacked the funds to cast large bronze sculptures. Moreover, she had to get her sculptures home; they had to be moveable. The malleabil-

55 Interview with JE, Painter & Sculptor, in Brookline, Mass. (Apr. 27, 2010).

ity of the found material with which she began working has been one of the hallmarks of this sculptor's work ever since.

As one might expect, scientists and engineers similarly describe their creative impulses in terms of urgency or need. Biologists describe the need to solve certain medical problems and while doing so experience significant pleasure in that challenge.⁵⁶ Similarly, small device manufacturers explain the reason for their work as filling an identified need. Here, a lawyer describes the inception of one of his client's inventions—a device for a gutter that prevents ice dams—as particularly necessary in his New England community.

[H]e had a problem, and he thought, well, it would be neat to do this, especially in New Hampshire, because people's gutters . . . almost every year, they have problems with their gutters where they splinter . . . because the ice expands . . . And he had the device . . . where the gutter . . . folds [I]t's a simple device—everybody can understand it, but nobody thought of it. [T]he technology is so basic, it's something where the second I saw it, I wanted it on my house.⁵⁷

This lawyer's description of the need his client set out to fulfill is typical—stereotypical even—of the small-time inventor stories. Needs can be material (“I lost my paint and so I am working with the materials I have”), socio-emotional (“I needed to help my child”) and consumer-oriented (“We need a better way to keep our gutters ice-free.”). But whatever the need, the interviewee explains it as the initial inspiration that started them upon the activity that culminates in their particular form of creative or innovative work.

The interviewees do not set out to identify or solve any problems within a field with which they are *unfamiliar* or *unattached*. To the contrary, writers explore personal and worldly problems through writing; visual artists do the same through painting or sculpture or some other medium. Throughout these interviews, respondents discuss how much pleasure their particular work brought them. And by this, I did not understand them to be saying that solving the problem and finishing the product brought them pleasure but instead that the act of *engaging* in their craft made them happy (be it designing computer programs or writing and playing music).⁵⁸ Indeed, often interviewees

56 See Interview with MM, Patent Lawyer, in Concord, Mass. (May 11, 2009) (describing biologist client). This kind of problem solving comports more directly with the psychology literature. See CSIKSZENTMIHALYI, *supra* note 18, at 83–98.

57 Interview with PN, Patent Lawyer, in Bos., Mass. (Aug. 12, 2008) (talking about small inventor client).

58 Csikszentmihalyi's interviews described the same sentiment. See CSIKSZENTMIHALYI, *supra* note 18, at 107.

conflated the need to engage in their craft with the pleasure the craft brought them. The following quote from an unpublished novelist is exemplary of many of the interviews:

I also think of writing . . . having some similarities to exercise, it being something that I need to do every day, and that it's not really explicable—there are plenty of people who *don't* have to exercise every day. But when I do it, I feel better. And this is what I notice: that this is the year that I first . . . quit and moved up to Vermont [to write full-time]; I noticed that I felt less crazy as a person if I got my work got done I was like, "Oh my God! This really makes me feel calm!"⁵⁹

Many other respondents—both artists and scientists—would confirm this sentiment. In response to my questions that were asking essentially "why do you keep doing the work you do," they would say "because it keeps me balanced and happy."⁶⁰

Need and desire are intertwined as motivating forces behind the embarking on a day's work. Need might be momentary and circumstantial, whereas desire is ongoing and satisfied only partially. But in terms of those engaging in creative and innovative work, the work is pleasurable because it satisfies a passion. In other words, respondents describe the need to work because they crave the enjoyment it brings.⁶¹

Specific to this pleasure is the *freedom* the respondents feel while engaging in their work—a kind of free-play that is, simply, fun. Sometimes this feeling of play or freedom arises in the context of work autonomy. Other times it arises through the exhilaration of adventure and exploration. Consistent throughout many of the interviews was that this free-play was central in fomenting more creativity and innovative output in a kind of generative and content cycle.⁶²

59 Interview with CH, Copy Editor & Unpublished Novelist, in Bos., Mass. (Aug. 24, 2009).

60 Here is another respondent, confirming this sentiment:

I mean, I know that if someone told me right now, 'You will never be able to make a record or perform again,' I would not stop writing. Like that's my filter on the world. That's how I recycle an experience and turn it into something that's—feels beautiful to me. And there is just so much chaos, and that's the way I've always made order out of all of this stuff that's so hard to navigate.

Interview with MH, *supra* note 45.

61 See Tushnet, *supra* note 37, at 533–35 (describing creativity as a form of addiction-satisfying activity).

62 This is consistent with studies conducted by Mihaly Csikszentmihalyi and other contemporary writers. See MIHALY CSIKSZENTMIHALYI, *FLOW* 43–48 (1990); DANIEL PINK, *THE SURPRISING TRUTH ABOUT WHAT MOTIVATES US* 88–92 (2009).

One painter, who was a lawyer most of his life but who now in his 60s is becoming a well-known visual artist, describes his creative beginnings as a painter in terms of playing around in his kitchen:

I didn't set out to be a painter. . . . I wanted to be a writer, and that was much more daunting, because I had spent a lot of time thinking about what great writing was [I]t became sort of a big hurdle to overcome. But painting, I just started doing it because it was—you know, I enjoyed it; it was meditative for me. . . . A lot of the painting started out as what I would call getting into a "mental space," where . . . I would . . . work for two to four hours a night in my kitchen.⁶³

This painter, like many other artists, describes that crucial to his beginnings as an artist was having freedom to experiment and to let thoughts or actions roam. He describes how experimenting with all sorts of paint materials was essential to stumbling upon a winning combination of acrylic for his drip painting for which he is becoming famous.⁶⁴ This combination of accident, need and playfulness was common in the interviews when describing how and why they began their work.

In another context, this free-play might be called "freedom to operate." As described by many respondents, freedom is crucial to engaging in and enjoying the activity as well as important for the production of innovative and disruptive new technologies or creative works.⁶⁵ Freedom to play and the pleasure of play go hand-in-hand in these interviews. They are also predictable precursors to the act of creation or discovery.

This is true not only with the artists but with the scientists and engineers. Scientists and their business managers emphasize the benefit that intellectual autonomy and work-place playfulness bring to their fields.⁶⁶ One general counsel describes the most prolific inventors in his biotech company as "juvenile delinquents" because they are always figuring out ways to break rules or get around them to make something new and different. He says:

63 Interview with EC, Lawyer turned Painter, in Martha's Vineyard, Mass. (July 8, 2010).

64 *See id.*

65 The intellectual property literature is rich with critiques of how strengthened intellectual property protection restricts access and use of creative or innovative work thereby stifling the very creativity and innovation the intellectual property laws were meant to incentivize. *See, e.g.,* Cohen, *supra* note 17, at 347; Heller & Eisenberg, *supra* note 3, at 698–701; Murray & Stern, *supra* note 6, at 651.

