

LAW AND ENTREPRENEURIAL OPPORTUNITIES

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INTRODUCTION

In his book *Siberia Bound*, Minnesota-native Alexander Blakely details his five years living and working in postcommunist Siberia in the mid-1990s.¹ Blakely was motivated to bring capitalism to a place where it had not existed.² During Blakely’s time in Siberia, he and his Siberian business partner “Sasha” engaged in numerous en-

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†† Associate Professor of Law, University of Wisconsin Law School. We are grateful to our colleagues and friends who commented on early versions of this Article at the Law & Entrepreneurship Retreat, the Law and Society Association Annual Meeting, the Kauffman Summer Legal Institute, the Searle Center Conference on the Economics and Law of the Entrepreneur, and workshops at the University of Wisconsin, the Hong Kong Polytechnic University, and Brigham Young University. Special thanks to Greg Pass, Colin Hill, Steve Browne, and others for comments at the *Cornell Law Review* Symposium on Law, Innovation, and Entrepreneurship and to Kif Augustine-Adams, Shima Baradaran, Betsy Bennion, Michael Burstein, Douglas Cumming, Mirit Eyal-Cohen, Vic Fleischer, Cliff Fleming, Brook Gotberg, Alan Hurst, Christine Hurt, RonNell Andersen Jones, Ben Means, Carolina Núñez, Sean O’Connor, and Michalyn Steele for their insights and assistance. We also thank Travis Hunt for lending his excellent research assistance and Drew Smith for sharing his design talent.

¹ ALEXANDER BLAKELY, *SIBERIA BOUND: CHASING THE AMERICAN DREAM ON RUSSIA’S WILD FRONTIER* xi–xiv (2002).

² *Id.* at xi.

trepreneurial ventures that included selling cocoa beans, chocolate, latex gloves, and potatoes.³ Most strikingly for purposes of this Article, entrepreneurship in Siberia was largely pursued in the absence of the rule of law.

Blakely describes routine bribery in his business dealings and never mentions the law or lawyers except to note their absence. In one anecdote, Blakely recounts borrowing \$20,000 from a local lender. Sasha presented the lender with a contract, which the lender slid back across the table to Sasha. Blakely describes what happened next:

Sasha, still grinning, ripped the paper lengthwise in two, then ripped the two halves into quarters, then into eighths. . . . I felt drunk with emotion. In two days, we had sold six tons of chocolate and borrowed twenty thousand dollars without a single lawyer charging two hundred dollars an hour to put words on paper to protect us from any and every eventuality. Even better, there would be no lawyers to siphon thousands of dollars from us when an unforeseen eventuality did occur and a dispute arose, a dispute that only lawyers profited from.⁴

Blakely's anecdote resonates with many entrepreneurs who view lawyers and the law as impediments to business.⁵ In this Article, however, we claim that law is not only essential to entrepreneurship in the obvious ways—honest courts enforce contracts and property rights, for example—but also on a different, more fundamental level.⁶ We contend that law plays an integral part in encouraging entrepreneurs to create the very opportunities from which they profit. Although Blakely did not realize it, his opportunities in law-barren Siberia were limited, and it is telling that he left Siberia after only five years.⁷ By contrast, the United States is rich with entrepreneurial opportunities,

³ See *id.* at 1–9, 103, 144.

⁴ *Id.* at 7.

⁵ See, e.g., Scott Edward Walker, *Top 10 Reasons Why Entrepreneurs Hate Lawyers*, VENTURE HACKS (Jan. 14, 2010), <http://venturehacks.com/articles/hate-lawyers> (stating that “[l]awyers are often viewed as deal-killers”).

⁶ For a macro look at the emerging field of “law and entrepreneurship,” see generally Darian M. Ibrahim & D. Gordon Smith, *Entrepreneurs on Horseback: Reflections on the Organization of Law*, 50 ARIZ. L. REV. 71 (2008) (describing “law and entrepreneurship” as a distinct and important field of study).

⁷ In the end, although he and Sasha were making money, Blakely admitted that their business model boiled down to an unappealing proposition: bribing the directors of chocolate factories. BLAKELY, *supra* note 1, at 301. In a study of ten Baltic and Central European countries after the disintegration of the Soviet Union in 1991, Tomi Ovaska and Russell Sobel found that different amounts of “entrepreneurial activity” (measured by the number of new enterprises and by the number of new patent and trademark applications) correlated with “credit availability, contract enforcement, low government corruption, sound monetary policy, high foreign direct investment, and policies (such as low regulations and taxes) that are consistent with giving citizens a high degree of economic freedom.” Tomi Ovaska & Russell S. Sobel, *Entrepreneurship in Post-Socialist Economies*, 21 J.

in part because of the role of our legal system in encouraging entrepreneurs to create them.⁸

“Opportunity” is a central concept in entrepreneurship research,⁹ and this Article explores the relationship between law and entrepreneurial opportunities. We adopt the widely held view that entrepreneurial opportunities are *ideas created by entrepreneurs*, rather than *resources waiting to be discovered*.¹⁰ Of course, as with all products of the imagination,¹¹ entrepreneurial opportunities draw on existing resources for inspiration,¹² and we contend that some legal systems are better than others at encouraging entrepreneurs to think about existing resources in new ways. We also contend that when entrepreneurs exploit opportunities, the inventory of resources expands and lays the foundation for the creation of even more entrepreneurial opportunities.¹³ This “opportunity cycle,” represented in the figure below, leads to plentiful and continuous opportunity creation.¹⁴

PRIVATE ENTERPRISE 8, 14, 24 (2005). These results are consistent with the notion that law matters to entrepreneurial activity, as we argue in this Article.

⁸ See *infra* Part III.

⁹ See Jeremy C. Short et al., *The Concept of “Opportunity” in Entrepreneurship Research: Past Accomplishments and Future Challenges*, 36 J. MGMT. 40, 41 (2010).

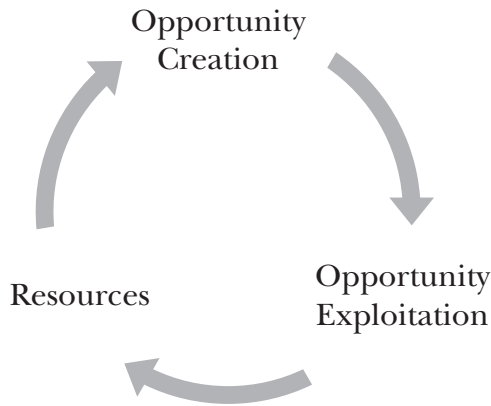
¹⁰ See, e.g., Alexander Ardchivili et al., *A Theory of Entrepreneurial Opportunity Identification and Development*, 18 J. BUS. VENTURING 105, 106 (2003) (“While elements of opportunities may be ‘recognized,’ opportunities are made, not found.”).

¹¹ See Peter G. Klein, *Opportunity Discovery, Entrepreneurial Action, and Economic Organization*, 2 STRATEGIC ENTREPRENEURSHIP J. 175, 182 (2008) (preferring to discuss entrepreneurs imagining opportunities rather than creating them, but conceding that “[a]t one level, the distinction between opportunity creation and opportunity imagination seems semantic”).

¹² See Connie Marie Gaglio, *The Role of Mental Simulations and Counterfactual Thinking in the Opportunity Identification Process*, 28 ENTREPRENEURSHIP THEORY & PRAC. 533, 534 (2004) (illustrating modes of thinking that allow entrepreneurs to identify new opportunities).

¹³ This is not a revolutionary claim. Half a century ago, Kenneth Arrow wrote a now-famous article about learning by doing in which he hypothesized, “it is the very activity of production which gives rise to problems for which favorable responses are selected over time.” Kenneth J. Arrow, *The Economic Implications of Learning by Doing*, 29 REV. ECON. STUD. 155, 156 (1962). The *Harvard Business Review* recently referred to the “experience curve”—the notion that companies “develop competitive advantage [by learning over time] . . . to lower costs, gain efficiencies, and improve products by redesigning and utilizing better technology”—as one of five “charts that changed the world.” Andrea Ovans, *Vision Statement: The Charts That Changed the World*, 89 HARV. BUS. REV. 34, 34 (2011).

¹⁴ After creating the opportunity cycle, we discovered Michael Gollin’s “innovation cycle,” which also has three stages and resembles the opportunity cycle. See MICHAEL A. GOLLIN, *DRIVING INNOVATION: INTELLECTUAL PROPERTY STRATEGIES FOR A DYNAMIC WORLD* 17–19 (2008). Gollin’s cycle begins with “creative work by individuals” using existing knowledge. *Id.* at 17. The second stage is “adoption by society,” which Gollin also refers to as “diffusion.” *Id.* at 18. Gollin uses the term “innovation” in a narrow sense, including only those creative works that are shared. *Id.* at 17–18. “Personal creative acts” do not count as innovations. *Id.* The third stage is “accessibility of knowledge” without which no cycling of innovation can occur. *Id.* at 18. A “successful innovation” is one that “joins the reservoir of accessible knowledge,” providing a foundation on which creative people build in the “next revolution of the innovation cycle.” *Id.* at 19. As is evident from



Legal rules play an important role in the opportunity cycle, and two sets of stories regarding law are foundational to innovation research:

—The first is that property rights (*i.e.*, the right to exclude) are essential in the development of innovative resources because property rights assure market participants that they can *retain many of the benefits of their success*.¹⁵

—The second is that various sets of legal rules—including laws limiting barriers to entry, bankruptcy laws, and corporate laws relating to limited liability and asset partitioning—*reduce the costs of entrepreneurial action and failure*, thus emboldening entrepreneurs to exploit opportunities.¹⁶

Our thesis is that these stories are part of a grander tale about the opportunity cycle and that the central theme of this tale is that promoting entrepreneurial action is a fundamental value of the U.S. legal system.

Over a half century ago, Willard Hurst offered a similar thesis with regard to nineteenth-century legal policy in the United States, observing that “the release of individual creative energy was the domi-

the foregoing description, the innovation cycle is describing a process by which resources are created. While these resources are essential to the opportunity cycle, the two cycles do not attempt to explain the same phenomena.

¹⁵ See Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 347–49 (1967) (discussing how property rights protect incentives while minimizing externalities).

¹⁶ See, *e.g.*, ENTREPRENEURSHIP, GROWTH, AND INNOVATION: THE DYNAMICS OF FIRMS AND INDUSTRIES 246 (Enrico Santarelli ed., 2006) (stating that “limited liability encourages entry by providing a kind of wealth insurance for potential risk averse entrepreneurs”).

nant value” of the American legal system.¹⁷ Echoing Max Weber¹⁸ and anticipating Douglass North,¹⁹ Hernando de Soto,²⁰ the “Rule of Law” scholars,²¹ the “Legal Origins” theorists,²² and others,²³ Hurst argued that law provided a stabilizing influence that allowed private actors to plan for the future.²⁴ Within a “framework of reasonably predictable consequences,” Hurst surmised that private actors were “likely to cultivate boldness and energy in action.”²⁵ In this Article, we suggest that these values have stayed intact to the present day.

Although we claim as a descriptive matter that promoting entrepreneurial action is a fundamental value of the U.S. legal system, we also recognize circumstances in which this value has largely been absent from policy debates.²⁶ For example, federal immigration law,²⁷ which has traditionally been motivated by concern for national secur-

17 JAMES WILLARD HURST, *LAW AND THE CONDITIONS OF FREEDOM IN THE NINETEENTH-CENTURY UNITED STATES* 7 (1956); cf. John P. Roche, *Entrepreneurial Liberty and the Commerce Power: Expansion, Contraction, and Casuistry in the Age of Enterprise*, 30 U. CHI. L. REV. 680, 680 (1963) (arguing that the “key dogma” of the industrial revolution was entrepreneurial liberty, which amounted to “the notion that what was good for business was good for the nation”).

18 See 2 MAX WEBER, *ECONOMY AND SOCIETY* 642–43 (Guenther Roth & Claus Wittich eds., Univ. of Cal. Press 1978).

19 See DOUGLASS C. NORTH, *INSTITUTIONS, INSTITUTIONAL CHANGE AND ECONOMIC PERFORMANCE* 46–53 (1990).

20 See HERNANDO DE SOTO, *THE MYSTERY OF CAPITAL: WHY CAPITALISM TRIUMPHS IN THE WEST AND FAILS EVERYWHERE ELSE* 174–75 (2000).

21 See John K.M. Ohnesorge, *The Rule of Law*, 3 ANNUAL REV. L. & SOC. SCI. 99, 107 (2007).

22 See Rafael La Porta et al., *The Economic Consequences of Legal Origins*, 46 J. ECON. LIT. 285, 307–08 (2008).

23 See, e.g., WILLIAM E. NELSON, *THE COMMON LAW IN COLONIAL AMERICA: VOLUME I, THE CHESAPEAKE AND NEW ENGLAND, 1607–1660*, at 47 (2008) (explaining how law that developed in Virginia in the 1600s provided investors with “extensive protection”); GABRIEL KOLKO, *THE TRIUMPH OF CONSERVATISM: A REINTERPRETATION OF AMERICAN HISTORY, 1900–1916*, at 179 (1963) (noting that large businesses favored increasing federal regulation due to their stabilizing effects).

24 HURST, *supra* note 17, at 10–11 (“[T]he law of private property—the law of the autonomy of private decision makers—included also positive provision of legal procedures and tools and legal compulsions to create a framework of reasonable expectations within which rational decisions could be taken for the future.”).

25 *Id.* at 22.

26 Indeed, some commentators argue that “laws in the United States do more to hinder entrepreneurship than assist it.” Christine Hurt, *The High Cost of Entrepreneurship*, CONGLOMERATE BLOG: BUSINESS, LAW, ECONOMICS & SOCIETY (Jan. 31, 2013), <http://www.theconglomerate.org/2013/01/the-high-cost-of-entrepreneurship.html>; see also Eric J. Gouvin, *Of Small Businesses and Entrepreneurs: Toward a Public Policy that Supports New Venture Formation*, in *ENTREPRENEURSHIP AND INNOVATION IN EVOLVING ECONOMIES: THE ROLE OF LAW* 27, 29 (Megan M. Carpenter ed., 2012) (arguing that “law frequently . . . erects obstacles to new business formation”).