66 For arguments about the importance of autonomy in business organizations, see DANIEL PINK, *DRIVE* 72, 163 (2010).

I think the most successful inventors here are the people who are constantly looking for an edge, and looking of how to buck the system. They see it as a challenge . . . Always looking to like, game the system or something like that. . . . Shortcuts, or just trying to get around things. They were probably horrible juvenile delinquents in their youth (laughter).⁶⁷

This same lawyer describes invention happening in the lab “by accident,” which I understood in the context of the discussion to mean not only that serendipity plays an important role in triggering innovation (as described above), but also that fortunate accidents are one result of the freedom his scientists enjoy to explore paths not previously taken. This general counsel intentionally fosters a culture in his company to encourage scientists to think outside of the box and break certain rules, to “play hard,” and to innovate their particular scientific landscape. In fact, his particular company incentivizes this kind of play with very modest monetary bonuses.⁶⁸ But it is clear that he believes the motivation to innovate is not the ten dollar gift cards that he hands out as payment for the “cool[est] idea”⁶⁹ but the emotional and reputational kudos that winning provides each scientist within the firm as well as the fun of the game.

Across these interviews, inventors and creators discuss the significant pleasure the work that leads to a discovery or creation brings them. One e-commerce general counsel describes his reason for entering the e-commerce business as building on his expertise, which developed in part because he simply enjoyed working through the problems in the field.⁷⁰ And really, this isn’t surprising. Social scientists who study work and creativity have said the same thing about drive and motivation;⁷¹ it happens not because of the financial rewards from outputs but, at least initially, because doing the work itself was fun. What is surprising, however, and potentially new to the IP literature, is that these stories and patterns within the interviews tell us that these creators and innovators do not describe the benefits of ownership (e.g., control or revenue) as a reason to embark on their life or project in art, science, or business. They give other reasons for doing what they do *at first*. These “origin stories” infuse their everyday life as writers, musicians, software engineers, entrepreneurs, or chemists, with the gloss of inevitability, luck, free play, or personal need.

67 Interview with TL, Gen. Counsel at Biotech Co., in Bos., Mass. (Apr. 30, 2008).

68 See *id.* (describing internal competitions to disclose all new ideas).

69 *Id.*

70 See Interview with DM, Gen. Counsel to an E-commerce Co., in Cambridge, Mass. (Apr. 29, 2008).

71 See CSIKSZENTMIHALYI, *supra* note 18, at 107.

IP law's role appears absent here. Or, one might say that IP law is unfelt and unseen by these interviewees as a guide or constraint in their early development as artists and scientists. The field of play appears open to them and they engage it: where accidents or serendipity is allowed to happen, where pleasure is encouraged, where nature or instinct can be closely explored or followed. We might say with confidence of course law is present here, as it is everywhere, in the employment contracts, book contracts, or loan agreements, the private law that facilitates business relationships as well as personal well-being. But, crucially, if this project measures popular legal consciousness of IP's role in facilitating creativity and innovation, these interviewees do not experience or see IP law as a structuring mechanism in that precise way. Instead, they describe the origins of creative or innovative impulses as coming from personal biographies, from diverse and serendipitous experiences, from doing what pleases them, and as generated from within a field of relative personal and/or professional freedom.

None of this is to say that IP as a legal construct or cultural object has no role to play in the creative or innovation industries. The above is simply a reporting of interviewees' stories about the *beginnings* of their lives and projects as artists or scientists, business people or lawyers. IP ownership appears not to be the initial trigger for creative or innovative work. Nonetheless, I see it functioning more robustly in the respondents' later professional trajectories, especially in the context of business negotiations, growth, and conflict. In particular, IP appears to play a role in serving some of the later arising interests we have come to think it is supposed to serve—facilitating distribution and commercialization.⁷² And so, if these respondents are to be a guide, IP intervenes later in the lives of the creator and of their creations than IP law has heretofore claimed.

B. *The Work of Craft: Work-Makes-Work*

Beyond serendipitous, inevitable, playful, or urgent beginnings, respondents describe that which daily draws them to the office or stu-

72 A forthcoming article by Julie Cohen posits something similar: that the author-centered model of incentives for copyright is simply wrong as a descriptive matter and that we should be talking instead about how copyright sustains and generates corporate welfare in specific industries. In other words, "the incentives-for-authors story impedes clear-eyed assessment of copyright's true economic and cultural functions. The purpose of copyright is to enable the provision of capital and organization so that creative work may be exploited." Julie E. Cohen, *Copyright as Post-Industrial Property: A Research Agenda*, 2011 WIS. L. REV. (forthcoming) (on file with author). The interviews I have been collecting bear out this theory empirically.

dio. They describe how and why they work every day despite (for some) an inconsistent or uncertain financial or emotional payoff. In contrast to the beginnings described as lucky, inevitable, or necessary, the descriptions of daily work are as a craft—laborious and painstaking, sometimes mechanical and tiresome, although also rhythmic and comforting.⁷³ The descriptions of work contain internal dialectics that appear generative of the work, such as (1) time/space and (2) personal property/labor. There is an implicit focus on the asset that is the product of the workday (a painting or software program), but the language used to describe how and why the work is made directs attention away from typical IP values (creation of a reproducible object for dissemination or commercialization) to alternative ones (everyday routines, integrity of the person and her labor, community building).

1. Time/Space

Many respondents describe their work day in terms of spatial and temporal dimensions. In spatial terms, the laboratory, office, or studio is central to facilitating work. Being in a confined space and focusing on the details of a project defines the pleasure and purpose of the project. One writer describes how she enjoys sitting at her writing desk and being surrounded by pictures of her fans (juvenile readers) and that it was a safe and encouraging place in which to work.⁷⁴ The physical space is not confining but defining—it sets the stage to get the work done. Here, a painter describes the importance of transitioning from doing his painting at home to a studio:

I started to go the studio every day. And it was sort of—it was as a result of—basically, I adopted an attitude: “I’m going to make something every day.” Even if I don’t like what I’m making, I’m going to make something. And you know, I treated it like a job. . . . And a lot of things came out of that. I mean, first of all, I started taking it seriously⁷⁵

⁷³ See, e.g., Michael J. Madison, *Creativity and Craft*, in CREATIVITY, LAW, AND ENTREPRENEURSHIP 18 (Shubha Ghosh & Robin Paul Malloy eds., forthcoming 2011) (on file with author) (discussing the role of crafted goods in copyright law and defining craft for his purposes in the broader sense of “human-produced artifacts even if their tangible manifestations are digital or virtual. . . . [T]o physical things, or at least to material (including digital) things, rather than to the cognitive or imaginative processes that produce them.”).

⁷⁴ See Interview with BH, *supra* note 43. Csikszentmihalyi writes of a similar phenomenon in terms of more natural settings. See Csikszentmihalyi, *supra* note 18, at 135.

⁷⁵ Interview with EC, *supra* note 63.

The physical space of the studio elevated his sense of purpose and drove him to produce more. But the talk of space does not have to be about the fact of a room or desk of one's own. It could be about how physically close one is to co-workers (open cubicles or long hallways) or whether the space is adequately stocked (sufficient tools, light, or sounds). All are described as crucial to the day's productivity.

Time is less of a focus, except to say that work takes time. And, respondents emphasize that flexibility of schedule (a form of autonomy) is essential to their productivity. They don't focus on the importance of starting late or leaving early (or vice versa). But references to being in control over one's time suggests that flexibility over the hours spent working is an accepted and desired feature of their workday for it to be successful. One writer talks about having "complete control over [her] environment" as optimal for writing.

I would get up at the exact same time every day, go to bed at the exact same time every day; . . . go to bed to read at exactly the same time, . . . I mean, it was . . . a little crazy. But I could do it because I had complete control over my environment. . . . [I]n the morning, I would get up at exactly the same time, I would, you know put on my oats, take a shower, come down and eat for 10 minutes, and then go . . . be sitting in front of my computer at 9 o'clock, down. And that was it.⁷⁶

Another respondent who, as a lawyer in the biotech field, closely identifies with the scientists at his pharmaceutical company, describes how he will often work late nights, not because he likes to but because the work demands it, the culture of the place appreciates it, and it makes him feel good to get the work done and be recognized as a hard worker.⁷⁷ And then there are the engineers and lab scientists who pride themselves on the marathon work sessions, either coding or running tests. Working long, hard hours is part of their identity and essential to the value they produce. One software engineer described the initial stages of his company in terms of a grueling nine-month period of coding and cold-calling every day.

And we coded for about—I don't know—eight months straight for a demonstration. And you know, this is coding, like—I don't know. Like at that time, we were coding probably 70–80 hours a week. And it's *just* coding. And then I started towards—after like, six

76 Interview with CH, *supra* note 59. See Csikszentmihalyi, *supra* note 18, at 144 (describing a similar desire for patterns or rhythms to facilitate creativity).

77 See Interview with DD, In-house IP Counsel at a Pharm. Co., in Cambridge, Mass. (Aug. 8, 2008).

months, I started cold calling. So I would spend enormous amounts of my day just cold calling cable companies, all day long.⁷⁸

Time for these respondents characterizes the work's value and their identity, both in terms of the control they exercise over their time and their choice to put in as many hours as they do.

2. Hard Work

Given how much time the respondents admit to working, the trepidation with which they must begin their days loomed large. What motivates them to begin their work knowing they would be working so long and hard? How do those interviewed commence working every day? One sculptor said to me:

[W]ork makes work. That's one thing. So that whole light bulb theory . . . I still remember when I—my first solo show, and I was in bed, and I had like (snap fingers) “Oh! Here we go!” I was able to come up with the title of the show. And that was very—a big moment, because a lot of things fell into place. But in general, it's just like work makes work, so you just work, and then you realize this is what it is, or what it should be, or what you should be doing.⁷⁹

This sculptor makes her living through commissions and sale of works. She must produce objects and experiences to continue as an artist. What gets her out of bed every morning and brings her to the studio? She rarely talked about the need to work for money (except to say that she is terrible with the business-side of her work). In a matter-of-fact manner, she says that by working every day, more work comes. One project leads to another—both in terms of ideas for projects and projects that pay—and she is compelled to continue.

Several writers, engineers, musicians, and artists talk similarly about pursuing their work “in a very linear way,”⁸⁰ how the writing can be “painfully mechanical,”⁸¹ or how producing software was like a “military” operation, predictable and exact.⁸² One copyright lawyer talked about the work of writing and building a business around it as “bricklaying,” and the time and labor needed was like that of becoming a “master bricklayer.”⁸³ In these phrases, the daily work sounds more burdensome, although nonetheless driven by a commitment to purpose—a purpose which is less goal oriented (to produce the work)

78 Interview with ARD, *supra* note 39.

79 Interview with KH, Sculptor & Drawing Artist, in N.Y.C., N.Y. (Feb. 6, 2010).

80 See Interview with CG, *supra* note 38; Interview with JE, *supra* note 55.

81 See Interview with BH, *supra* note 43.

82 See Interview with ARD, *supra* note 39.

83 Interview with FH, Copyright Lawyer, in Bos., Mass. (June 3, 2009).

but instead one in which the minute-to-minute details of their craft define their identities (they are what they do).

Here, a musician contrasts her love of recording music with the performance aspect of her work. Recording is detail-oriented and painstaking work, but the work she loves the most.

I love performing, but my favorite part is that secret place where you are all alone and you are writing, and you are being—you are really living in a world as an artist. And I love the recording process. . . . I love just, like, tinkering away in the workshop doing—crafting it, and having that time to, like, polish it and sculpt it, and, like, perfect it in a way⁸⁴

This musician combines the spatial language discussed above (“all alone” in the studio) with the commitment to time (“having that time to . . . polish”) and the experience of hard, detail-oriented work (“tinkering” and “crafting”). She does not highlight the finished product—its aesthetic qualities or its end-value—but instead emphasizes her enjoyment of the process of engaging with the music and words as they are formed by her. That process is why she loves being a musician and why she continues to be one.

Some lawyers, describing how and why bench scientists at their firms work as hard as they do, parallel in their descriptions this work-a-day mentality. Contrasting the inventive moments of people like Steve Jobs to the lab scientists doing the every day work in a pharmaceutical company, a senior in-house IP counsel says:

Steve Jobs and Wozniak created the personal computer, all right? . . . Cohen and Boyer created biotechnology, the concept of moving genes around through man’s intervention. OK? But most of the rest of us mere mortals just—you know, you learn from other people, and then you—you know, the frontiers of science are pushed back . . . gradually through similar ant-like persistence by scientists⁸⁵

The language of “ant-like persistence” of one’s craft is from a Learned Hand opinion from the 1920s about patent lawyers and their own dogged pursuit of valid patent claims.⁸⁶ This particular patent lawyer, finding solidarity with the bench scientists, describes a common feeling of everyday toil, not as drudgery but as part of his self-identity.