27 Immigration law “refers to the body of law governing the admission and expulsion of aliens.” Hiroshi Motomura, *Immigration Law After a Century of Plenary Power: Phantom Constitutional Norms and Statutory Interpretation*, 100 YALE L.J. 545, 547 (1990).

ity,²⁸ labor supply,²⁹ family reunification,³⁰ refugees,³¹ and other considerations,³² is only now considering the promotion of entrepreneurial action as a motivating value. For the past decade, the focal point of these policy debates has been the H-1B visa, which is of particular importance to technology firms because it allows temporary or nonimmigrant workers in occupations requiring “a body of highly specialized knowledge” to work for a sponsoring employer in the United States for up to three years.³³ More recently, however, the discussion of links between immigration and entrepreneurship has ex-

²⁸ Congress regulates immigration law under the “plenary power” doctrine, which has its origins in the so-called *Chinese Exclusion Case*. *Chae Chan Ping v. United States*, 130 U.S. 581 (1889). The plenary power doctrine was justified in that case by reference to national security considerations. *See id.* at 604 (“While under our Constitution and form of government the great mass of local matters is controlled by local authorities, the United States, in their relation to foreign countries and their subjects or citizens are one nation, invested with powers which belong to independent nations, the exercise of which can be invoked for the maintenance of its absolute independence and security throughout its entire territory.”). Despite criticism, *see, e.g.*, Stephen H. Legomsky, *Immigration Law and the Principle of Plenary Congressional Power*, 1984 SUP. CT. REV. 255, 255 (1984) (“[T]he Court should abandon the special deference it has accorded Congress in the field of immigration.”), the Supreme Court of the United States continues to invoke the plenary power doctrine. *See Arizona v. United States*, 132 S. Ct. 2492, 2498 (2012) (“The Government of the United States has broad, undoubted power over the subject of immigration and the status of aliens.”). National security remains one of the driving forces of immigration law. Matthew J. Lindsay, *Immigration, Sovereignty, and the Constitution of Foreignness*, 45 CONN. L. REV. 743, 749 (2013) (arguing that “the association between immigration regulation and national security remains essential to justifying a power unmoored from the Constitution and shielded from judicial scrutiny”).

²⁹ *See, e.g.*, Immigration Reform and Control Act of 1986, Pub. L. No. 99-603, sec. 101, § 274A, 100 Stat. 3359, 3360 (codified in 8 U.S.C. § 1324a(a) (2012)) (“[m]aking employment of unauthorized aliens unlawful”). For an argument that protectionist immigration policy is harmful to the economy, see Howard F. Chang, *Liberalized Immigration as Free Trade: Economic Welfare and the Optimal Immigration Policy*, 145 U. PA. L. REV. 1147, 1153 (1997) (arguing that “the application of trade principles to immigration law suggests . . . that specific liberalizing reforms . . . would raise national economic welfare as well as global economic welfare”).

³⁰ *See* Immigration and Nationality Act, Pub. L. No. 82-414, 66 Stat. 163 §§ 201(b)(2)(A)(i), 203(a), (d) (1952) (codified in 8 U.S.C. §§ 1151(b)(2)(A)(i), 1153(a), (d) (2012)). For a recent discussion of the policy of family reunification, see Jessica Feinberg, *The Plus One Policy: An Autonomous Model of Family Reunification*, 11 NEV. L.J. 629, 630 (2011) (proposing “adding a new category to immigration law’s current family reunification scheme, with the aim of providing U.S. citizens and those with whom they share important relationships significant relief from the harsh results that often arise under the current system”).

³¹ *See, e.g.*, 8 U.S.C. § 1158(b) (2012) (permitting the Secretary of Homeland Security or the Attorney General to grant asylum to an alien who is a “refugee” within the meaning of 8 U.S.C. § 1101(a)(42)(A)).

³² *See* Stephen H. Legomsky, *Immigration Policy from Scratch: The Universal and the Unique*, 21 WM. & MARY BILL RTS. J. 339, 355 (2012) (referring to family reunification, labor immigration, and refugees as the “three main pillars” of immigration policy, but also acknowledging other considerations).

³³ 8 U.S.C. § 1184(i)(1)(A) (2012). For a summary of the issues, see Craig S. Morford, Note, *H to B or Not to Be: What Gives Foreigners the Right to Come Here and Create American Jobs?*, 6 OHIO ST. ENTREPRENEURIAL BUS. L.J. 299, 299–303 (2011).

panded,³⁴ including the promotion of the “StartUp Visa Act”³⁵ and the launch of “Entrepreneur Pathways” in November 2012 by the U.S. Citizenship and Immigration Services (USCIS), a resource developed “to enhance communications with the entrepreneurial community and provide foreign entrepreneurs with the tools and information to determine which nonimmigrant visa category is most appropriate for their particular circumstance.”³⁶ While we acknowledge that other values are important in creating, interpreting, and enforcing laws, we believe as a normative matter that the promotion of entrepreneurial action is an important value to add to these and other debates.

This Article proceeds as follows. In Part I, we begin by reviewing the existing literature on entrepreneurial opportunities. We recognize that entrepreneurial opportunities have an objective component, which leads some commentators to assert that entrepreneurial opportunities are discovered. Nevertheless, we join the vast majority of entrepreneurship scholars in concluding that it is the subjective acts of the entrepreneur that mostly create entrepreneurial opportunities.

In Part II, we examine how entrepreneurs create opportunities and recognize the sources of novelty or innovation in entrepreneurial opportunities. We review briefly the vast psychology literature on creativity and innovation, which holds that new opportunities have their genesis in existing resources. Relying on the theory of creative cognition, we maintain that entrepreneurs draw on existing resources, their life experiences, and other available ideas in using the processes of analogy, conceptual combination, and abstraction to create entrepreneurial opportunities.

In Part III, we argue that a legal system can facilitate the creation of entrepreneurial opportunities by emboldening entrepreneurs to act. A legal system encourages entrepreneurial action by assuring entrepreneurs that they can retain the benefits of their success while reducing the costs of their failure. Here we draw on Willard Hurst, who discussed how nineteenth-century legal policy in the United States fa-

³⁴ See, e.g., THE WHITE HOUSE, BUILDING A 21ST CENTURY IMMIGRATION SYSTEM 9 (May 2011) (noting that the United States Citizenship and Immigration Service “has already begun initial steps to reduce barriers for high-skilled immigrants by identifying and reducing undue immigration barriers faced by foreign-born entrepreneurs”).

³⁵ StartUp Visa Act of 2011, S. 565, 112th Cong. (2011) (proposing to amend the Immigration and Nationality Act to establish visas for sponsored alien entrepreneurs).

³⁶ *Entrepreneur Pathways: A Resource for Immigrant Entrepreneurs*, U.S. CITIZENSHIP AND IMMIGRATION SERVS., <http://www.uscis.gov/portal/site/uscis/eir> (last visited Mar. 27, 2013). The Entrepreneurs in Residence (EIR) team created this particular resource. See *Entrepreneurs in Residence (EIR)*, U.S. CITIZENSHIP & IMMIGR. SERVS., available at <http://www.uscis.gov/eir> (last updated May 8, 2013). These initiatives correspond with stagnation in immigrant-founded startups. See VIVEK WADHWA ET AL., THEN AND NOW: AMERICA’S NEW IMMIGRANT ENTREPRENEURS 2 (Oct. 2012) (finding that “for the first time in decades, the growth rate of immigrant-founded companies has stagnated, if not declined”).

cilitated the “release of individual creative energy” through transacting.³⁷ Encouraging entrepreneurs to act and release their creative energy results in the pursuit of many ideas, and it is this combination of acting and having existing ideas to act upon that leads to the development of an opportunity cycle that sustains an entrepreneurial society.

I

ENTREPRENEURIAL OPPORTUNITIES

Entrepreneurship scholars strive to understand the nature and causes of entrepreneurial action, and the most influential definitions of entrepreneurship revolve around the concept of opportunities.³⁸ For instance, Jonathan Eckhardt and Michael Ciuchta define entrepreneurship as “the discovery, evaluation, and exploitation of entrepreneurial opportunities.”³⁹ Scott Shane offers a similar definition: “[e]ntrepreneurship is an activity that involves the discovery, evaluation and exploitation of opportunities to introduce new goods and services, ways of organizing, markets, processes, and raw materials through organizing efforts that previously had not existed.”⁴⁰ As evidenced by these definitions, the concept of *opportunities* plays a central role in the study of entrepreneurship.⁴¹

Entrepreneurial opportunities are the subset of market opportunities that involve some form of novelty or innovation.⁴² Joseph Schumpeter offers a typology of five forms of entrepreneurial opportunities: 1) new goods; 2) new methods of production; 3) new geographical markets; 4) new raw materials; and 5) new ways of organizing.⁴³ Eckhardt and Ciuchta define entrepreneurial opportu-

³⁷ See HURST, *supra* note 17.

³⁸ Peter Klein observes that “occupational” and “structural” theories of entrepreneurship focus on the entrepreneurial mindset and the entrepreneurial firm, respectively, paying little or no attention to entrepreneurial opportunities. Klein, *supra* note 11, at 176–77. “Functional” theories of entrepreneurship focus on judgment, innovation, adaptation, alertness, and coordination. *Id.* at 177–78. According to Klein, “[w]hat unifies these varied aspects of the entrepreneurial function is the concept of the opportunity.” *Id.* at 179.

³⁹ Jonathan T. Eckhardt & Michael P. Ciuchta, *Selected Variation: The Population-Level Implications of Multistage Selection in Entrepreneurship*, 2 STRATEGIC ENTREPRENEURSHIP J. 209, 209 (2008).

⁴⁰ SCOTT SHANE, A GENERAL THEORY OF ENTREPRENEURSHIP: THE INDIVIDUAL-OPPORTUNITY NEXUS 4 (2003) [hereinafter SHANE, GENERAL THEORY] (citation omitted).

⁴¹ Jonathan T. Eckhardt & Scott A. Shane, *Opportunities and Entrepreneurship*, 29 J. MGMT. 333, 336 (2003) (“[W]e define entrepreneurship as the discovery, evaluation, and exploitation of future goods and services. *This definition suggests that, as a scholarly field, entrepreneurship involves the study of opportunities.*” (emphasis added)).

⁴² For a more in-depth discussion of entrepreneurial opportunities versus market opportunities, see SCOTT A. SHANE, FOOL’S GOLD? THE TRUTH BEHIND ANGEL INVESTING IN AMERICA 39–41 (2009) [hereinafter SHANE, FOOL’S GOLD?].

⁴³ JOSEPH A. SCHUMPETER, THE THEORY OF ECONOMIC DEVELOPMENT: AN INQUIRY INTO PROFITS, CAPITAL, CREDIT, INTEREST, AND THE BUSINESS CYCLE 66 (Redvers Opie trans.,

nities as “situations in which new goods, services, raw materials, markets, and organizing methods can be introduced for profit.”⁴⁴ Shane and Venkataraman also focus on the “newness” of entrepreneurial opportunities, writing that “[e]ntrepreneurial opportunities differ from the larger set of all opportunities for profit, particularly opportunities to enhance the efficiency of existing goods, services, raw materials, and organizing methods, because the former require the discovery of new means-ends relationships.”⁴⁵

How much newness, novelty, or innovation turns an ordinary market opportunity into an entrepreneurial opportunity? Entrepreneurship often brings to mind novelty in the strong sense, such as a new technology developed in Silicon Valley and funded by venture capital. Although Schumpeter wrote several decades before the emergence of Silicon Valley, he appeared to contemplate novelty in the strong sense. He defined an entrepreneur as someone who carries out “new combinations”⁴⁶ or as he famously put it, is an agent of “Creative Destruction.”⁴⁷ Schumpeter’s entrepreneur is an agitator who mixes things up by introducing new information into a complacent

Harvard Univ. Press 1961) (1934); see also SHANE, GENERAL THEORY, *supra* note 40, at 34 (observing that there has been a lack of research on the forms that entrepreneurial opportunities may take and that only one empirical study has employed Schumpeter’s typology of opportunity); Eckhardt & Shane, *supra* note 41, at 340 (illustrating Schumpeter’s typology with examples).

⁴⁴ Eckhardt & Ciuchta, *supra* note 39, at 210.

⁴⁵ Scott Shane & S. Venkataraman, *The Promise of Entrepreneurship as a Field of Research*, 25 ACAD. MGMT. REV. 217, 220 (2000) (emphasis omitted). In 2010, Shane and Venkataraman were honored with the AMR Decade Award; they each wrote a reflection on the field of entrepreneurship, giving special attention to entrepreneurial opportunities. See Scott Shane, *Reflections on the 2010 AMR Decade Award: Delivering on the Promise of Entrepreneurship as a Field of Research*, 37 ACAD. MGMT. REV. 10, 14–17 (2012) [hereinafter Shane, *Reflections*]; Sankaran Venkataraman et al., *Reflections on the 2010 AMR Decade Award: Whither the Promise? Moving Forward with Entrepreneurship as a Science of the Artificial*, 37 ACAD. MGMT. REV. 21, 22–23 (2012) [hereinafter Venkataraman et al., *Reflections*]. These reflections prompted further commentary on the subject of entrepreneurial opportunities. See generally Sharon A. Alvarez & Jay B. Barney, *Epistemology, Opportunities, and Entrepreneurship: Comments on Venkataraman et al. (2012) and Shane (2012)*, 38 ACAD. MGMT. REV. 154 (2013) (raising issues with both Venkataraman’s and Shane’s articles); Raghu Garud & Antonio Paco Giuliani, *A Narrative Perspective on Entrepreneurial Opportunities*, 38 ACAD. MGMT. REV. 157 (2013) (proposing a “narrative perspective” to address issues that Shane and Venkataraman do not address). These commentaries, in turn, provoked responses. See generally Jonathan T. Eckhardt & Scott A. Shane, *Response to the Commentaries: The Individual-Opportunity (IO) Nexus Integrates Objective and Subjective Aspects of Entrepreneurship*, 38 ACAD. MGMT. REV. 160 (2013) (responding to the commentaries on Shane’s 2012 article); Sankaran Venkataraman et al., *Of Narratives and Artifacts*, 38 ACAD. MGMT. REV. 163, 163 (2013) [hereinafter Venkataraman et al., *Narratives*] (describing “relationships between narratives and artifact that could enhance an agenda for researching entrepreneurship” in response to the Garud and Giuliani article).

⁴⁶ SCHUMPETER, *supra* note 43, at 66.

⁴⁷ JOSEPH A. SCHUMPETER, CAPITALISM, SOCIALISM, AND DEMOCRACY 83 (Harper & Brothers 3d ed. 1950) (1942).

market.⁴⁸ In today's knowledge economy, opportunities that are novel in the strong or Schumpeterian sense are particularly valuable.

Still other entrepreneurial opportunities involve novelty in the weak sense.⁴⁹ The typical small business owner is often described as an entrepreneur, and some scholars have argued that opportunities exploited by small business owners count as entrepreneurial opportunities.⁵⁰ For example, Scott Shane has stated that "the entrepreneurial process can involve a type of innovation that is much milder [than technological shake-ups], such as placing a restaurant on a different corner of an intersection from existing restaurants, or using different recipes or employees in a new restaurant in the same location as an old one."⁵¹ Israel Kirzner's writings on entrepreneurial opportunities are well known and also invoke innovation in the weak sense;⁵² even a situation in which a commodity in one market can be sold for more in another market is considered an entrepreneurial opportunity.⁵³ If opportunities involving innovation in the weak sense are also counted as entrepreneurial, the importance of entrepreneurial opportunities to our society and economy is multiplied many times over.

In developing the concept of opportunities, scholars have debated whether opportunities are objective phenomena waiting to be discovered by entrepreneurs or whether entrepreneurs subjectively

⁴⁸ Eckhardt & Shane, *supra* note 41, at 341.