In these descriptions of work’s momentum is the pride of hard work, which requires focus and persistence. I am interested in each of

84 Interview with MH, *supra* note 45.

85 Interview with DD, *supra* note 77.

86 *See Lyon v. Boh*, 1 F.2d 48, 50 (S.D.N.Y. 1924).

these descriptions of work because I hear honor as rooted in the doing of work, not necessarily in its outcome. The contrast between the sculptor's description of the "light bulb" experience or the lawyer's comment about the rare genius-inventor with their descriptions of "work makes work" and "ant-like persistence" suggests that the value of the work is in the everyday, not in the rare moment of inspiration. Even work that is less successful is a source of pride and honor because it is the doing, not the value of the end-product, that is worthwhile. This has implications for the labor theory of property (and the anti-labor theory of intellectual property)⁸⁷ about which I will have more to say later.

In addition to the routine and inertia of the day's rhythm, respondents describe the absorbing nature of the work as another reason for doing it. Many describe the attraction to their particular craft in terms of obsessing over solving puzzles, which is a common description of scientific or artistic processes and which was mentioned above as a reason to start the project in the first place.⁸⁸ One software engineer talked about the momentum of his work this way: "So there was an aesthetic side. Like I remember going back to my house and thinking for three days how the system would be architected. So that's a very good sign. You know, you already know you're in the right area if you can't stop thinking about the problem."⁸⁹ A chemical engineer similarly talked about the pleasure of solving problems as the highlight of his earlier jobs. The presence of puzzles and the satisfaction of solving them were the reasons he said he stayed at the job and turned down (or eventually quit) other jobs lacking those attributes but that offered him higher pay and prestige.⁹⁰ A well-known children's author describes the rhythm of her work this way: "And I know that sometimes, I get in the zone. And . . . nothing else is there. There is me and the screen, and I am standing right there with the characters, I am sweating with them, I am laughing with them, I am simply a part of it . . ."⁹¹ These diverse creative individuals continue with their hard work because there is something about the momentum—the toil and the mystery—that keeps them enjoyably focused.

87 See *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 364 (1991) (holding that sweat of the brow—one's labor—does not determine whether a work is copyrightable).

88 See CSIKSZENTMIHALYI, *supra* note 18, at 105; Fromer, *supra* note 2, at 1468–83 (discussing the place of problem finding and problem solving in the arts and sciences). Consider the contrast here: I am talking not about novelty but the every day.

89 Interview with ARD, *supra* note 39.

90 See Interview with DB, *supra* note 54.

91 Interview with BH, *supra* note 43.

3. Harvesting Tangible Property

The interviewees often describe their daily work in terms of natural metaphors, such as harvesting or fishing, as if to say that the physical labor of the job dignifies the output because it is made with the body and time of a person. A novelist describes her work with this analogy: “[W]riting, for me, it’s like fishing. It’s like you just go out there every day, and some days you catch something interesting, and other days you catch a bunch of carp, and some days you catch really pretty much nothing.”⁹² In a remarkably similar metaphor, but in a very different business (alternative energy biotech), an in-house lawyer describes how he “harvests” innovation and how the VP for research “seeds” ideas to his scientists to generate invention.⁹³

Both the time/space dialectic and the metaphors that relate intellectual work to natural processes and generate tangible goods (real or personal property) resonate with Lockean notions of property—a justification tangential to IP.⁹⁴ As the Supreme Court said in *Feist*, “[t]he primary objective of copyright is not to reward the labor of authors,”⁹⁵ and while this may seem unfair, it was not “some unforeseen byproduct of a statutory scheme.”⁹⁶ Nonetheless, many respondents (lawyers, business people, artists, and scientists) lament the *irrelevance* in the market place of the significance of time spent on the particular project. Many discuss how long the project took and how hard they worked—months to draft the code, weeks in the recording studio, months to finalize the public installation of a sculpture, years to bring a drug to market—and are puzzled by how the market valuation of the work is almost entirely unrelated to the time spent on it.

92 Interview with CH, *supra* note 59.

93 See Interview with TL, *supra* note 67 (“So my role is to basically try to harvest innovation across the entire process chain.”).

I know, for instance, one of our lead VPs on the research side is very much supportive of basically sort of almost like seeding the ideas to people, right? He’s a very smart guy; really understands IP; he really understands the space. I know that he spends a fair amount of time sort of dropping these little “seeds.”

Id.

94 See *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340 (1991). But see Lawrence C. Becker, *Deserving to Own Intellectual Property*, 68 CHI.-KENT L. REV. 609, 609–10 (1993) (discussing natural rights theories of IP); Wendy J. Gordon, *A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property*, 102 YALE L.J. 1533, 1540–44 (1993) (same); Adam D. Moore, *Toward a Lockean Theory of Intellectual Property*, in INTELLECTUAL PROPERTY 81 (Adam D. Moore ed., 1997) (same).

95 *Feist*, 499 U.S. at 349.

96 *Id.* (quoting *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 589 (1985) (Brennan, J., dissenting)).

Thus, it seems, interviewees seek a way to express the value of their work outside the market, which for many seems quixotic or mysterious. Many describe their output not in terms of products of the mind—although that is what they certainly are—but in terms of real or personal property. Musicians “polish” and “sculpt” their songs, and a writer describes plagiarism as resting on someone else’s “scaffolding.”⁹⁷ Patented inventions are described as “chits” for trading.⁹⁸ Taking someone’s inventive idea is akin to “steal[ing] other people’s homework.”⁹⁹ Breaking through digital rights management (DRM) to access copyrighted work is akin to “shoplift[ing]” by evading the metal detectors.¹⁰⁰ The value of the work is measured by something you can “put [your] hands on,”¹⁰¹ and misappropriation or infringement claims are made by demanding “hands off.”¹⁰²

This language of tangible goods in the intellectual property context may be unsurprising given the ubiquity of real property rhetoric in intellectual property policy debates.¹⁰³ But this language is nonetheless puzzling given the manner in which so many of these artists, scientists, and their business partners collaborate (or encourage collaborating) and share their work. That is, few of those interviewed spoke in possessive terms of their creations or inventions in the way that real property language evokes. There was infrequent use of words like “mine” or “ours” (or corollaries, such as “copying,” “taking,” “shield,” or “shelter”). To the contrary, when property rights were clear and could be asserted, few respondents—including business managers representing firms—behaved in an aggressively possessive manner. By this, I mean that rarely did the respondents express a desire to or did they in fact fully exercise their exclusive rights in their IP by sheltering it from the world or sharing it only for full-extraction value. Most dismissed minor incidents of copying or illegal borrowing as inevitable and not worth doing anything about.¹⁰⁴ “What goes

97 See Interview with CH, *supra* note 59; Interview with MH, *supra* note 45.

98 See Interview with TL, *supra* note 67.

99 Interview with DD, *supra* note 77.

100 See Interview with AR, In-House Counsel, in Watertown, Mass. (July 23, 2008).

101 Interview with TL, *supra* note 67.

102 See Interview with CH, *supra* note 59.

103 See, e.g., David Fagundes, *Property Rhetoric and the Public Domain*, 94 MINN. L. REV. 652, 655–58 (2010); Molly Shaffer Van Houweling, *The New Servitudes*, 96 GEO. L.J. 885, 887–91 (2008).