⁴⁹ William Baumol distinguishes between "replicative" entrepreneurs and "innovative" entrepreneurs. See WILLIAM J. BAUMOL, *THE MICROTHEORY OF INNOVATIVE ENTREPRENEURSHIP* 18 (2010).

⁵⁰ See SCOTT A. SHANE, *THE ILLUSIONS OF ENTREPRENEURSHIP: THE COSTLY MYTHS THAT ENTREPRENEURS, INVESTORS, AND POLICY MAKERS LIVE BY* 41 (2008) [hereinafter SHANE, *ILLUSIONS*] (describing the typical entrepreneur as "a white man in his forties" who is "just trying to make a living, not trying to build a high-growth business").

⁵¹ SHANE, *GENERAL THEORY*, *supra* note 40, at 8. *But see* Robert A. Baron, *Opportunity Recognition as Pattern Recognition: How Entrepreneurs "Connect the Dots" to Identify New Business Opportunities*, 20 *ACAD. MGMT. REV.* 104, 107 (2006) ("[T]he focus here is on what have been described as innovative opportunities—ones that truly break new ground rather than merely expand or repeat existing business models, such as, for instance, opening a new Italian restaurant in a neighborhood that does not currently have one.").

⁵² A fair amount of the existing opportunities literature is devoted to comparing and contrasting Kirznerian and Schumpeterian opportunities. See, e.g., ISRAEL M. KIRZNER, *PERCEPTION, OPPORTUNITY, AND PROFIT: STUDIES IN THE THEORY OF ENTREPRENEURSHIP* 111 (1979) ("In Schumpeter it appears that the entrepreneur acts to *disturb* an existing equilibrium situation. . . . [I]n our discussion the entrepreneur is seen as the equilibrating force."); Guido Buenstorf, *Creation and Pursuit of Entrepreneurial Opportunities: An Evolutionary Economics Perspective*, 28 *SMALL BUS. ECON.* 323, 325 (2007) (comparing Schumpeterian and Kirznerian entrepreneurs and their different effects on market processes).

⁵³ See Israel M. Kirzner, *Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach*, 35 *J. ECON. LIT.* 60, 70 (1997) (describing a situation in which the daring entrepreneur "buys where prices are 'too low' and sells where prices are 'too high'").

“create” or “imagine” opportunities.⁵⁴ Under discovery theory, entrepreneurial opportunities may arise from exogenous shocks to the competitive equilibrium—including changes in technology, changes in consumer preferences, and political or regulatory changes—or simply from the limits of the price system.⁵⁵ According to Sharon Alvarez and Jay Barney, “this emphasis on exogenous shocks forming opportunities suggests that discovery theory is predominantly about search—systematically scanning the environment to discover opportunities to produce new products or services.”⁵⁶ Thus, Israel Kirzner described opportunities as being like twenty-dollar bills lying on a beach, simply waiting to be plucked up by an entrepreneur.⁵⁷

Proponents of discovery theory recognize that this account of entrepreneurial opportunities implies that “entrepreneurs who discover opportunities are significantly different from others in their ability to either see opportunities or, once they are seen, to exploit these opportunities.”⁵⁸ Kirzner attempts to capture this difference with the concept of “alertness,”⁵⁹ and some entrepreneurship scholars have attempted to operationalize this concept.⁶⁰ Peter Klein has argued that this research program “misses the point” of Kirzner’s metaphor of entrepreneurial alertness: “Kirzner is not making an ontological claim about the nature of profit opportunities per se—not claiming, in other words, that opportunities are, in some fundamental sense, objective—but merely using the concept of objective, exogenously given, but not yet discovered opportunities as a device for explaining the tendency of markets to clear.”⁶¹

While we are sympathetic to Klein’s reading of Kirzner, the academic criticism of the objective theory of opportunities and Kirzner’s response to that criticism are instructive. For example, Don Lavoie criticizes Kirzner’s account of entrepreneurship, observing that “acts of entrepreneurship . . . require efforts of the creative imagination, skillful judgments of future cost and revenue possibilities, and an abil-

⁵⁴ For a useful introduction to the debate, see Sharon A. Alvarez & Jay B. Barney, *Discovery and Creation: Alternative Theories of Entrepreneurial Action*, 1 STRATEGIC ENTREPRENEURSHIP J. 11, 11–12 (2007).

⁵⁵ See Eckhardt & Shane, *supra* note 41, at 336–38.

⁵⁶ Alvarez & Barney, *supra* note 54, at 13.

⁵⁷ See ISRAEL M. KIRZNER, COMPETITION AND ENTREPRENEURSHIP 15–16 (1973) (“The entrepreneurial element in the economic behavior of market participants consists . . . in their alertness to previously unnoticed changes in circumstances which may make it possible to get far more in exchange for whatever they have to offer than was hitherto possible.”).

⁵⁸ Alvarez & Barney, *supra* note 54, at 14.

⁵⁹ KIRZNER, *supra* note 57, at 67.

⁶⁰ See Klein, *supra* note 11, at 179–80 (discussing opportunity identification literature which “seeks to build a positive research program by operationalizing the concept of alertness”).

⁶¹ *Id.* at 180 (emphasis omitted).

ity to read the significance of complex social situations.”⁶² Kirzner conceded that cultural and social detail would be important in the application of economic theory,⁶³ which is consistent with Klein’s view that “entrepreneurs act based on their beliefs about future gains and losses, rather than reacting to objective, exogenously given opportunities for profit.”⁶⁴

Thus, the boundary between discovery theory and creation theory is rather blurry as both theories seem to admit that entrepreneurial opportunities are at least partly endogenous to entrepreneurs.⁶⁵ While we do not wish to trivialize the objective attributes of entrepreneurial opportunities,⁶⁶ scholars largely agree that entrepreneurial opportunities are historically, culturally, and psychologically contingent.⁶⁷

Scott Shane offers an excellent illustration of opportunity creation—even though he labels it “discovery”—as we understand the concept.⁶⁸ Shane tracked eight entrepreneurial teams who explored a single MIT technology for a three-dimensional printing process in the hopes of licensing that technology.⁶⁹ The eight teams each saw a different application for the patented technology, ranging from architec-

⁶² Don Lavoie, *The Discovery and Interpretation of Profit Opportunities: Culture and the Kirznerian Entrepreneur*, in *THE CULTURE OF ENTREPRENEURSHIP* 33, 44 (Brigitte Berger ed., 1991).

⁶³ See ISRAEL M. KIRZNER, *THE ECONOMIC POINT OF VIEW: AN ESSAY IN THE HISTORY OF ECONOMIC THOUGHT* 146–47 (1960); Israel M. Kirzner, *The Alert and Creative Entrepreneur: A Clarification*, 32 *SMALL BUS. ECON.* 145, 150 (arguing that he was not “in any way denying the elements of boldness, creativity, and innovativeness that, in the real world, certainly do characterize entrepreneurial activity”).

⁶⁴ Klein, *supra* note 11, at 182–83.

⁶⁵ In creation theory, “opportunities are social constructions that do not exist independent of entrepreneur’s perceptions.” Alvarez & Barney, *supra* note 54, at 15. Scott Shane, who refocused the attention of entrepreneurship scholars on opportunities, is perhaps the most adamant scholar on the objective nature of entrepreneurial opportunities. See Shane, *Reflections*, *supra* note 45, at 15 (“Entrepreneurial opportunities are situations in which it is possible to recombine resources in a way that generates a profit. Business ideas are entrepreneurs’ *interpretation* of how to recombine resources in a way that allows pursuit of that opportunity.”). Shane’s view that “objective factors influence opportunities” reflects precisely our own view. *Id.* Embracing this idea eliminates the need for a new and separate concept of “business ideas.” *See id.*

⁶⁶ See Jeffery S. McMullen et al., *What Is Entrepreneurial Opportunity?*, 28 *SMALL BUS. ECON.* 273, 276–78 (2007) (discussing various ways to view the objective component of opportunities).

⁶⁷ Peter Klein would concede on this point but would also argue that the subjective nature of entrepreneurial opportunities and the fact that “we treat them as a black box” makes them less useful as a unit of analysis. Klein, *supra* note 11, at 183. He would focus instead on entrepreneurial action, which he describes as “the assembly of resources in the present in anticipation of (uncertain) receipts in the future.” *Id.* The opportunity cycle labels this “opportunity exploitation.” *See id.* at 179.

⁶⁸ Scott Shane, *Prior Knowledge and the Discovery of Entrepreneurial Opportunities*, 11 *ORG. SCI.* 448, 448 (2000).

⁶⁹ Four of the teams actually started new firms to exploit the technology, while four did not. *Id.* at 454.

tural models based on CAD drawings, to a new drug delivery system, to ceramic filters for power generation.⁷⁰ These variations show that the technology was not the opportunity but rather a resource—an existing idea.⁷¹ Each entrepreneurial team then created its own opportunity based on that resource.⁷²

Guido Buenstorff also illustrates opportunity creation using the example of special bikes designed by a group of California “hippies” for their downhill races. An entrepreneur who was not part of this original group later commercialized the bikes as “mountain bikes.”⁷³ Buenstorff’s analysis matches our own. He views the hippies’ modified bike as a resource, not an opportunity. The unaffiliated entrepreneur then discovers the resource, evaluates it, and uses it to *create* the mountain bike.

What we call the act of creation comes after an entrepreneur discovers and evaluates resources but before an opportunity exists. The entrepreneur’s act of creation is what turns existing resources into new entrepreneurial opportunities.⁷⁴ In Part III of this Article, we discuss how legal rules affect the opportunities that entrepreneurs perceive, but first we will examine the entrepreneur’s creative process through existing psychology literature.

II

WHERE DO NEW OPPORTUNITIES COME FROM?

As noted in the preceding Part, the act of opportunity creation is a cognitive process. Although entrepreneurship literature and psychology literature are not always consistent in describing imagination or creativity, certain creative processes are generally recognized in

⁷⁰ *Id.* at 455 tbl.1.

⁷¹ Schumpeter did not make the mistake of conflating entrepreneurship with invention. He observed that “[a]lthough entrepreneurs of course *may* be inventors just as they may be capitalists, they are inventors not by nature of their function but by coincidence and vice versa.” SCHUMPETER, *supra* note 43, at 88–89.

⁷² See Shane, *supra* note 68, at 455–59 (comparing the ability of the eight teams to recognize and take advantage of opportunities).

⁷³ Buenstorff, *supra* note 52, at 329–30. Randall Holcombe gives another example: Xerox developed the use of on-screen windows and the computer mouse, but its lack of “entrepreneurial insight” allowed Apple and Microsoft to exploit these opportunities. Randall G. Holcombe, *The Origins of Entrepreneurial Opportunities*, 16 REV. AUSTRIAN ECON. 25, 28 (2003).

⁷⁴ Venkataraman describes entrepreneurship in a manner that is strikingly similar to the opportunity cycle: “[M]ost entrepreneurial opportunities in the world have to be *made* through the *actions and interactions* of stakeholders in the enterprise, using materials and concepts *found* in the world. Opportunities are, in fact, artifacts. And their making involves *transforming* the extant world into new possibilities.” Venkataraman et al., *Reflections*, *supra* note 45, at 26.

both psychology and entrepreneurship.⁷⁵ Further, although theories about creative cognitive processes vary, they all rely on one basic premise: new ideas come from some combination, restructuring, or extension of existing ideas.⁷⁶

A. The Crucial “Incubation” Stage in the Creative Process

Imagination is a broad field of study covering many different methods of reconstructing past experiences and images.⁷⁷ In modern psychology, this field has been divided into four separate subfields: consciousness, daydreaming, night dreaming, and creativity.⁷⁸ Creativity—defined as “the production of any idea, action, or object that is new and valued”⁷⁹—is the form of imagination that most closely relates to the creation of entrepreneurial opportunities. Creativity is a process that has several stages, the most important of which, for our purposes, is *incubation*.⁸⁰ The incubation stage is crucial to our ac-

⁷⁵ While we focus on the psychology literature, entrepreneurial scholars have offered explanations for how entrepreneurs either discover existing ideas or create new opportunities. An entrepreneur who discovers an existing resource before someone else has a favorable information asymmetry. Entrepreneurs might have superior information or access to existing resources due to their current jobs, prior experiences, or social networks. They may also gain informational advantages through an active search for information. When no informational asymmetries exist, one entrepreneur may be able to see something in an existing resource that another does not. These “belief” asymmetries mean that entrepreneurs are able to evaluate shared information differently during the creative process. Individual traits such as intelligence, creativity, and alertness can influence an entrepreneur’s ability to imagine new opportunities from known resources. *See, e.g.*, SHANE, GENERAL THEORY, *supra* note 40, at 45 (“[P]eople discover opportunities that others do not identify for two reasons: first, they have better access to information about the existence of the opportunity. Second, they are better able than others to recognize opportunities, given the same amount of information about it, because they have superior cognitive capabilities.”).

⁷⁶ *See e.g.*, ARTHUR S. REBER ET AL., PENGUIN DICTIONARY OF PSYCHOLOGY 371 (4th ed. 2009) (“Imagination[:] The process of recombining memories of past experiences and previously formed images into novel constructions”); Denis A. Grégoire et al., *Cognitive Processes of Opportunity Recognition: The Role of Structural Alignment*, 21 ORG. SCI. 413, 426 (2010) (“In line with past research, we observe that the executives in our study used their prior knowledge of markets to search for and think of opportunities for new technologies.”); Brian J. Loasby, *Uncertainty and Imagination, Illusion and Order: Shackleian Connections*, 35 CAMBRIDGE J. ECON. 771, 772 (2011) (focusing on George Shackle’s idea that “we can acquire new knowledge only by connecting it to our existing knowledge[]and that the consequences of such connections are in general not predictable”).

⁷⁷ *Imagination*, in 4 ENCYCLOPEDIA OF PSYCHOLOGY 227, 227 (Alan E. Kazdin ed., 2000).

⁷⁸ *Id.* at 229.

⁷⁹ *Creativity*, in 2 ENCYCLOPEDIA OF PSYCHOLOGY, *supra* note 77, at 337, 338.

⁸⁰ The other stages are preparation, insight, evaluation, and elaboration. *Id.* at 339. This general psychological theory of creativity has been directly applied to opportunity creation in some cases, with each stage representing a part of the entrepreneurial process. *See* Ashford C. Chea, *Entrepreneurial Venture Creation: The Application of Pattern Identification Theory to the Entrepreneurial Opportunity-Identification Process*, INT’L J. BUS. & MGMT. 37, 43–45 (2008).

count of the connection between law and entrepreneurial opportunities.