104 This makes sense given that lawsuits are extremely costly and full-blown litigation is worthwhile only when the assets being protected are worth the hundreds of thousands (or millions) of dollars a lawsuit will cost. See William M. Landes, *An Empirical Analysis of Intellectual Property Litigation: Some Preliminary Results*, 41 HOUS. L. REV. 749, 753 (2004); Kevin M. Lemley, *I’ll Make Him an Offer He Can’t Refuse: A Proposed*

around comes around,” people seem to suggest.¹⁰⁵ Very few said they would bother filing a lawsuit even when faced with clear infringement as long as the company’s welfare was not at stake.¹⁰⁶

In contrast, interviewees express outrage and were more likely to contest certain uses that cause *reputational harm* or interfere with long-held project plans. In these situations, concern and anger turns to action, and respondents are more likely to describe what has been infringed (or taken) as “theirs” in a physical or trespassory kind of way and to do something about it. Ironically, IP law doesn’t easily protect these kinds of harms in the way the artists, scientists, or business managers would hope. Copyright law does not compel attribution or prevent misattribution, despite that being what most of the authors and

Model for Alternative Dispute Resolution in Intellectual Property Disputes, 37 AKRON L. REV. 287, 299 (2004); Michael J. Meurer, *Controlling Opportunistic and Anti-Competitive Intellectual Property Litigation*, 44 B.C. L. REV. 509, 515–16 (2003). Alternatively, lawsuits may be filed to send a message about the lengths to which a business or organization will protect its IP assets, even if in this case the asset is not worth as much. See Stephanie Francis Ward, *Plaintiff to RIAA: Download This!*, A.B.A. J., Nov. 2007, at 14, 15 (“Our companies have every right to protect their product, just as those who have been robbed have every right to claim damages for what was stolen from them [Filing these suits] is simply a means to an end—that is, communicating the message that illegal downloading has consequences and encouraging fans to turn to any one of the great legal ways to enjoy music.” (quoting Jonathan Lamy, Senior Vice President of Communications, RIAA)).

105 One musician describes how music CDs should be shared freely even if people won’t pay for them and how she has been a beneficiary of ripped CDs in the past.

But I feel like if you’re not going to buy it, but you’re going to give it to your friend, great. If you’re going to give it to five friends, that’s fine. . . . Because I’d rather you have it if you’re not going to buy it. . . . I mean, I’m not saying I want everyone to do that, obviously, because like I said, I’m still depending on the sales. But I mean, I discover a lot of good stuff by someone just bring[ing] me a CD, you know?

Interview with MH, *supra* note 45.

106 One author remarkably said she considered copying a form of flattery and did not pursue infringement claims unless her market was harmed. She said:

[Y]ou know, [copying is] the sincerest form of flattery. . . . [I]t didn’t bother me. Not at all. Why would it? . . . [Y]ou know you have succeeded when somebody tries to copy you. . . . I’m afraid that’s the kind of thing I think. . . . [But], I’d be annoyed if theirs succeeded more than mine did. But mine went into a television series. Theirs was optioned

Interview with BH, *supra* note 43. Another in-house copyright lawyer described avoiding lawsuits even in clear infringement cases and relying only on the force of demand letters or negotiation. If, however, there was enough money at stake or he felt particularly strong about the principle at stake (one such infringement event he called “brazen theft”), he would reluctantly file suit. See Interview with AR, *supra* note 100.

artists I interviewed wanted.¹⁰⁷ Patent law does not prevent blocking of improvement uses, despite scientists and engineers describing the desire for credit and collaboration in the context of follow-on innovation and improvements. And firm employees resort to personal property language tinged with moral dimensions using phrases such as “rip off” or “stealing homework” or “shoplifting” when the infringement is minimal (or nonactionable) but it nonetheless offends them.

My preliminary thought on this rhetorical shift is that this kind of property talk is an end in itself. It hides or displaces the incentive policy of intellectual property (because incentive is irrelevant here) and makes protecting tangible property—the thingness and value of personal goods—the goal. The IP incentive fades away (if it was ever there), and all that matters is that what was taken was “mine.” In this way, the characterization of that which was taken predetermines the justification for its protection.¹⁰⁸ Describing the value of these people’s work in material, physical terms strengthens their possessive impulse and in some cases manifests as assertions of control that are more robust than current intellectual property law provides.¹⁰⁹ This overreaching in the context of moral outrage contrasts with the underprotection of the IP in cases of everyday commercial infringement. In sum, the interviewees appear to desire protection through their IP rights for affronts that U.S. intellectual property law cannot protect against (moral harms and rights of integrity). And they underutilize the aspects of U.S. IP law (rent seeking) that IP law is better suited to provide.

The act of laboring dominates the discussion of how to value everyday creative or innovative work, as seen by the linguistic patterns of the arguments that sound in nature (harvesting) or personal property. Time spent and the burden of the everyday work is a source of pride and worth, both as a matter of personal identity as well as professional merit. Legal and moral language surfaces when respondents experience reputational affronts or challenges to their person or

107 See *Dastar Corp. v. Twentieth Century Fox Film Corp.*, 539 U.S. 23, 34–35 (2003).

108 I am grateful to Bill Patry for conversations with him that have made this point obvious to me. See also WILLIAM PATRY, *MORAL PANICS AND THE COPYRIGHT WARS* 113, 131 (2009) (discussing the effort to characterize IP in a manner similar to real property and the significant attachment we feel to things we create).

109 See Christopher Buccafusco & Christopher Sprigman, *Valuing Intellectual Property: An Experiment*, 96 CORNELL L. REV. 1, 4 (2010) (describing results of an experiment that demonstrate over-valuation by creators of expressive works as compared to the price at which buyers are willing to license the works, leading to suboptimal transactions).

plans (a feature of time). And yet, intellectual property law does not help here. This second stage of creative and innovative work misaligns with intellectual property policy as formally considered. The policies that drive the law of intentional torts and unjust enrichment more clearly resonate (albeit implicitly) in this second stage of “work makes work.”