Incubation is the unconscious process whereby the brain combines ideas with information stored in memory at random and whereby the individual either accepts or rejects these combinations of ideas with the information stored in memory.⁸¹ Though it is unknown exactly how this happens, there are several theories about the process, including the theory of creative cognition, which will be discussed below. An individual cannot engage in the incubation process without becoming immersed in and curious about an unresolved problem, but after the individual has these two prerequisites, the incubation process can occur without the conscious knowledge of the creative thinker.⁸²

Psychologists and cognitive scientists have devised several theories to describe the process through which the brain creates new ideas. One theory that has gained substantial support both in the psychology and entrepreneurship literatures is the theory of creative cognition.⁸³ Although there are different branches within this theory that have created separate versions of cognitive processes,⁸⁴ the core of the theory accepts the notion that there are at least three processes by which an individual creates new ideas: analogy, conceptual combination, and abstraction.⁸⁵ Like other psychological theories of imagination, this theory relies on the premise that new ideas come from existing ideas.⁸⁶

To take each part of the theory of creative cognition in turn, analogy is the process of transposing a conceptual structure from a habitual context to an innovative context; this is like using the structure of a planetary system to visualize the orbit of electrons around an atom.⁸⁷ Combination is the concept of combining old ideas in new ways, such as combining the different structures of elements to create the double helix for DNA mapping.⁸⁸ Abstraction is “the discovery of any structure, regularity, pattern, or organization that is present in a number of

⁸¹ See *Creativity*, *supra* note 79, at 339.

⁸² *Id.*

⁸³ See generally RONALD A. FINKE ET AL., *CREATIVE COGNITION: THEORY, RESEARCH, AND APPLICATIONS* (1992) (discussing cognitive processes from a psychological perspective); Thomas B. Ward, *Cognition, Creativity, and Entrepreneurship*, 19 J. BUS. VENTURING 173 (2004) (discussing cognitive approaches to creativity as they relate to entrepreneurs' generation of ideas for business ventures).

⁸⁴ See Ward, *supra* note 83, at 181.

⁸⁵ *Id.* at 176–85; see also Hans Welling, *Four Mental Operations in Creative Cognition: The Importance of Abstraction*, 19 CREATIVITY RES. J. 163, 168–74 (2007) (discussing analogy, conceptual combination, and abstraction theories in turn).

⁸⁶ See Ward, *supra* note 83, at 176.

⁸⁷ See Welling, *supra* note 85, at 168–69.

⁸⁸ *Id.* at 169 (“Combination is the merging of two or more concepts into one new idea.”).

different perceptions that can be either physical or mental in nature.”⁸⁹

Although creative cognition has found some application to entrepreneurship, other theories apply more specifically to explain the process of creating or recognizing entrepreneurial opportunities. One such theory claims that entrepreneurs engage in the process of structural alignment in order to create new ideas for opportunities.⁹⁰ Structural alignment is a theory that cognitive scientists created to explain analogies and analogical thinking,⁹¹ and it is a theory that is referenced frequently in the field of creative cognition as well.⁹² Structural alignment involves comparing abstract relationships and capabilities of a certain technology or object with technological fields or domains that are familiar to the entrepreneur.⁹³ This allows the entrepreneur to process the new information and create new ideas for exploiting the technology.⁹⁴

The concepts that underlie the structural alignment theory fit well with both the theory of creative cognition and the general psychological theory of creativity. In essence, structural alignment is an amalgamation of the processes of abstraction and analogy under the creative cognition theory. The entrepreneur discovers structures and patterns associated with an object (engages in the process of abstraction) and then analogizes that new information with more familiar information the entrepreneur has stored about market places and other domains. Under the general psychological theory of creativity, this process would fall under the phase of incubation, as it is an unconscious cognitive process.

B. The Other Stages in the Creative Process

Although less critical to our connection between law and opportunities, the other stages in the creative process are also important and reveal that entrepreneurs draw on existing ideas to create new opportunities. These other stages in the creative process, discussed below, are preparation, insight, evaluation, and elaboration.

Preparation is the process whereby the individual becomes immersed in the “symbolic system, or domain” of a particular branch of technology.⁹⁵ For example, painters often become familiar with the

⁸⁹ *Id.* at 170.

⁹⁰ See Grégoire et al., *supra* note 76, at 415–16.

⁹¹ See generally Dedre Gentner, *Structure-Mapping: A Theoretical Framework for Analogy*, 7 COGNITIVE SCI. 155 (1983) (discussing structure-mapping as a framework that describes the rules of analogies and analogical thinking).

⁹² See e.g., FINKE ET AL., *supra* note 83, at 22–23; Ward, *supra* note 83, at 180.

⁹³ See Grégoire et al., *supra* note 76, at 416.

⁹⁴ *Id.*

⁹⁵ *Creativity*, *supra* note 79, at 339.

works of art of other painters, and writers read the works of other writers.⁹⁶ Also included in the preparation stage is a sense of curiosity about some unresolved problem in the particular branch of technology.⁹⁷ Unresolved problems may either be presented to the creative thinker or discovered by the thinker who is dealing with problematic situations.⁹⁸ In short, the preparation stage is where an entrepreneur discovers an existing idea. Using the examples from earlier in this Article, preparation is where Buenstorf's entrepreneur discovers the downhill bike or Shane's entrepreneurs discover the MIT technology.⁹⁹

Insight is the moment of illumination that occurs when a combination of ideas is "strong enough to withstand . . . unconscious censorship."¹⁰⁰ Because this experience is often so strong, it is usually the experience that creative thinkers focus on to the exclusion of the preceding and succeeding processes.¹⁰¹ However, psychologists consider the other processes to be more important to the creative process in general.¹⁰²

Evaluation is the process whereby the creative thinker seeks to reconcile the new combination of ideas with the existing ideas within the domain of the branch of technology.¹⁰³ Many idea combinations fail in this process because although the idea may be novel, it is not completely consistent either with logic or with the field in which the creative thinker is working.¹⁰⁴ At this stage, the creative thinker can err either on the side of being too concerned with having a perfect theory or not being concerned enough.¹⁰⁵

Finally, elaboration is the process whereby the idea is tested and applied.¹⁰⁶ This is the end of the creative process and produces the final opportunity. For example, after the novelist has come up with the idea for a brilliant book, he or she must now sit down, write the book, and take it through the editing process.¹⁰⁷ This is another stage in which the opportunity may fail because it is a stage that requires time and hard work.¹⁰⁸ In sum, new opportunities come from existing

96 *See id.*

97 *Id.*

98 *Id.*

99 *See supra* notes 68–73 and accompanying text.

100 *Creativity, supra* note 79, at 339.

101 *See id.*

102 *Id.*

103 *Id.*

104 *Id.*

105 *Id.*

106 *Id.* at 339–40.

107 *See id.*

108 *Id.*

ideas, and our brief review of the psychology literature helps explain the process.

III

THE OPPORTUNITY CYCLE

Several years ago, one of the authors was visiting an indoor children's play park with a colleague in Germany. While observing their children at play, the German lawyer offered several suggestions about how the play park might be improved, and he speculated that the business would be much more successful if the owners of the play park adopted his innovative ideas. His companion, impressed by the lawyer's ingenuity, wondered aloud if he might be tempted to leave his legal practice to build a more advanced play park. The German lawyer was puzzled. *Why would he leave his prestigious professional position to become an entrepreneur?* In his view, entrepreneurship was for people who could not succeed in loftier intellectual pursuits.

As we consider why people might create and exploit entrepreneurial opportunities, we would do well to remember two points illustrated by this anecdote. First, entrepreneurship has a cultural dimension that may be (mostly) independent of legal and market incentives. Second, people think creatively even when they have no intention of profiting from their innovative ideas. Nevertheless, incentives matter.¹⁰⁹ In this section, we argue that legal rules encourage the creation of entrepreneurial opportunities by assuring market participants that they can retain many of the benefits of their success while reducing costs associated with transacting, especially when the transactions fail. As discussed in more detail below, scholars in various areas of law have linked law and entrepreneurial action. We seek to generalize these insights arguing simply that when law emboldens action, entrepreneurs create more opportunities.

A. Motivating the Release of Energy

When Willard Hurst published *Law and the Conditions of Freedom* in 1956, he was striving to debunk the image of the nineteenth-century United States as a *laissez-faire* society,¹¹⁰ but Hurst's claim that Ameri-

¹⁰⁹ Cf. Russell S. Sobel et al., *Freedom, Barriers to Entry, Entrepreneurship, and Economic Progress*, 20 REV. AUSTRIAN ECON. 221, 222 (2007) ("In countries with institutions providing secure property rights, a fair and balanced judicial system, contract enforcement, and effective limits on government's ability to transfer wealth through taxation and regulation, creative individuals are more likely to engage in the creation of new wealth through productive private sector entrepreneurship.")

¹¹⁰ HURST, *supra* note 17, at 32 ("Belief in the release of private individual and group energies thus furnished one of the working principles which give the coherence of character to our early nineteenth-century public policy. This principle found expression in no simple removal of legal restrictions or staying of the regulatory hand. Limitations on offi-

can law promoted the “release of individual creative energy” as an independent value is a tantalizing suggestion.¹¹¹ Under this view, legislatures and courts defined private property to protect the autonomy of an individual vis-à-vis the state, created legal rules to ensure the enforcement of valid contracts, and imposed tort liability to encourage people to rely on others.¹¹² Legal forms, including the corporation, “loaned the organized force of the community to private planners.”¹¹³

Hurst builds his story on two rather mundane observations about the operation of law in nineteenth-century America. First, the institution of private property—comprising not only the rules relating to ownership that are typically associated with property law, but also the rules against injury that are associated with criminal law and tort law—ensured autonomy for private decision makers as against the public officials, as well as against other private parties.¹¹⁴ Second, the willingness of courts to enforce promises allowed property owners to plan for the use of their property in the future.¹¹⁵ When combined, these observations direct our eyes toward the importance of transactions as the source of energy.¹¹⁶ Hurst was not interested in the solitary inventor or the reclusive author. The “release of individual creative energy” was accomplished through collaborative business ventures, and Hurst was interested in the entrepreneur.¹¹⁷

The Hurstian entrepreneur was inspired to action by the prospect of material gain. The state’s role was to secure property rights and reduce the risks associated with venturing.¹¹⁸ The legal framework, therefore, served as a form of subsidy for business transactions.¹¹⁹ The common law rules examined by Hurst were largely agnostic about

cial power were very important elements of this pattern of policy. But so, too, was a complicated affirmative use of law to furnish instruments and procedures and to impose as well as enforce patterns of dealing. In this aspect, our nineteenth-century policy involved a good deal less of simple *laissez faire* than has often been claimed for it.”)

¹¹¹ *Id.* at 7.

¹¹² *See id.* at 8–9.

¹¹³ *Id.* at 11.

¹¹⁴ *Id.* at 9.

¹¹⁵ *Id.* at 12.

¹¹⁶ *Id.* at 14 (“[T]he general extension of contract expressed, above all else, the increasing dominance of the market in social organization.”).

¹¹⁷ *Cf.* SCHUMPETER, *supra* note 43, at 74 (“The carrying out of new combinations we call ‘enterprise’; the individuals whose function it is to carry them out we call ‘entrepreneurs.’”).

¹¹⁸ *See* HURST, *supra* note 17, at 19–20.

¹¹⁹ *Id.* at 11 (“[E]nforcement of promises involved delegating the public force in aid of private decision making.”).

the substance of transactions.¹²⁰ The motivation of legal policy makers was not efficiency or fairness,¹²¹ but *action*.¹²²

In the modern regulatory state, legal rules are more complex and intrusive than those studied by Hurst, but the bias for action still inheres in much of our current legal policy. In the following sections, we describe two roles that the legal system performs in facilitating the creation of entrepreneurial opportunities: ensuring that entrepreneurs retain the benefits of their success and reducing the costs of action and even failure. We do not attempt to give a comprehensive account of the U.S. legal system;¹²³ instead, we offer various examples of laws that illustrate the central point of our Article, that the promo-

¹²⁰ *Id.* at 14 (“In more and more instances, from mid-century on, the law itself provided a framework for the parties’ dealing, unless they explicitly contracted out of the transaction which the rules of law shaped for them. This was notably true in respect to the instruments of commerce [but] [t]his development was a particularly important form of the more general, growing confidence of the courts in implying agreements from the parties’ dealings and construing their agreements in the light of trade custom.”).

¹²¹ See generally LOUIS KAPLOW & STEVEN SHAVELL, *FAIRNESS VERSUS WELFARE* 3–4 (2002) (arguing that “legal rules should be selected entirely with respect to their effects on the well-being of individuals in society”).

¹²² The foundation for this legal policy may have been laid in the near aftermath of the American Revolution. As observed by Gordon Wood:

[N]o banks, no government, no institutions could have created the American economic miracle of [the early nineteenth century] . . . America suddenly emerged a prosperous, scrambling, enterprising society not because the Constitution was created or because a few leaders formed a national bank, but because ordinary people, hundreds of thousands of them, began working harder to make money and ‘get ahead.’ Americans seemed to be a people totally absorbed in the individual pursuit of money.

GORDON S. WOOD, *THE RADICALISM OF THE AMERICAN REVOLUTION* 325 (1991).

¹²³ For example, we do not discuss tax policy. For an excellent and brief summary of the arguments relating to the effect of tax subsidies on entrepreneurship, see Victor Fleischer, *Taxing Founders’ Stock*, 59 *UCLA L. REV.* 60, 92–97 (2011) (arguing that the “effect of the tax subsidy is mostly inframarginal, rewarding entrepreneurs for activity they would have conducted anyway”). We could also have discussed capital formation which has been in the news recently with the passage of the Jumpstart Our Business Startups Act (JOBS Act), Pub. L. No. 112-106, 126 Stat. 306 (2012). For an excellent examination of the role of capital formation in entrepreneurship, see Elizabeth Pollman, *Information Issues on Wall Street 2.0*, 161 *U. PA. L. REV.* 179, 185–86 (2012). In a contribution to this symposium, Robert Thompson and Donald Langevoort argue that regulation of the public offering process is motivated by “concern for the sales pressures that come from having to dispose of a significant volume of securities in a short time and the risks of deception and opportunism that may result.” Robert B. Thompson & Donald C. Langevoort, *Redrawing the Public-Private Boundaries in Entrepreneurial Capital Raising*, 98 *CORNELL L. REV.* 1573, 1627 (2013). As the authors recognize, however, efforts to control fraud through regulation affect the cost of capital formation. *Id.* at 1618. Thus, as with other legal rules discussed in this Article, the debate over capital formation for entrepreneurial firms is about the optimal level of regulation. For an empirical investigation of the effect of securities regulation on the creation of new entrepreneurial ventures, see Douglas Cumming & April Knill, *Disclosure, Venture Capital and Entrepreneurial Spawning*, 43 *J. INT’L BUS. STUD.* 563, 564 (2012) (suggesting that stricter disclosure standards for venture capital investments would encourage “entrepreneurial spawning”).

tion of entrepreneurial action is a fundamental value in the U.S. legal system.

B. Retaining the Benefits of Success

As noted by Hurst, one of the basic requirements for entrepreneurship is the right to own private property.¹²⁴ Property theorists are quick to observe that “property” is not a *thing*,¹²⁵ but rather a “bundle of rights” with respect to a thing.¹²⁶ The tricky part of defining “property” is that the bundle of rights is not the same for all things.¹²⁷ As a result, the designation of something as “property” does not say anything about the associated rights.¹²⁸ Thus, the label “property” has come to be seen by some as “almost meaningless.”¹²⁹ Fortunately, we are not interested in the legal definition of property but rather in the economic understanding of property rights. For many economists (and lawyers, as it turns out), the essence of “property” is the right to exclude.¹³⁰ We use “property rights” in this sense to motivate our discussion of law and entrepreneurial opportunities.

The right to exclude is pervasive. As Shyamkrishna Balganesh has observed, “[t]he idea of exclusion, in one form or the other, tends to inform almost *any* understanding of property, whether private, public, or community.”¹³¹ The right to exclude from a resource implies

¹²⁴ See HURST, *supra* note 17, at 10–11.

¹²⁵ Thomas W. Merrill & Henry E. Smith, *What Happened to Property in Law and Economics?*, 111 YALE L.J. 357, 358 (2001) (stating, tongue-in-cheek, that “[s]omeone who believes that property is a right to a thing is assumed to suffer from a childlike lack of sophistication—or worse”).

¹²⁶ See, e.g., Felix S. Cohen, *Dialogue on Private Property*, 9 RUTGERS L. REV. 357, 361 (1954); Morris R. Cohen, *Property and Sovereignty*, 13 CORNELL L.Q. 8, 12 (1927) [hereinafter Cohen, *Sovereignty*] (using the term “set of relationships” in place of “bundle of rights”); Jeremy Waldron, *What Is Private Property?*, 5 OXFORD J. LEGAL STUD. 313, 314–15 (1985) (discussing the difficulty of defining contents of the “bundle of rights” for any property).

¹²⁷ See Waldron, *supra* note 126, at 315 (noting that if the bundle of rights “remained constant for all or most of the cases that we want to describe as private property, the bundle as a whole could be defined in terms of its contents” but that “it does not remain constant, and that is where the difficulties begin”).

¹²⁸ See Joan Williams, *The Rhetoric of Property*, 83 IOWA L. REV. 277, 297 (1998) (“Labeling something as property does not predetermine what rights an owner does or does not have in it.”).

¹²⁹ Merrill & Smith, *supra* note 125, at 357.

¹³⁰ See J.E. PENNER, *THE IDEA OF PROPERTY IN LAW* 68 (1997) (contending that “property rights can be fully explained using the concepts of exclusion and use”); 2 WILLIAM BLACKSTONE, *COMMENTARIES ON THE LAWS OF ENGLAND* 2 (Univ. of Chi. Press 1979) (1766) (defining property as “that sole and despotic dominion . . . exercise[d] over the external things . . . in total exclusion of the right of any other” (emphasis added)); see also Cohen, *Sovereignty*, *supra* note 126, at 12 (noting that “the essence of private property is always the right to exclude others”); Thomas W. Merrill, *Property and the Right to Exclude*, 77 NEB. L. REV. 730, 730 (1998) (stating that “the right to exclude others is more than just ‘one of the most essential’ constituents of property—it is the *sine qua non*”).

¹³¹ Shyamkrishna Balganesh, *Demystifying the Right to Exclude: Of Property, Inviolability, and Automatic Injunctions*, 31 HARV. J.L. & PUB. POL’Y 593, 596 (2008).

the correlative duty not to interfere with the resource.¹³² Thus, the right to exclude becomes the touchstone for describing a broad swath of legal rules that protect one person's resources from infringement by another.

This expansive understanding of the right to exclude also undergirds our view that a fundamental purpose of law in connection with entrepreneurship is to define rights to exclude.¹³³ As observed by Kirsten and Nicolai Foss, rights to exclude are inextricably linked to the creation of entrepreneurial opportunities: “[P]roperty rights steer the entrepreneurial discovery process. . . . [I]f the entrepreneur cannot hold (sufficiently) secure property rights to certain resource attributes, he will not explore these and certain resource attributes may therefore never be discovered and explored.”¹³⁴

Multiple entrepreneurs might be interested in creating similar opportunities from the same underlying resources, but not all of them have the legal right to do so. Faced with competing claims to opportunities, the law allocates resources between competing entrepreneurs. It does so through the granting of property rights, which allows the grantee to create and exploit the opportunity while at the same time excluding others from doing so.¹³⁵ Some of the entrepreneurship literature recognizes that property rights are important to opportunities,¹³⁶ and we explain this connection using a traditional example—patent law—and a less obvious one—corporate fiduciary law—as illustrations.¹³⁷

¹³² See Wesley Newcomb Hohfeld, *Some Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 23 YALE L.J. 16, 35–36 (1913).

¹³³ Steven N. S. Cheung, *The Structure of a Contract and the Theory of a Non-Exclusive Resource*, 13 J. L. & ECON. 49, 67 (1970) (“The transfer of property rights among individual owners through contracting in the marketplace requires that the rights be exclusive. . . . [W]ithout some enforced or policed exclusivity to a right of action, the right to contract so as to exchange is absent.”).

¹³⁴ Kirsten Foss & Nicolai J. Foss, *Entrepreneurship, Transaction Costs, and Resource Attributes* 5 (Ctr. for Strategic Mgmt. & Globalization, Working Paper No. 7, 2006), available at <http://ssrn.com/abstract=982103>. We do not intend to suggest that all entitlements are potential opportunities, but rather than all opportunities depend on legal entitlements.

¹³⁵ See *supra* notes 124–32 and accompanying text.

¹³⁶ See Kirsten Foss & Nicolai J. Foss, *Understanding Opportunity Discovery and Sustainable Advantage: The Role of Transaction Costs and Property Rights*, 2 STRATEGIC ENTREPRENEURSHIP J. 191, 194 (2008).

¹³⁷ Other areas of potential inquiry relating to property rights are the law of agency and the law of employment contracts, particularly as they relate to competition by an agent with a principal or former principal. Ronald Gilson has famously argued that refusing to enforce covenants not to compete—effectively refusing employers the right to exclude—is facilitative of entrepreneurial activity. See Ronald J. Gilson, *The Legal Infrastructure of High Technology Industrial Districts: Silicon Valley, Route 128, and Covenants Not to Compete*, 74 N.Y.U. L. REV. 575, 608–09 (1999). For an argument in favor of a uniform rule of unenforceability that is partly motivated by a desire for more innovation, see Viva R. Moffat, *Making Non-Competes Unenforceable*, 54 ARIZ. L. REV. 939, 984 (2012) (“[A] number of recent studies indicate that a legal regime in which non-competes are unenforceable is preferable not

1. *Patent Law*

The legal rules governing the issuance and exploitation of patents define resources through the granting of property rights.¹³⁸ Although Willard Hurst did not examine patent law in *Law and the Conditions of Freedom*,¹³⁹ the “democratization” of patents in the nineteenth century seems to have played an important role in the economic development of the United States.¹⁴⁰ Patent law is the most conspicuous example of the promotion of entrepreneurial action as a fundamental value of the U.S. legal system.¹⁴¹

just for employees (which goes without saying), but also for employers who will gain from access to more skilled and qualified employees and from increased overall innovation and financial returns.”).

¹³⁸ Intellectual property has traditionally been classified as outside the realm of legal property. See Pamela Samuelson, *Information as Property: Do Ruckelshaus and Carpenter Signal a Changing Direction in Intellectual Property Law?*, 38 CATH. U. L. REV. 365, 365 (1989). Nevertheless, a patent is a right to exclude, earned by the patentee through disclosure. See *J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int’l, Inc.*, 534 U.S. 124, 142 (2001) (disclosure is the “*quid pro quo* of the right to exclude” (quoting *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 484 (1974))). For a debate on “intellectual property isolationism,” see Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031, 1075 (2005) (“The economics of intellectual property law should focus on the economic characteristics of intellectual property rights, not on inapposite economic analysis borrowed from the very different case of land.”) and John F. Duffy, *Intellectual Property Isolationism and the Average Cost Thesis*, 83 TEX. L. REV. 1077, 1078 (2005) (“A unified theory of property—one broad enough to account for the similarities and differences among species of property as diverse as Blackacre and patents—promises to increase rather than to diminish our understanding of property and intellectual property.” (emphasis omitted)).

¹³⁹ See HURST, *supra* note 17; Oskar Liivak, *Maturing Patent Theory from Industrial Policy to Intellectual Property*, 86 TUL. L. REV. 1163, 1181 (2012) (asking if the release of “individual creative energy” could “extend to patents as well” as traditional property).

¹⁴⁰ See, e.g., B. ZORINA KHAN, *THE DEMOCRATIZATION OF INVENTION: PATENTS AND COPYRIGHTS IN AMERICAN ECONOMIC DEVELOPMENT, 1790–1920*, at 107 (2005) (“The U.S. patent system was instrumental in directing the efforts of a diverse array of individuals toward extracting returns from their improvements.”); Petra Moser, *How Do Patent Laws Influence Innovation? Evidence from Nineteenth-Century World’s Fairs*, 95 AM. ECON. REV. 1214, 1233 (2005) (noting that “the decision to adopt strong patent laws at the beginning of the nineteenth century may have played an important role in encouraging the American focus on manufacturing machinery that spurred economic growth toward the end of the century”).

¹⁴¹ Dan L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, 89 VA. L. REV. 1575, 1576 (2003) [hereinafter Burk & Lemley, *Policy Levers*] (“Patent law is our primary policy tool to promote innovation, encourage the development of new technologies, and increase the fund of human knowledge.”); see also Mark A. Lemley et al., *Life After Bilski*, 63 STAN. L. REV. 1315, 1326 (2011) (“The core mission of patent law is to create incentives for the production, disclosure, and commercialization of socially valuable inventions.”). This goal emanates from the Intellectual Property Clause of the Constitution: “[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” U.S. CONST. art. I, § 8, cl. 8.

Michael Burstein is skeptical of the need for intellectual property to facilitate information exchange. See Michael J. Burstein, *Exchanging Information Without Intellectual Property*, 91 TEX. L. REV. 227, 247 (2012) (arguing that a “nuanced understanding of information supports a range of potential strategies for engaging in exchange, of which intellectual property is only one”). Given the potentially high costs of obtaining patent protection, he

As illustrated earlier in Scott Shane's study of three-dimensional printing, the innovations embodied in patents are not themselves entrepreneurial opportunities but rather resources that can be employed in the creation of entrepreneurial opportunities.¹⁴² Based on our understanding of the process of opportunity creation described above, we assume that expanding the inventory of resources would naturally lead to the creation of more entrepreneurial opportunities. Thus, we view the ultimate purpose of patent law as the promotion of entrepreneurial action.

How should the patent system maximize the inventory of socially valuable inventions? While scholars largely "agree on the goals the patent statute is intended to achieve[,] they have offered radically different ideas for interpreting patent law to achieve those goals."¹⁴³ The scope of debate regarding patent law is vast because the legal rules defining patent protection must account for a fundamental trade-off: as protection is strengthened, the incentive to innovate is heightened *ex ante*, but the costs of monopoly are increased *ex post*.¹⁴⁴ Thus, the attributes determining patent protection—including novelty,¹⁴⁵ utility,¹⁴⁶ non-obvious-

contends that the case for broadening and strengthening intellectual property rights is weaker than many commentators assume. *Id.* at 275.

¹⁴² Shane, *supra* note 68, at 467.

¹⁴³ Burk & Lemley, *Policy Levers*, *supra* note 141, at 1578.

¹⁴⁴ See WILLIAM D. NORDHAUS, *INVENTION, GROWTH, AND WELFARE: A THEORETICAL TREATMENT OF TECHNOLOGICAL CHANGE* 76 (1969). See also Sean B. Seymore, *Rethinking Novelty in Patent Law*, 60 DUKE L.J. 919, 920–21 (2011) ("The U.S. patent system is a pendulum. It swings back and forth, attempting to balance the need to reward inventors for their work against the need to foster innovation through the dissemination of technical knowledge.").

¹⁴⁵ The novelty requirement is codified in 35 U.S.C. § 101 (2006) ("Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter . . . may obtain a patent . . ."). Tun-Jen Chiang offers an interesting explanation for the connection between the novelty requirement and the promotion of entrepreneurial action. Tun-Jen Chiang, *Defining Patent Scope by the Novelty of the Idea*, 89 WASH. U. L. REV. 1211, 1267 (2012) ("[T]he core purpose of patent law is to protect against misappropriation of information goods, and this means the idea and not the embodiment."). For an argument that the current method of interpreting novelty can have a negative effect on innovation, see Seymore, *supra* note 144, at 926.

¹⁴⁶ The utility requirement is based on the Intellectual Property Clause of the Constitution, which gives Congress the power to grant exclusive rights to inventors to "promote the Progress of Science and useful Arts." U.S. CONST. art. I, § 8, cl. 8. The requirement is also codified in 35 U.S.C. § 101 ("Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent . . ."). The U. S. Supreme Court has articulated the policy connecting the utility requirement and the promotion of entrepreneurial action: "The basic *quid pro quo* contemplated by the Constitution and the Congress for granting a patent monopoly is the benefit derived by the public from an invention with substantial utility. Unless and until a process is refined and developed to this point—where specific benefit exists in currently available form—there is insufficient justification for permitting an applicant to engross what may prove to be a broad field." *Brenner v. Manson*, 383 U.S. 519, 534–35 (1966). Interpreting this passage, Sivaramjani Thambisetty has argued that "the

ness,¹⁴⁷ subject matter,¹⁴⁸ and scope¹⁴⁹—have generated intense scholarly debate. We do not attempt to resolve these debates about patent law here, but we highlight the debates to show that both the current legal rules and the reform proposals recognize the promotion of entrepreneurial action as the dominant value in patent law.¹⁵⁰

criterion of utility appears to function as a timing device in gauging when an invention on the assembly line of scientific enquiry is ready to be patented.” Sivaramjani Thambisetty, *Legal Transplants in Patent Law: Why “Utility” Is the New “Industrial Applicability,”* 49 JURIMETRICS J. 155, 173 (2009).

¹⁴⁷ The non-obviousness requirement is codified in 35 U.S.C. § 103(a) (2006 & Supp. V 2011) (“A patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.”). Michael Abramowicz and John Duffy describe the theoretical connection between the non-obviousness requirement and the promotion of entrepreneurial action. Michael Abramowicz & John F. Duffy, *The Inducement Standard of Patentability*, 120 YALE L.J. 1590, 1594 (2011) (“[I]f the innovation would be created and disclosed even without patent protection, denying a patent on the innovation costs society nothing (because the innovation would be developed anyway) and saves society from needlessly suffering the well-known negative consequences of patents, including the restriction on output caused by a patentee’s exclusive rights and the administrative and litigation costs associated with running a patent system.”). Although Abramowicz and Duffy would rely on the non-obviousness requirement to advance the goals of patent law, most courts and commentators agree with Ed Kitch that the non-obviousness requirement is an “awkward” tool “to sort out those innovations that would not be developed absent a patent system.” Edmund W. Kitch, *Graham v. John Deere Co.: New Standards for Patents*, 1966 SUP. CT. REV. 293, 301.