IV. IP'S PLACE: IMPLICATIONS AND CONCLUSIONS

A. *Tentative Implications*

So what is new here, really? Beginnings are spontaneous or lucky and work is about time and labor. This sounds familiar, even cliché, if one thinks about myths of the romantic author or the mad scientist. But what *is* new, even surprising, is that this is *not* how IP law and policy talk about creative or innovative activity. IP law, insofar as it can be imagined as a rational set of goals and a coherent structure, considers its role as essential to incentivizing art and science from its inception. But even the business agents and lawyers who are highly self-conscious of the law's rules and application reaffirm, in their descriptions of their clients and businesses, that the beginnings and the mechanisms of creative or innovative activity do not map onto the traditional justifications and structure of intellectual property law and policy.

To be sure, there is variation among those interviewed. It is fair to say that firms (as opposed to individuals) more consistently consider how and what research and development to pursue based on the firm's ability to leverage the IP that will be produced. In this sense, those people or entities that control the research and development plans are incentivized by the existence of IP rights at the beginning, even if the individual creators are not. But this understanding only more starkly highlights the disjunction in the law. Why does IP law talk about rights being granted to incentivize creators (the myth of the romantic author and mad scientist) and not to firms? I ask this seriously, because I do wonder if it is at the firm level where IP does most of its work. If this is true, IP law should speak more about firm organization and IP distribution within the firm than about the individual creators and inventors.¹¹⁰

Further to this point, as a thought experiment, what would happen if we talked more about how IP facilitates firm development and

110 See Cohen, *supra* note 72 (making this same argument from the perspective of the development of post-industrial property, i.e., corporate capital).

distribution of intellectual goods? Would *Eldred v. Ashcroft*¹¹¹ have been argued and decided differently? Readers will recall that *Eldred* upheld the Copyright Term Extension Act (CTEA) on the argument that longer duration provides more incentives for artists and authors, which results in more copyrighted works, and that is good for progress.¹¹² But if the reason for producing creative work does not originate with the promise of a copyright, at least for individuals, the reasoning in *Eldred* weakens. Instead, the argument supporting longer duration or stronger copyright would have to focus on how copyright maximizes *firm capital* and how it is corporate entities, not individual authors or artists, who are initially (or ultimately) incentivized by IP. Without the ability to fall back on romantic authorship as the *sine qua non* of copyright, legislators, lawyers, and business interests might be forced to focus more clearly on the economic consequences of IP entitlements, who benefits exactly, and how.¹¹³

Other implications might be fair use and statutory defaults. Would fair use decisions in copyright be analyzed with less of an emphasis on transformativeness (and other factors) and even more of an emphasis on commerciality and market harm?¹¹⁴ Would ownership and inventorship in patent law be allocated differently as a statutory matter?¹¹⁵ I think the ramifications for this kind of switch in focus could potentially be very significant. If we really want to benefit the distributors of IP or those firms that are in fact incentivized by IP to develop and distribute inventions and creative works, we would define and highlight the value intermediaries bring to creative culture much more than is currently the case. And, there would be less dis-

111 537 U.S. 186 (2003).

112 See *id.* at 206–07 (“Congress passed the CTEA in light of demographic, economic, and technological changes, and rationally credited projections that longer terms would encourage copyright holders to invest in the restoration and public distribution of their works.” (footnote omitted) (citation omitted)). The Court later confirms that copyright secures a bargain, “this for that,” such that authors receive the benefit of the copyright term, including any extension. See *id.* at 214 (quoting Brief for Petitioners at 16, *Eldred*, 537 U.S. 186 (No. 01-618)).

113 In the trademark context, for example, the argument that trademarks protect consumers diverts attention from (and obfuscates the fact of) the expansion of trademark rights that benefit mark owners. See Mark P. McKenna, *The Normative Foundations of Trademark Law*, 82 NOTRE DAME L. REV. 1839, 1840–44 (2007). Thanks to Mark McKenna for bringing this comparison to my attention.

114 See Barton Beebe, *An Empirical Study of U.S. Copyright Fair Use Opinions, 1978–2005*, 156 U. PA. L. REV. 549, 597, 605, 617 (2008) (describing how commerciality (and market harm) compete for dominance in the fair use analyses with transformativeness).

115 See 35 U.S.C. §§ 116, 261 (2006).

cussion in the cases and legislative debates about how the author or inventor is the ultimate beneficiary of our intellectual property laws.¹¹⁶

Consider the Bayh-Dole Act,¹¹⁷ which requires universities that support federally funded research to license inventions (for commercialization) produced by that research.¹¹⁸ Some say this law was effective in progressing the useful arts “not so much because it created financial incentives, but because it stimulated the formalization of processes in universities that allow scientists to further the commercialization of their research without having to make prohibitive sacrifices in their academic work.”¹¹⁹ It might be productive to think in a similar way about the copyright industries. In lieu of private contracting schemes, would a regulatory mechanism that protects the lifestyles of writers, artists, or filmmakers facilitate cooperation with the firms that engage them and therefore stimulate more creative output to be widely distributed? Could such a mechanism also foment a perception or experience of equity and balance as between the individual content creators and the corporate intermediaries or distributors? Although not part of this paper, another focus of my research contrasts how the respondents make a living with how they would optimally support themselves. Answers to these questions confirm that most artists, scientists, or engineers want a salary (what in centuries past was a patron) rather than royalties. But they also want a measure of freedom. IP rights do not suit their tolerance for risk or their desire for stability. They make do (and produce work) despite the challenge of generating revenue from their IP rights.

116 Similarly, if we really want to protect and benefit the originator of IP (the author or inventor), we would regulate the creator-intermediary relation much more than we do, either through employment doctrine or IP related rules. See, e.g., Catherine L. Fisk, *Screen Credit and the Writers Guild of America, 1938–2000*, at 50–52 (Aug. 2010) (unpublished manuscript), available at http://works.bepress.com/catherine_fisk/1.

117 Pub. L. No. 96-517, 94 Stat. 3019 (1980) (codified as amended at 35 U.S.C. §§ 200–212).

118 See Rebecca Goulding et al., *Alternative Intellectual Property for Genomics and the Activity of Technology Transfer Offices: Emerging Directions in Research*, 16 B.U. J. SCI. & TECH. L. 194, 201 (2010).