¹⁴⁸ Patent eligibility is determined initially by reference to 35 U.S.C. § 101 (“Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.”). The United States Supreme Court has created three exceptions to the broad patent-eligibility principles in section 101: “laws of nature, physical phenomena, and abstract ideas.” *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980). The subject matter requirement is notoriously uncertain, and this uncertainty can impede innovation. See Michael Risch, *Everything Is Patentable*, 75 TENN. L. REV. 591, 646 (2008).

¹⁴⁹ The scope of a patent is determined by the claims that “define what the inventor considers to be the scope of her invention, the technological territory she claims is hers to control by suing for infringement.” Robert P. Merges & Richard R. Nelson, *On the Complex Economics of Patent Scope*, 90 COLUM. L. REV. 839, 844 (1990). The connection between the scope of patents and the promotion of entrepreneurial action entails consideration of the fundamental trade-off in patent law discussed above. Merges and Nelson add that scope determinations have an important effect on future substitutes. *Id.* at 870 (“Since some of the follow-on efforts of inventors could result in something not simply slightly different but significantly better than the patented technology, broad patents could discourage much useful research.”). The usual answer to this concern is Kitch’s prospect theory. See Edmund W. Kitch, *The Nature and Function of the Patent System*, 20 J.L. & ECON. 265, 266 (1977). For an analysis of scope as a “levels of abstraction problem,” see Tun-Jen Chiang, *The Levels of Abstraction Problem in Patent Law*, 105 NW. U. L. REV. 1097, 1100 (2011).

¹⁵⁰ Even when a patent law scholar argues that intellectual property may be trivial, the focus is on innovation incentives. See Jonathan M. Barnett, *Is Intellectual Property Trivial?*, 157 U. PA. L. REV. 1691, 1692 (2009).

Similarly, recent debates about the so-called “patent crisis”—including discussions of business method patents,¹⁵¹ the role of patent institutions (the United States Court of Appeals for the Federal Circuit and the United States Patent and Trademark Office),¹⁵² and patent trolls¹⁵³—revolve almost exclusively around the issue of innovation. A striking manifestation of our thesis in this literature comes from the work of Dan Burk and Mark Lemley, who describe the current patent system as comprising “unitary” patent rules that are sometimes tailored to the needs of different industries by courts.¹⁵⁴ The impulse to adapt the rules of patent law to different industries emanates from a desire to more efficiently promote innovation.¹⁵⁵ To achieve that goal, Burk and Lemley advocate a “modular patent system,” which would be created through the use of “existing policy levers” such as the utility requirement or the PHOISTA standard (“person having ordinary skill in the art”),¹⁵⁶ and the development of “nascent policy levers” such as the presumption of validity and patent misuse claims.¹⁵⁷ As with the debates about patent law doctrines dis-

¹⁵¹ The United States permits business method patents, at least insofar as they are more than “abstract ideas.” *Bilski v. Kappos*, 130 S. Ct. 3218, 3225, 3229 (2010). John Duffy has argued that in the development of business method patents, “law followed technology,” John F. Duffy, *Why Business Method Patents?*, 63 STAN. L. REV. 1247, 1263 (2011), as one would expect in a legal system that encourages entrepreneurial experimentation.

¹⁵² See ADAM B. JAFFE & JOSH LERNER, *INNOVATION AND ITS DISCONTENTS: HOW OUR BROKEN PATENT SYSTEM IS ENDANGERING INNOVATION AND PROGRESS, AND WHAT TO DO ABOUT IT* 107–10, 179–81 (2004).

¹⁵³ Colleen Chien has studied the effect of patent trolls on start-up firms. See generally Colleen V. Chien, *Startups and Patent Trolls* (Santa Clara Univ. Legal Studies Research Paper No. 09-12, 2012), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2146251 (concluding that small firms are vulnerable as targets of nuisance lawsuits because they use technology and often pay settlements without regard to the merits of the claim). For other takes, see also John R. Allison et al., *Patent Quality and Settlement Among Repeat Patent Litigants*, 99 GEO. L.J. 677, 707–08 (2011) (detailing findings that patent trolls tend to fail in court); Colleen V. Chien, *Of Trolls, Davids, Goliaths, and Kings: Narratives and Evidence in the Litigation of High-Tech Patents*, 87 N.C. L. REV. 1571, 1577 (2009) (calling patent trolls “perhaps the most controversial and least popular group of patent plaintiffs”); Gerard N. Magliocca, *Blackberries and Barnyards: Patent Trolls and the Perils of Innovation*, 82 NOTRE DAME L. REV. 1809, 1811 (2007) (comparing patent trolls to the “patent sharks” of the nineteenth century); Michael Risch, *Patent Troll Myths*, 42 SETON HALL L. REV. 457, 458 (2012) (asserting that “the patents enforced by so-called trolls—and the companies that obtained them—look a lot like other litigated patents and their owners”).

¹⁵⁴ DAN L. BURK & MARK A. LEMLEY, *THE PATENT CRISIS AND HOW COURTS CAN SOLVE IT* 5 (2009) [hereinafter BURK & LEMLEY, *PATENT CRISIS*]; see also Burk & Lemley, *Policy Levers*, *supra* note 141, at 1577 (“[A]lthough patent law is technology-neutral in theory, it is technology-specific in application.”); Dan L. Burk & Mark A. Lemley, *Is Patent Law Technology-Specific?*, 17 BERKELEY TECH. L.J. 1155, 1156 (2002) (describing the “increasing divergence between the rules [of patent law] and the application of the rules to different industries”).

¹⁵⁵ BURK & LEMLEY, *PATENT CRISIS*, *supra* note 154, at 4 (stating that the “entire purpose” of patent law is to “promote innovation”).

¹⁵⁶ *Id.* at 109–30.

¹⁵⁷ *Id.* at 131–41.

cussed above, the analysis shows that both current legal rules and reform proposals strive to promote entrepreneurial action.

Perhaps not surprisingly, the two contributions to this symposium relating to patent law propose complementary reforms that would promote entrepreneurial action by undermining patent trolls.¹⁵⁸ John Duffy argues that the goals of patent law are expressed erroneously in a manner that enables patent trolling.¹⁵⁹ According to Duffy, the “public benefit” sought from patenting “can easily be viewed as including not merely the disclosure required by the statute to be set forth in the patent document but also the benefit flowing from the practical knowledge and experience gained from actually building and commercializing the invention.”¹⁶⁰ Duffy proposes a “resurrection of the paper patent doctrine,”¹⁶¹ which would favor the commercialization of inventions. Similarly, Oskar Liivak and Eduardo Peñalver would limit the right not to use patents: “[U]nless the holder of the patent is actually practicing the invention, remedies for patent infringement against independent inventors should be significantly softer than they would be in other successful patent infringement actions, possibly even *de minimis*.”¹⁶² While one could argue that placing additional constraints on patenting is contrary to the “release of energy” described by Hurst, the thrust of both of these papers is to promote entrepreneurial action.

2. *Fiduciary Law*

Fiduciary law arises within many substantive areas of law. For purposes of this discussion, we focus on one subspecies of fiduciary law, the opportunities doctrine, which is a subset of corporate law’s duty of loyalty. The opportunities doctrine allows fiduciaries—for example, officers and directors—of corporations or other business entities—to exploit those opportunities that courts do not deem to belong to the entity.¹⁶³ In the typical case, a third party might approach the fiduci-

¹⁵⁸ See John F. Duffy, *Reviving the Paper Patent Doctrine*, 98 CORNELL L. REV. 1359, 1396 (2013) (arguing that the revival of the paper patent doctrine could alleviate the current concerns about patent trolls); Oskar Liivak & Eduardo M. Peñalver, *The Right Not to Use in Property and Patent Law*, 98 CORNELL L. REV. 1437, 1442–43 (2013) (arguing that treating patents more like traditional types of property could aid patent reform).

¹⁵⁹ See Duffy, *supra* note 158, at 1388–89 (noting that patent law’s focus on disclosure of inventions has enabled patents to issue to those who did not actually develop any technology).

¹⁶⁰ *Id.* at 1361–62.

¹⁶¹ *Id.* at 1396. Duffy describes the essence of the doctrine as follows: “[D]ocumentary disclosure was sufficient to sustain the validity of a patent, but the courts favored inventors who had done more.” *Id.* at 1374.

¹⁶² Liivak & Peñalver, *supra* note 158, at 1443.

¹⁶³ See ROBERT CHARLES CLARK, CORPORATE LAW 224–25 (1986) (“[T]he difficult issue is to determine what should be deemed, as between the corporation and fiduciary, to belong to the corporation, and why.”); D. GORDON SMITH & CYNTHIA A. WILLIAMS, BUSINESS

ary with an opportunity for profit. In one leading case, *Guth v. Loft, Inc.*,¹⁶⁴ it was the opportunity to buy the Pepsi trademark and secret formula out of bankruptcy in the early 1930s. In another leading case, *Broz v. Cellular Information Systems, Inc.*,¹⁶⁵ it was the opportunity to buy a regional cell phone license for an area in Michigan. The fiduciary is presented with a dilemma: Can he simply purchase and exploit the opportunity through a separate company, perhaps a start-up, and reap all of the profits, or does his status as a fiduciary mean that he must offer the opportunity to his employer?

The corporate opportunities doctrine answers this question, albeit imperfectly.¹⁶⁶ In distinguishing between acceptable entrepreneurial behavior and fiduciary obligation, the corporate opportunities doctrine promotes entrepreneurial action where it is appropriate.¹⁶⁷ Without the opportunities doctrine, the fear of acting as a disloyal fiduciary could chill entrepreneurial action. The corporate opportunities doctrine promotes entrepreneurial action by telling fiduciaries which opportunities they can create and exploit on their own and conversely, which opportunities must yield to fiduciary duty.¹⁶⁸

How does the opportunities doctrine draw this dividing line? As in the case of patent law, the opportunities doctrine fulfills this function through the granting of rights to exclude. Although the opportunities doctrine does not grant property rights that allow the grantee to exclude the rest of the world from the opportunity, it allocates opportunities between the corporation and fiduciary, leaving third parties free to exploit the opportunity until either the corporation or fiduciary establishes property rights that allow it to exclude more broadly.¹⁶⁹

ORGANIZATIONS: CASES, PROBLEMS, AND CASE STUDIES 515 (2004) (stating that the question of “whose opportunity is it?” is the “most difficult aspect of the corporate opportunity doctrine”); D. Gordon Smith, *The Critical Resource Theory of Fiduciary Duty*, 55 VAND. L. REV. 1399, 1483 n.359 (2002) (“The most difficult issue in [the opportunities doctrine] area is deciding which opportunities belong to the corporation.”).

¹⁶⁴ 5 A.2d 503, 505–06 (Del. 1939).

¹⁶⁵ 673 A.2d 148, 150 (Del. 1996).

¹⁶⁶ See Eric Talley, *Turning Servile Opportunities to Gold: A Strategic Analysis of the Corporate Opportunities Doctrine*, 108 YALE L.J. 277, 280 (1998) (referring to the opportunities doctrine as a “doctrinal quagmire”).

¹⁶⁷ Cf. SMITH & WILLIAMS, *supra* note 163, at 513 (noting that a plaintiff may prevail on a corporate opportunities claim only if the opportunity taken by the fiduciary was a “corporate opportunity”).

¹⁶⁸ Cf. Talley, *supra* note 166, at 279 (stating that the corporate opportunities doctrine is “the law’s attempt to regulate circumstances in which a corporate officer or director may usurp new business prospects for her own account”).

¹⁶⁹ As Dean Robert Clark explains, “the opportunity need not be corporate property in the strong sense that the corporation could legally object to its being taken and developed by independent third parties. The point is only that, as between the corporation and its fiduciary, the opportunity belongs to the corporation [or fiduciary].” CLARK, *supra* note 163, at 224.

The corporate opportunities doctrine thus serves to tell fiduciaries when they can retain the benefits of their own success.

There are a number of tests that courts may choose in defining corporate versus fiduciary opportunities, each drawing the line in a different place. Consider two leading tests: (1) the test favored in Delaware, the state of incorporation for over half of public companies, is the *line-of-business test*, which asks whether the opportunity is part of a business in which the business entity currently engages or which is a logical and natural adaptation of that business;¹⁷⁰ and (2) the *interest or expectancy test*, which allocates to the entity only those opportunities in which it has a recognizable interest or expectancy—for example, those opportunities on which the entity has a contractual option.¹⁷¹ These leading tests give some guidance and strictures to the dividing line between corporate and fiduciary opportunities and in doing so promote entrepreneurial action where appropriate.

Other tests less often used by courts include the “fairness” test, which asks whether it is fair, all things considered, to allow the fiduciary to exploit the opportunity individually,¹⁷² and the “*Miller two-step*” test—named after the case that created it¹⁷³—which layers the fairness test on top of the line-of-business test. Under the *Miller two-step* test, if an opportunity is within the entity’s line of business, the fiduciary might still be permitted to exploit it if fair for him to do so.¹⁷⁴ These tests, both of which defer to the nebulous concept of “fairness” without really telling us what that means, have been less successful for a reason—they do not promote entrepreneurial action because they are foggy in their definition of corporate versus fiduciary opportunities. As Eric Talley observes, “[j]urisdictions adopting [the fairness] test

¹⁷⁰ See *Guth v. Loft, Inc.*, 5 A.2d 503, 514 (Del. 1939). Delaware is not the only state to use this test; rather, “the line-of-business test (or a close variant) has now become preeminent.” Talley, *supra* note 166, at 289. In addition to the basic line-of-business test, these cases are also decided by looking at certain factors, including whether the fiduciary learned of the opportunity in his individual or corporate capacity, whether the corporation was financially able to exploit the opportunity, and whether the third party refused to deal with the corporation. See CLARK, *supra* note 163, at 224.

¹⁷¹ The classic case that presents this test is *Lagarde v. Anniston Lime & Stone Co.*, 28 So. 199, 201 (Ala. 1900).

¹⁷² See *Durfee v. Durfee & Canning, Inc.*, 80 N.E.2d 522, 529 (Mass. 1948) (stating that “the true basis of the governing doctrine rests fundamentally on the unfairness in the particular circumstances” of the fiduciary taking the opportunity). Needless to say, this has not proved to be the easiest test for courts to apply.

¹⁷³ *Miller v. Miller*, 222 N.W.2d 71, 81–82 (Minn. 1974).

¹⁷⁴ See *id.* The American Law Institute (ALI) has developed yet another test, one that requires fiduciaries to disclose corporate opportunities in advance but allows fiduciaries to take the opportunity should the entity reject it. See THE AM. LAW INST., 1 PRINCIPLES OF CORPORATE GOVERNANCE § 5.05 (1994). Under the ALI test, entity opportunities include opportunities that are “closely related to a business in which the [entity] is engaged or expects to engage,” which appears similar to the line-of-business test. *Id.* at § 5.05(b)(2).

have had little success in articulating—beyond recapitulations of circular rhetoric—the substantive contours of a fairness approach.”¹⁷⁵

Finally, the opportunities doctrine’s legal allocation of entrepreneurial opportunities through the granting of rights to exclude has another important effect on entrepreneurial behavior: it motivates entrepreneurs to frame opportunities in a manner that will ensure a favorable legal allocation. In doing so, the opportunities doctrine plays a role in shaping the entrepreneur’s creative process.

C. Reducing the Risks of Venturing

The previous section explored one means by which the U.S. legal system entices entrepreneurs to release their creative energy—by allowing them to retain the benefits of success—but the reality is that many, or even most, entrepreneurs fail.¹⁷⁶ Therefore, if we want entrepreneurs to exploit entrepreneurial opportunities, we must also reduce the costs of their failure. We first observe that enticing entrepreneurs to exploit opportunities is not just about limiting the downside in the case of failure *ex post* but also about reducing the barriers to entry *ex ante* so entrepreneurs can set about on a path of action in the first place. Second, we discuss what happens if there is this action but it results in failure. We start with barriers to entry, then move to bankruptcy laws, which allow entrepreneurs to discharge debts and have a “fresh start.” Finally, we explain how limited liability and its corollary, asset partitioning, allow entrepreneurs to limit the costs of failure to the business at hand.

1. Barriers to Entry

In the most recent *Doing Business* report of The World Bank, the United States ranked fourth in the world in terms of “ease of doing business.”¹⁷⁷ This ranking includes multiple measures of the ease of entry into business, including the procedures, cost, minimum capital, and number of days required to form a business.¹⁷⁸ While the regulation of business entry could function as quality control,¹⁷⁹ regulation might also serve incumbent firms or politicians at the expense of con-

¹⁷⁵ Talley, *supra* note 166, at 293.

¹⁷⁶ *Cf.* SHANE, FOOL’S GOLD?, *supra* note 42, at 6 (stating that the frequently heard success stories of angel investors are “the rarest of rare events”).

¹⁷⁷ THE WORLD BANK, DOING BUSINESS 2013: SMARTER REGULATIONS FOR SMALL AND MEDIUM-SIZED ENTERPRISES 203 (2013). The three countries ranked ahead of the United States are Singapore, Hong Kong, and New Zealand. *See id.* at 3.

¹⁷⁸ *See id.* at 56.

¹⁷⁹ *See, e.g.*, Benito Arruñada, *Pitfalls to Avoid When Measuring Institutions: Is Doing Business Damaging Business?*, 35 J. COMP. ECON. 729, 744–45 (2007) (arguing for a “value strategy” that would emphasize the value of information produced by the registration process, rather than merely the costs of that process).

sumers and innovation.¹⁸⁰ As one would expect, lowering barriers to entry increases business formation.¹⁸¹ In the United States, entry barriers of the sort described above are relatively low,¹⁸² and business formation is robust in comparison with other countries.¹⁸³

The *Doing Business* reports were inspired by a series of articles on law and finance,¹⁸⁴ which developed into Legal Origins Theory.¹⁸⁵ Although Legal Origins Theory has various potential implications, we reference it here for the fundamental proposition that “law matters” to economic development in a fairly specific way, namely in facilitat-

¹⁸⁰ See Simeon Djankov et al., *The Regulation of Entry*, 117 Q.J. ECON. 1, 5 (2002) (finding that “countries with more open access to political power, greater constraints on the executive, and greater political rights have less burdensome regulation of entry—even controlling for per capita income—than do the countries with less representative, less limited, and less free government”).

¹⁸¹ See, e.g., Miriam Bruhn, *License to Sell: The Effect of Business Registration Reform on Entrepreneurial Activity in Mexico*, 93 REV. ECON. & STAT. 382, 382 (2011) (performing a statistical analysis and finding that simplifying entry regulation “increased the number of registered businesses by 5% in eligible industries”).

¹⁸² Economists sometimes measure this attribute of national economics through an economic freedom index. The most influential index was developed by James Gwartney, Robert Lawson, and Joshua Hall, who update the data annually. See James Gwartney et al., *Economic Freedom of the World Data*, FRASER INST., http://www.freetheworld.com/datasets_efw.html (last updated Oct. 23, 2012). “Economic freedom” is said to have four key ingredients, one of which is “freedom to enter and compete in markets.” JAMES GWARTNEY ET AL., *ECONOMIC FREEDOM OF THE WORLD 2012 ANNUAL REPORT 1* (2012). This feature of economic freedom is captured by the part of the index dealing with regulation of business activities (5C), and the United States ranks 30th of 144 countries. See *id.* at 7, 14.

The Heritage Foundation and *The Wall Street Journal* developed the Index of Economic Freedom in 1995. See Edwin J. Feulner, *Preface*, 2013 INDEX OF ECONOMIC FREEDOM (Nov. 2012), <http://www.heritage.org/index/book/preface>. One feature of the index is “business freedom,” which is described as “an individual’s right to establish and run an enterprise without undue interference from the state.” Terry Miller & Anthony B. Kim, *Defining Economic Freedom*, in 2013 INDEX OF ECONOMIC FREEDOM, <http://www.heritage.org/index/book/chapter-7> (last visited Apr. 4, 2013). The authors also observe that “[b]urdensome and redundant regulations are the most common barriers to the free conduct of entrepreneurial activity.” *Id.* The Index of Economic Freedom draws data from the *Doing Business* reports, so it is not surprising that the United States fares well, earning a business freedom score of 90.5 on a 100-point scale. See *Explore the Data*, 2013 INDEX OF ECONOMIC FREEDOM, <http://www.heritage.org/index/explore> (last visited Apr. 4, 2013); *Methodology*, 2013 INDEX OF ECONOMIC FREEDOM, <http://www.heritage.org/index/book/methodology> (last visited Apr. 4, 2013).

¹⁸³ In terms of the number of businesses created in a given year, the United States is the leader. Compare OFFICE OF ADVOCACY, U.S. SMALL BUS. ADMIN., BUSINESS DYNAMICS STATISTICS: FIRMS AND ESTABLISHMENTS BY FIRM AGE, available at <http://www.sba.gov/advocacy/849/12162> (reporting that 394,632 new businesses were established in 2010), with *NEW Businesses Registered*, WORLD BANK <http://data.worldbank.org/indicator/IC.BUS.NREG> (displaying figures for other countries in 2009, with only the United Kingdom and Brazil eclipsing 300,000). Looking at the number of workers who are starting their own businesses as a percentage of the total population, however, the United States falls behind other, smaller countries. See SHANE, ILLUSIONS, *supra* note 50, at 18.

¹⁸⁴ See Ralf Michaels, *Comparative Law by Numbers? Legal Origins Thesis*, *Doing Business Reports, and the Silence of Traditional Comparative Law*, 57 AM. J. COMP. L. 765, 771–72 (2009).

¹⁸⁵ See La Porta et al., *supra* note 22, at 306–09 (describing Legal Origins Theory).

ing transactions by limiting barriers to entry.¹⁸⁶ Though legal scholars have been skeptical of the importance of legal origins as an explanatory variable,¹⁸⁷ they have embraced efforts to reduce barriers to entry when this would encourage entrepreneurship.¹⁸⁸ The challenge when dealing with barriers to entry is to determine when they are impediments to entrepreneurship and when they are facilitative of entrepreneurship or some other value.

Barriers to entry take many forms, including the sorts of property rights described in the prior section, and these barriers to entry often have dual effects. For example, patents create a barrier to entry that may harm new entrants¹⁸⁹ but may also have the salutary effect of ensuring product differentiation.¹⁹⁰ Joshua Wright offers another example by describing the tension between antitrust law, which encourages new products on the ground that they increase consumer choice, and the “new behavioral approach” to consumer protection law, which holds that “rules and regulations can be designed to improve consumers’ decision-making abilities by altering the design of some consumer credit products, by restricting consumers’ access to others, and by instituting default rules in favor of standardized products” approved by the Consumer Financial Protection Bureau.¹⁹¹

¹⁸⁶ The idea that “law is essential to economic development has a long and venerable history.” Curtis J. Milhaupt, *Beyond Legal Origin: Rethinking Law’s Relationship to the Economy—Implications for Policy*, 57 AM. J. COMP. L. 831, 831 (2009). Nevertheless, the earliest claim made by Legal Origins Theory—that increases in shareholder protection would lead to stock market development—has been questioned by using longitudinal data. See John Armour et al., *Law and Financial Development: What We Are Learning from Time-Series Evidence*, 2009 BYU L. REV. 1435, 1484 (noting the “absence of a correlation between corporate law reform and stock market development”).

¹⁸⁷ For critical appraisals of Legal Origins Theory by law professors, see generally Ruth V. Aguilera & Cynthia A. Williams, “*Law and Finance*”: *Inaccurate, Incomplete, and Important*, 2009 BYU L. REV. 1413, and Michaels, *supra* note 184.

¹⁸⁸ See, e.g., Katharina Pistor, *Rethinking the “Law and Finance” Paradigm*, 2009 BYU L. REV. 1647, 1657 (noting that “the underlying thrust” of legal origin-based arguments “appears to be that entrepreneurship is best left to its own devices and that the regulation of entry imposes unnecessary and socially harmful costs on business”).

¹⁸⁹ See, e.g., Kelce Wilson, *The Four Phases of Patent Usage*, 40 CAP. U. L. REV. 679, 684 (2012) (“Rather than helping to compensate for barriers to entry, the patent system may actually create a significant barrier. When small, a manufacturer is likely to be tightly constrained by an investment-phase budget and is unable to afford litigation-related expenses. Thus, new entrants are particularly vulnerable to nuisance assertions that leverage litigation risk asymmetry to drain precious operating capital.” (citations omitted)).

¹⁹⁰ See Mark A. Lemley & Mark P. McKenna, *Is Pepsi Really a Substitute for Coke? Market Definition in Antitrust and IP*, 100 GEO. L.J. 2055, 2082 (2012) (“IP rights contribute significantly to . . . product differentiation [A]n IP right is a barrier to entry that prevents the sort of quick and easy supply substitution that might undermine market power.”).

¹⁹¹ Joshua D. Wright, *The Antitrust/Consumer Protection Paradox: Two Policies at War with Each Other*, 121 YALE L.J. 2216, 2244 (2012) (emphasis omitted). Antitrust law is a fertile field for exploring connections between law and entrepreneurship. See, e.g., Jonathan B. Baker, *Beyond Schumpeter v. Arrow: How Antitrust Fosters Innovation*, 74 ANTITRUST L.J. 575, 587 (2007) (concluding that “competition does not just lead firms to produce more and

Taxes, fees, and regulations of all sorts serve as barriers to entry, and the vast literature on public choice theory demonstrates that politicians cater to established businesses at the expense of new entrants.¹⁹² The popular notion of “crony capitalism” describes a system of laws that entrenches incumbent firms and blocks entrepreneurial action.¹⁹³ Any legal system that wishes to promote entrepreneurial action must employ mechanisms that constrain the inevitable pressure to favor incumbent firms. We believe that the value of entrepreneurship, sprinkled throughout the U.S. legal system, serves as a constant reminder to legal policymakers to avoid entrenchment of incumbents.

2. *Bankruptcy Laws*

Willard Hurst argued that “[b]ankruptcy law began mainly as a protection to creditors against the dishonesty of debtors,” but by the mid-nineteenth century, bankruptcy law in the U.S. “was as much to provide means by which debtors might be saved from irretrievable ruin and salvaged as venturers who might yet again contribute productively to the market.”¹⁹⁴ In modern legal and economic scholarship, bankruptcy is widely regarded as an important legal tool to facilitate entrepreneurship.¹⁹⁵ Bankruptcy clearly limits the cost of failure associated with entrepreneurial action.

Bankruptcy scholars have long associated a “fresh start policy” with a desire to encourage entrepreneurship.¹⁹⁶ Bankruptcy law may also encourage entrepreneurship by allowing start-up businesses to at-

charge less; it encourages them to innovate as well”); Philip J. Weiser, *Innovation, Entrepreneurship, and the Information Age*, 9 J. ON TELECOMM. & HIGH TECH. L. 1, 6 (2011) (contending that one role of antitrust law is to protect “disruptive entry”).

¹⁹² See Daniel A. Farber & Philip P. Frickey, *The Jurisprudence of Public Choice*, 65 TEX. L. REV. 873, 900 (1987) (interpreting empirical evidence in support of a theory that “would simply postulate (1) that reelection is an important motive of legislators; (2) that constituent and contributor interests thus influence legislators; and (3) that small, easily organized interest groups have an influence disproportionate to the size of their membership”).

¹⁹³ See, e.g., LAWRENCE LESSIG, *REPUBLIC, LOST: HOW MONEY CORRUPTS CONGRESS—AND A PLAN TO STOP IT* 246 (2011) (“What wins in the market is too often not what ‘a free market’ would choose, but what a market bent by tariffs and subsidies and endless incumbency protective regulation defaults to. Call that ‘crony capitalism.’”).

¹⁹⁴ HURST, *supra* note 17, at 26.

¹⁹⁵ Mike W. Peng et al., *Bankruptcy Laws and Entrepreneur-Friendliness*, ENTREPRENEURSHIP THEORY & PRAC. 517, 518 (2010); Seung-Hyun Lee et al., *Bankruptcy Law and Entrepreneurship Development: A Real Options Perspective*, 32 ACAD. MGMT. REV. 257, 259 (2007).

¹⁹⁶ See, e.g., Charles G. Hallinan, *The “Fresh Start” Policy in Consumer Bankruptcy: A Historical Inventory and an Interpretive Theory*, 21 U. RICH. L. REV. 49, 64 (1986) (describing “commercial risk taking” as the “chief organizing principle” of the fresh start policy); Robert A. Hillman, *Contract Excuse and Bankruptcy Discharge*, 43 STAN. L. REV. 99, 125 (1990) (noting that “discharge . . . encourages beneficial, albeit risky, business activity by merchants and manufacturers”).

tract employees.¹⁹⁷ A strong connection between bankruptcy laws and entrepreneurship has been supported empirically.¹⁹⁸

One might be tempted to assume that strong limited liability protection, discussed in the next section, would substitute for bankruptcy laws, but “creditors frequently demand personal guarantees from owner-managers which constitute a ‘contracting out’ of the liability shield incorporation otherwise gives to the entrepreneur.”¹⁹⁹ Thus, Armour and Cumming identify two effects of bankruptcy law that are in some tension: the “insurance effect” results in more entrepreneurship because debtors are more protected against losses of exempt assets, and the “credit supply effect” results in less entrepreneurship because lenders ration credit when debtors are more protected against losses.²⁰⁰ However, the main thrust of the bankruptcy literature, both normative and empirical, is that it promotes entrepreneurs to act by limiting their cost of failure.²⁰¹

3. *Limited Liability and Asset Partitioning*

The concept of limited liability has existed in various forms for hundreds of years, and the justification for it has surprisingly remained the same: investors are more willing to invest in a venture if they can be assured that the creditors of the venture will not have the ability to take the personal assets of the investors.²⁰² This not only encourages investors but also entrepreneurs themselves to engage in transactions because they no longer have to take an “all or nothing”

¹⁹⁷ F.H. Buckley, *The Debtor as Victim*, 87 CORNELL L. REV. 1078, 1089 (2002) (suggesting that “bankruptcy might be a particularly useful incentive device in attracting employees to work in high-risk jobs, such as start-up ventures”).