119 Henry Sauermann et al., *Doing Well or Doing Good? The Motives, Incentives, and Commercial Activities of Academic Scientists and Engineers* 28 (June 15, 2010) (unpublished manuscript), available at <http://www2.druid.dk/conferences/viewpaper.php?id=501180&cf=43>. There exists criticism of Bayh-Dole as well. See, e.g., Carl E. Gulbrandsen, *Bayh-Dole: Wisconsin Roots and Inspired Public Policy*, 2007 WIS. L. REV. 1149, 1159–60 (describing two branches of criticism).

If out of these thought experiments comes the appreciation of IP rights as a *tool for exploitation* of the copy (of the invention or the expressive work) rather than as a *tool for creation* of art and science, we might decide to go one way or another entirely, for example, that IP law should be restructured to only incentivize creation,¹²⁰ leading to a less robust set of legal entitlements, or, instead, that IP law should be reformed to facilitate capital accumulation within organizations that are most efficiently organized to equitably distribute their wealth.¹²¹ This might make sense from an empirical standpoint if these interviews, which I realize are only a small sample, are representative of broader industry and individual practices.

We might also come to realize that the singular focus on IP rights for professional health in so many industries is too narrow. IP rights are merely one of many legal tools that individuals and enterprises use to compete in the marketplace. Respondents in software and high-technology industries, as well as publishers of textbooks and fiction literature, talk about how first-mover advantage is central to their market share and profitability.¹²² Many in the high-technology and biotechnology industries describe how confidential research and development practices are central to their business models.¹²³ One artist even refused to discuss how he mixed his paints because he considered it a trade secret.¹²⁴ Many also discuss how the absence of control over content or product—giving things away for free in exchange for a larger audience—is key to profitable growth, especially in the content and software industries.¹²⁵ These statements are supported by a growing literature.¹²⁶

In the end, we might ask whether IP law is right in ways that matter. This would be a question about correlating practices on the

120 See Lydia Pallas Loren, *The Pope's Copyright? Aligning Incentives with Reality by Using Creative Motivation to Shape Copyright Protection*, 69 LA. L. REV. 1, 2–3 (2008).

121 See Cohen, *supra* note 72.

122 See Interview with DF, Computer Scientist, in Brookline, Mass. (June 25, 2010); Interview with BY, In-House Counsel to Publ'g Co., in Bos., Mass. (Aug. 8, 2008).

123 See Interview with DD, *supra* note 77; Interview with TL, *supra* note 67.

124 See Interview with EC, *supra* note 63.

125 See Interview with AR, *supra* note 100; Interview with DF, *supra* note 122; Interview with MC, Music Agent, in Bos., Mass. (May 18, 2010).

126 See, e.g., Robert B. Ahdieh, *Making Markets: Network Effects and the Role of Law in the Creation of Strong Securities Markets*, 76 S. CAL. L. REV. 277, 316–17 (2003) (discussing the benefit of first mover advantage); Raneie Saunders, *If I Told You Then I'd Have to Kill You: The Standard for Discovery of Trade Secrets in South Carolina*, 61 S.C. L. REV. 717, 719 (2010) (describing the centrality of trade secrets in business models); Matthew Scherb, Note, *Free Content's Future: Advertising, Technology, and Copyright*, 98 NW. U. L. REV. 1787, 1790 (2004) (discussing how free content can pay).

ground, both hopeful and actual, with legal rules and desired policy. The optimal alignment of individual desires with corporate needs and socially desirable outcomes is the way to produce good work.¹²⁷ It is possible that in the absence of a firm, there would simply be diffusion, but there might also not be enough investment in the expensive or risky projects, even in this age of rapid technological development.¹²⁸ IP law has always been about finding the right balance. These interviews are suggesting to me that our balance today is off.

B. *Conclusions*

I highlight in this Article how creativity's early impulses and its early momentum seem less related to IP incentives in the traditional sense, be it exclusive rights for control or for rent. Where law emerges in the professional lives of these creators, it does so early on, not as exclusive entitlements in the IP sense, but instead as contracts relating to joint ventures and employment. Social relations formalized in legal or quasi-legal documents emerge before IP rights are perfected and commercialized. The recoupment of investment via IP does not arise frequently in the discussions about early-stage development. And if it does, the IP rights are tangential to the business model, or their enforcement is more relaxed. Many interviewees value IP, especially in the context of certain business models (pharmaceuticals, some novelists). But even those industries where IP features prominently in the business model—textbook publishers, software industry, musicians—the asserted IP entitlements are less to control reproduction and distribution and instead to protect the derivative work right (as a form of control over the improvement and complement markets). Even here, however, control is not always for rent but instead to protect reputation, and, legally, it is more controversial. Finally, IP tends to be harnessed—or “harvested” as one general counsel describes it—by the lawyers or business planners. IP has to be self-consciously made as a legal form out of the art and science that has already emerged from the work of individuals in their organizations.

127 See HOWARD GARDNER ET AL., *GOOD WORK* 15–36, 73–90 (2001) (describing good work as one effect of “alignment,” when all of the stakeholders concerned with a profession agree about what they would like).

128 The film industry is one such example where copyright appears necessary to incentivize investment in the expensive and complex collaborations that result in big Hollywood films. One interviewee described this same relationship in the patent context in light of the development of and market for semiconductors. See Interview with DF, *supra* note 122.

The above discussion should not be misunderstood, however, as an argument for IP's absence or irrelevance in the lives of artists and scientists. Nor should it be misunderstood as describing only commonalities and not also variations in the stories of creativity or innovation. This project's aim, as I set forth in the beginning, is to map the various ways intellectual property intervenes in the lives of those who engage in creative or innovative work, as the creators, innovators, business managers, or lawyers. This initial attempt at closely reading these interviews shows how various reasons exist for initiating, engaging in, and building a life and a business around these kinds of work. The various reasons for, and ways of, engaging in a life of creativity and innovation contribute to the formation of a heterodox account of the role of IP to confront and hopefully weaken the orthodox account on which so much case law and legislation is built. But, importantly, this paper did not focus on the parts of the interviews describing the middle or later stages of wage-earning or commercialization. That is for a later stage of this project.

The next series of essays in this project will more fully flesh out these varieties of IP forms and functions populating the interviews. One essay called "Making Do" traces the mechanisms the interviewees employ to make a living, some of which are IP mechanisms, and many of which are not. Another essay entitled "Instruction" traces the roles of lawyers and business managers in teaching about and shaping the IP portfolios of their clients. Another essay entitled "Reputation" explores the various ways these interviewees discuss how their major "asset" is their reputation, which they seek to control with IP-like entitlements but find challenging given the limitations of IP law in this area.¹²⁹ And yet another essay called "Distribution" traces the varieties of distributional mechanisms, including IP transactions, employed by the interviewees or their agents to disseminate their work.