¹⁹⁸ See John Armour & Douglas Cumming, *Bankruptcy Law and Entrepreneurship*, 10 AM. L. & ECON. REV. 303, 337 (2008) (“Controlling for a range of other legal, economic and social factors that may affect national levels of entrepreneurship, we show that bankruptcy law has a pronounced effect on levels of entrepreneurship.”); Wei Fan & Michelle J. White, *Personal Bankruptcy and the Level of Entrepreneurial Activity*, 46 J.L. & ECON. 543, 543–44 (2003) (finding that bankruptcy exemptions are positively correlated with the decision to start a business).

¹⁹⁹ Armour & Cumming, *supra* note 198, at 307.

²⁰⁰ *Id.* at 305–08.

²⁰¹ See Lee et al., *supra* note 195, at 259 (noting “the key issue is not avoiding failure but managing the cost of failure by limiting exposure to the downside while preserving access to attractive opportunities and maximizing gains” (citation omitted)).

²⁰² See William J. Carney, *Limited Liability*, in 3 ENCYCLOPEDIA OF LAW AND ECONOMICS: THE REGULATION OF CONTRACTS 659 (Boudewijn Bouckaert & Gerrit De Geest eds., 2000) (“The principal advantage of limited liability is in encouraging investment by passive investors in risky enterprises, particularly where these investors are poor monitors of managers.”); Max Radin, *The Endless Problem of Corporate Personality*, 32 COLUM. L. REV. 643, 654 (1932) (“It was found in medieval Europe that men would often decline to adventure in business transactions unless they could so limit their liability. And this was especially the case when those who were asked to join the enterprise had no direct control over its management.”).

approach to starting a business.²⁰³ In the absence of limited liability, “the supply of investment and the demand for credit might be much smaller than they are.”²⁰⁴

Other variations of this investment-encouragement argument for limited liability have found some traction as well. One author found that when states were originally deciding to create limited liability corporation statutes in the 1800s, a major justification offered by proponents of such legislation was that limited liability is much more “democratic.”²⁰⁵ The legislators meant that limited liability offered an opportunity for small business owners to engage in large-scale ventures than they would have under an unlimited liability regime.²⁰⁶ This would create greater diversification for investors because now the starting of businesses was not limited to just the wealthy—that is, those who could personally guarantee the debts of the corporation.²⁰⁷

While opponents to limited liability generally agree with the basic argument that limited liability offers opportunities for small business owners that would not be otherwise available, they argue that limited liability should be abolished when it comes to tort liability²⁰⁸ or when a parent corporation seeks to limit its liability in connection with a wholly owned subsidiary corporation.²⁰⁹ However, these arguments have been countered by the general notion that limited liability encourages investment.²¹⁰ Others have offered more attenuated counterarguments, claiming that limited liability also reduces the monitoring costs of doing business, which is necessary in today’s business world “where passive investors specialize in risk-bearing[] and

²⁰³ Richard A. Booth, *Limited Liability and the Efficient Allocation of Resources*, 89 Nw. U. L. REV. 140, 158 (1994) (“The notion that a small business owner should be prevented from planning how much capital to put at risk is so absurd that it hardly needs to be argued down.”).

²⁰⁴ Richard A. Posner, *The Rights of Creditors of Affiliated Corporations*, 43 U. CHI. L. REV. 499, 503 (1976).

²⁰⁵ Stephen B. Presser, *Thwarting the Killing of the Corporation: Limited Liability, Democracy, and Economics*, 87 Nw. U. L. REV. 148, 174 (1992) (“Limited liability was legislated with a model in mind of an entrepreneur who would directly invest in and manage a corporation.”).

²⁰⁶ *Id.* at 155–56.

²⁰⁷ *Id.*

²⁰⁸ See, e.g., Henry Hansmann & Reinier Kraakman, *Toward Unlimited Shareholder Liability for Corporate Torts*, 100 YALE L.J. 1879, 1880 (1991) (arguing that there are “no persuasive reasons to prefer limited liability . . . for corporate torts”).

²⁰⁹ Jonathan M. Landers, *A Unified Approach to Parent, Subsidiary, and Affiliate Questions in Bankruptcy*, 42 U. CHI. L. REV. 589, 617–19 (1975).

²¹⁰ Presser, *supra* note 205, at 172 (“Part of the theory of limited liability for corporate shareholders, it would seem, is that by allowing them to externalize some of their costs, and thus increasing the demand for corporate shares, economic development will take place that may have synergistic effects which generate widespread benefits.”).

not monitoring of management.”²¹¹ Further, limited liability allows organizations to engage in “optimal investment decisions.”²¹²

The scholarship took a turn when Henry Hansmann and Reinier Kraakman introduced the idea of “asset partitioning” and claimed that limited liability is only one half, and actually the less important half, of organizational law’s facilitative function.²¹³ Asset partitioning is the idea that an entrepreneur may, by choosing one type of business organization over another, move assets out of his own reach and out of the reach of his personal creditors and into the reach of creditors of a corporation or partnership.²¹⁴ Not only is this important to reduce the risk of the entrepreneur and the entrepreneur’s personal creditors (which is the concept of limited liability or “defensive asset partitioning”),²¹⁵ but it also serves the purpose of reducing the risk of the corporation’s creditors. The corporation’s creditors will not have to worry about the entrepreneur’s personal creditors trying to reach the corporate assets (which is the concept of “affirmative asset partitioning” or “capital lock-in”).²¹⁶

Because affirmative asset partitioning is regarded as the converse to limited liability, its justifications are similar: it reduces the risk of investors and encourages entrepreneurial activity and firm stability.²¹⁷ For example, one of the justifications for asset partitioning is that it increases stability in the firm by requiring partners and shareholders not to withdraw assets before there has been an agreement to liquidate the firm’s assets.²¹⁸ This, in turn, protects the “firm’s going-concern value,”²¹⁹ which encourages investment in the firm. In sum, limited liability and asset partitioning encourage entrepreneurial action by reducing the cost of failure.

²¹¹ Carney, *supra* note 202, at 670.

²¹² Frank H. Easterbrook & Daniel R. Fischel, *Limited Liability and the Corporation*, 52 U. CHI. L. REV. 89, 97 (1985) (“When investors hold diversified portfolios, managers maximize investors’ welfare by investing in any project with a positive net present value. They can accept high-variance ventures (such as the development of new products) without exposing the investors to ruin. Each investor can hedge against the failure of one project by holding stock in other firms. In a world of unlimited liability, though, managers would behave differently. They would reject as ‘too risky’ some projects with positive net present values. Investors would want them to do this because it would be the best way to reduce risks. By definition this would be a social loss, because projects with a positive net present value are beneficial uses of capital.”).

²¹³ Henry Hansmann & Reinier Kraakman, *The Essential Role of Organizational Law*, 110 YALE L.J. 387, 390 (2000).

²¹⁴ Giacomo Rojas Elgueta, *Divergences and Convergences of Common Law and Civil Law Traditions on Asset Partitioning: A Functional Analysis*, 12 U. PA. J. BUS. L. 517, 519–20 (2010).

²¹⁵ *Id.*

²¹⁶ *Id.*

²¹⁷ Henry Hansmann et al., *Law and the Rise of the Firm*, 119 HARV. L. REV. 1335, 1343–50 (2006).

²¹⁸ *Id.*

²¹⁹ *Id.* at 1350.

CONCLUSION

In this Article, we have claimed that a legal system, in a macro sense, is crucial to entrepreneurship. Entrepreneurial opportunities lie at the very heart of entrepreneurship, and a legal system that enhances the benefits of success and mitigates the costs of failure for entrepreneurs encourages entrepreneurs to experiment with existing resources to create new opportunities. When entrepreneurs exploit those opportunities, they produce new resources for the next generation of entrepreneurs to use in creating new entrepreneurial opportunities. This “opportunity cycle” leads to a self-perpetuating entrepreneurial society.

A well-known story involving Jeff Bezos and Amazon.com illustrates our thesis well. While working as a senior vice president for a Wall Street investment firm in the early 1990s, Jeff Bezos learned of a United States Supreme Court decision holding that a mail-order business could not be subject to sales tax in a state where the business had no physical presence.²²⁰ Bezos had been researching Internet business opportunities as part of his work for the hedge fund D.E. Shaw & Co.,²²¹ but when Bezos proposed that the firm pursue online bookselling, the chief executive officer refused.²²² Bezos left the firm, drove across the country to Seattle, Washington, and founded Amazon.com in the garage of his rental home.²²³

Amazon.com was not the first Internet retailer²²⁴—or even the first Internet bookseller²²⁵—but Bezos was willing to compete by lowering margins.²²⁶ He hired two experienced computer programmers,²²⁷ invested over \$50,000 of his own money, and provided

²²⁰ See *Quill Corp. v. North Dakota*, 504 U.S. 298, 311–12 (1992) (endorsing the physical-presence test under the Commerce Clause as established in *National Bellas Hess, Inc. v. Department of Revenue of Illinois*, 386 U.S. 753 (1967)).

²²¹ See ROBERT SPECTOR, *AMAZON.COM: GET BIG FAST* 16–22 (2000).

²²² *Id.* at 30.

²²³ Bezos had no prior connection to Seattle, but he wanted to base his company in a location with a large pool of technical talent, a relatively small population (because residents of the state would be charged sales tax on their purchases from the new company), and close proximity to a major book wholesaler. *Id.* at 33. Originally formed as a Washington corporation under the name “Cadabra, Inc.,” the company was reincorporated in Delaware with the name “Amazon.com, Inc.” prior to the launch in 1995. *Id.* at 36.

²²⁴ Peapod, an online grocery delivery service, was founded in 1989 and claims to be “the world’s first e-commerce-only company.” *Our Company*, PEAPOD, <http://www.peapod.com/site/companyPages/our-company-overview.jsp> (last visited Apr. 7, 2013).

²²⁵ See SPECTOR, *supra* note 221, at 21–22 (identifying Computer Literacy as the first Internet bookseller and BookStacks Unlimited and Wordsworth as two other early entrants into this particular line of business).

²²⁶ See Adam Lashinsky, *Amazon’s Jeff Bezos: The Ultimate Disrupter*, CNNMONEY (Nov. 16, 2012, 5:00 AM), <http://management.fortune.cnn.com/2012/11/16/jeff-bezos-amazon/> (reporting that a “favorite Bezos aphorism is ‘[y]our margin is my opportunity’”).

²²⁷ SPECTOR, *supra* note 221, at 39–42.

personal credit guarantees to get the firm off the ground.²²⁸ Amazon.com eventually took additional investments from angel investors²²⁹ and venture capitalists²³⁰ before completing an initial public offering of common stock in 1997.²³¹

Despite occasional bumps in the road, Amazon.com has been a spectacular success story. The entrepreneurial opportunity created by Jeff Bezos and the early employees of Amazon.com assembled many existing resources: the Internet, experienced computer programmers, books (the product), the corporate form, and financial capital, among other things. The exploitation of that opportunity has led to the development of additional resources—an online reviewer community,²³² the prioritization and clustering of reviews,²³³ the associates program,²³⁴ the Wish List,²³⁵ and the controversial one-click patent²³⁶—that have allowed Amazon.com to expand beyond books into toys, electronics, tools, and other product categories,²³⁷ and to serve as a model for many other Internet retailers. The company now describes itself in the most expansive terms: “We seek to be Earth’s most customer-centric company for four primary customer sets: consumers, sellers, enterprises, and content creators.”²³⁸

Surely most of the credit for this success and these innovations belongs to the hard work of Bezos and his team, but we believe an assist should be awarded to the U.S. legal system, which facilitated this entrepreneurial action.²³⁹ In making his decision to leave Wall Street, Bezos focused on the immense upside of the opportunity and the lim-

²²⁸ *Id.* at 62.

²²⁹ *Id.* (accepting an investment from his father, Miguel Bezos).

²³⁰ *Id.* at 99–103 (accepting an investment from the venture capital firm Kleiner Perkins Caufield & Byers).

²³¹ See Amazon.com Inc., Prospectus (Form 424(b)(1)), at 4 (May 15, 1997), available at <http://www.sec.gov/Archives/edgar/data/1018724/0000891020-97-000868.txt>.

²³² This feature of the site was described in the company’s first prospectus. See *id.* at 30–31.

²³³ See RAMON CASADESUS-MASANELL & ANANT THAKER, HARVARD BUS. SCH., CASE STUDY 712-405, EBAY, INC. AND AMAZON.COM (A) 4 (2012).

²³⁴ See Amazon.com, Inc., Annual Report (Form 10-K), at 7 (Mar. 29, 2000), available at <http://www.sec.gov/Archives/edgar/data/1018724/0000891020-00-000622.txt> (describing the Associates Program, which “enables associated Web sites to make products available to their audiences with order fulfillment by Amazon.com”).

²³⁵ See *id.* at 6 (describing the Wish List as a feature that “allows users to create an online wish list of desired products and services that others can reference for gift-giving purposes”).

²³⁶ U.S. Patent No. 5,960,411 (filed Sept. 12, 1997). The Patent and Trademark Office ordered a reexamination of this patent but confirmed its patentability after minor adjustments. See Reexamination Certificate, U.S. Patent No. 5,960,411 (issued July 13, 2010).

²³⁷ CASADESUS-MASANELL & THAKER, *supra* note 233, at 4.

²³⁸ Amazon Investor Relations, AMAZON.COM, <http://phx.corporate-ir.net/phoenix.zhtml?c=97664&p=irol-irhome> (last visited Apr. 7, 2013).

²³⁹ Although we have drawn attention to the startup process by focusing on Amazon.com, the opportunity cycle is not limited to startup companies. For example, one can

ited downside.²⁴⁰ By assuring Bezos that he could retain many of the benefits of his success while reducing the costs associated with failure, the legal system emboldened his action.

By contrast, the Introduction to this Article recounted entrepreneur Alexander Blakely's glee with the nonlegal society he found in postcommunist Siberia. As we saw, however, Blakely's glee was short lived, and he left Siberia after only five years. Blakely admits that his business prospects were largely dependent on bribes,²⁴¹ and we believe that his entrepreneurial opportunities were limited by the absence of law. Just as Bezos' successful creation and exploitation of the Amazon.com opportunity owes an assist to the U.S. legal system, Blakely's failure in Siberia owes an assist to the absence of a legal system that could promote legitimate entrepreneurial action.

easily perceive the opportunity cycle in the development of the Apple iPod. See WALTER ISAACSON, *STEVE JOBS: A BIOGRAPHY* 406 (2011).

²⁴⁰ SPECTOR, *supra* note 221, at 30–31.

²⁴¹ See *supra* text accompanying note 4.