In the end, this project does not make the case that IP is unnecessary or peripheral as a legal tool to facilitate the progress of science and the useful arts. This essay explains only that IP as a formal legal entitlement is not clearly present *in the beginning* of these endeavors—or even in the early stages of the work—despite the myth we tell about

129 Typically, trademark law is the way individuals or organizations with a product to sell protect identity and reputation for consistent quality through the designation of source. But trademark law contains robust exceptions for First Amendment protected speech, which includes criticism and commentary. This often renders elusive the kind of reputational control that IP owners seek. And copyright law does not protect attribution rights, except in the case of the Visual Artists Rights Act (VARA). See *Dastar Corp. v. Twentieth Century Fox Film Corp.*, 539 U.S. 23, 34–35 (2003).

IP as a motivating or incentivizing factor from inception. Nonetheless, IP is present in the professional lives of those interviewed as one mechanism for structuring social and business relations. Indeed, the respondents (creators and business people alike) confirm that *IP intervenes* somewhere in the middle of the professionalization of the individual or business as either (1) an effect on personal or ethical impulses or (2) an external framework imposed upon the situation by lawyers or business managers.

This project may also demonstrate how IP entitlements are perceived and function in more varied (and less rigid) ways than formal law would indicate. As discussed throughout the interviews across artistic, scientific, and technological domains, some industries and some people hope and expect to recoup investment in their work through some kind of legal entitlement, but IP is only one mechanism (and not necessarily the first mechanism) by which people and entities structure their business to make a living. First mover advantage, optimizing market share, and creating complementary products are all other ways in which money is made and wealth distributed along the professional chain.

The formalization of the innovative activity described in these interviews varies from that described and imagined by the federal IP law decided by courts and contained in statutes. My hope is that this empirical project can be read together with other similar projects that investigate and compare the material practices of those doing the work of creativity and innovation with the way law is interpreted and applied by a variety of legal or business actors. We must learn why and how individuals and firms do the work they do when it results in IP rights if we are to better serve the constitutional prerogative of progressing science and the useful arts. This project aims to be one small piece of that learning by attempting to map some of the intersections between IP law and creative and innovative activity, intersections the law so far has only presumed.

APPENDIX A: INTERVIEW DATA SAMPLING

My goal is to conduct at least sixty-four interviews in the New England area, at least thirty-two with creators/innovators and thirty-two with intellectual property professionals (lawyers, business managers, and licensing professionals). This paper is based on approximately half of that sample (thirty interviews) that are roughly divided among the variables described below.

Not all respondents will have made or own intellectual property, and thus I am guarding against selection on the dependent variable. All will have engaged in creative or inventive processes (or have worked with people who do). Creators/inventors vary across the range of creative processes from basic to applied science, from digital and print media, music, and other arts including sculpture, painting, and crafts. Among the business or legal professionals, all have experience working in the intellectual property field (as lawyers, licensing professionals, business managers), but they may have different views on when seeking IP protection is appropriate in light of their specific clients and their businesses.

Respondents are located through a snowball sampling method as well as letter campaigns. I follow Trost's method of nonrepresentative stratified sampling.¹³⁰ Utilizing three significant variables—respondent occupation (intellectual property professional or creator/innovator), whether they work independently (as a business owner, whether or not alone) or as an employee of a company in which they have no ownership stake, and field of law (copyright/trademark or patent)—eight possible variations are generated. I will attempt to interview eight respondents in each of the variations.¹³¹ Documents will also be collected from the interviewees to be included in the qualitative analysis, such as invention disclosure sheets, corporate policies regarding intellectual property, sample licenses, and contracts.

TABLE 1. CASE VARIATIONS

Creator/Innovator				Business Agent or Lawyer			
Independent Contractor		Employee		Independent Contractor		Employee	
©/tm	P	©/tm	P	©/tm	P	©/tm	P
8	8	8	8	8	8	8	8

130 See Trost, *supra* note 26, at 55–57.

131 See tbl.1.

APPENDIX B: DATA ANALYSIS

All interviews are digitally recorded and transcribed. Transcripts of the interviews are uploaded to Atlas.ti, a computer program that facilitates analysis of narrative data.

Analysis of the transcripts proceeds at the level of language (word choice, narrative structure, and content) and conceptual themes (drawn from reading across the transcripts and from the literature on innovation and intellectual property). Language is easier to quantify insofar as one is looking at discrete words, whether unusual or often repeated. Narrative structure and content is also observed and modeled, as many stories have identifiable markers and take recognizable forms. Drawing on my experience and training as a literary scholar (my doctoral focus was on contemporary narrative theory), analysis of the interviews isolates and interprets the various narrative components of selection, time, and relationality that coalesce to form a particular moral ordering or “point”¹³² and also that reflect or maintain a particular institutional or social structure.¹³³ The analysis of conceptual themes in the interviews develops from the socio-legal literature on innovation and legal policy. As interviews are read, reread, and coded with help of the analytic software, searches are revised based on reformulated questions and categories that emerge from this ongoing study of the interviews and the scholarly literature.

To analyze the transcripts, codes have been developed deductively from preliminary findings and inductively from the emergent language, repetitions, narrative structure, and conceptual themes contained in the interviews. Each transcript is read and summarized in a four to five page synopsis. These condensations include any notes made during the interview, a description of particularly interesting stories related by or quotations from the interviewee, and a list of overarching themes from the interview.¹³⁴ Treating the interview as a text exposes its structural features as a story of law-in-action and of innovation culture.

I work with a research assistant to code the transcripts. Borrowing from quantitative research traditions,¹³⁵ we developed a proce-

132 See HAYDEN WHITE, *THE CONTENT OF THE FORM* 21–24, 50–51 (1987).

133 See Silbey, *supra* note 17 (describing how intellectual property law justifies entitlements through origin narratives); Jessica Silbey, *The Subject of Trial Films* (1999) (unpublished dissertation, UMI Press) (describing how genre of trial films—their form and content—help constitute a popular legal consciousness that sustains liberal legal ideology).

134 See MILES & HUBERMAN, *supra* note 20, at 50–88.

135 See *id.*

ture to insure inter-coder reliability. To assure that we understand the codes in the same way, we meet regularly to review and compare the coding of the transcripts. Where there are differences, we discuss and resolve them. Also, after coding a transcript, we each draft a memo describing salient themes that emerged. Memos are shared on a regular basis again to produce a common framework for preparing these documents. By its very nature, working with qualitative data is an interpretive process. Nonetheless, strong consensus can be achieved by regularly sharing coding on a common text and thus collectively developing common parameters for interpretation.