FEDERAL CRIMINAL FRAUD AND THE DEVELOPMENT OF INTANGIBLE PROPERTY RIGHTS IN INFORMATION

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In recent years, new kinds of intangible property have become increasingly important in our information-based economy. In her article, Professor Moohr addresses the responses of federal courts to fraudulent interferences with various kinds of this growing genre of property.

Specifically, Professor Moohr begins with a historic overview of the development of the concepts of intangible property and fraud. She then traces Supreme Court decisions that adopt a narrow, restrictive application of traditional criminal statutes to intangible property and contrasts them with later decisions that indicate a shift to a much broader approach for protecting intangible property from fraudulent takings.

Professor Moohr then posits that the criminal law forum is not an appropriate one in which to define the nuances of fraud and intangible property rights. Focusing on public policy concerns regarding efficient use of information and employee mobility, she recommends that courts restrict the use of traditional fraud statutes to protect intangible property. She offers two criteria—the public nature of business information and the objective economic value of nonpublic information—to guide courts in determining which types of intangible property should be subject to the traditional statutes.

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I. INTRODUCTION

"Property is theft."[1]

Proudhon's revolutionary rallying cry embodies the symbiotic relationship between property and theft. Just as Kafka's warden and prisoner each define the other,[2] property and theft draw meaning from one another. At its essence, the idea of theft requires some conception of property, and our conception of property includes its protection by the law of theft.[3]

Both property and theft are broad and venerable social constructs that take many forms. The concept of property includes interests in land and buildings, movable chattels, money, stock certificates, and intangible interests such as copyrights and business information. The concept of theft includes crimes of force, fraud, and stealth, each of which can be further divided. This article examines the relationship in federal criminal law between one kind of property, intangible property, and one type of interference, theft by fraud.

Fraud and intangible property converge largely because of increases in the value of intangible property and growth in its variations. Intangible property can be a valuable commodity or business asset. Indeed, estimates of money lost through takings of property such as copyrighted works, trade secrets, and other business information are staggering.[4] Even as rough estimates, multi-billion-dollar losses indicate the great economic significance of intangible property. Owners of such valuable interests naturally seek the protection of criminal law.

In recent years, the kinds of intangible property have multiplied. The intangible interests examined here serve as examples: Elvis Presley recordings; computer source codes, software, and games; honest services;

1. PIERRE JOSEPH PROUDHON, WHAT IS PROPERTY? AN INQUIRY INTO THE PRINCIPLES OF RIGHT AND GOVERNMENT 11 (B. Tucker trans., 1976).

2. *See* FRANZ KAFKA, THE PENAL COLONY (W. & E. Muir trans., 1948).

3. *See* LAWRENCE M. FRIEDMAN, CRIME AND PUNISHMENT IN AMERICAN HISTORY 108 (1993) ("Perhaps the most primitive and basic rules in the criminal justice system were those that protected property rights. It is a crime to steal what belongs to somebody else.").

4. *See* DAN T. SWARTWOOD & RICHARD J. HEFFERNAN, AMERICAN SOC'Y FOR INDUS. SEC., INTERNATIONAL TRENDS IN INTELLECTUAL PROPERTY LOSS SURVEY REPORT 7, 15 (1998) (citing studies showing that firms were losing nearly $24 billion of corporate intellectual property each year); David J. Goldstone & Peter J. Toren, *The Criminalization of Trademark Counterfeiting*, 31 CONN. L. REV. 1, 5 (1998) (stating that in 1996, trademark counterfeiting cost United States industries $200 billion); Arthur J. Schwab & David J. Porter, *Federal Protection of Trade Secrets: Understanding the Economic Espionage Act of 1996*, 10 J. PROPRIETARY RTS. 2, 3 (1998) (reporting testimony before Congress that estimated losses for American industry from foreign espionage constituted $63 billion per year); John Gibeant, *Zapping Cyber Piracy*, A.B.A. J., Feb. 1997, at 61 (noting that piracy losses were estimated at $20 billion a year to copyright holders of computer software, compact discs, and movies); Jack Nelson, *Spies Took $300-Billion Toll on U.S. Firms in '97*, L.A. TIMES, Jan. 12, 1998, at A1 (estimating losses of copyrighted software, trade secrets, and confidential business information at over $300 billion per year).

business licenses and franchises; and business information such as the contents of a newspaper column, the paper's production schedule, and plans of one corporation to purchase another. Although these interests are diverse, they share certain characteristics and raise similar questions. Unlike tangible property, their intangible nature makes the application of traditional criminal statutes problematic. How does one take a thing whose value and essence is independent of a physical form? Conversely, how does one maintain ownership of a res that can be simultaneously possessed by others? Most tellingly for present purposes, the effort to protect intangible property interests through criminal law raises the fundamental issue of whether such interests should be afforded the full panoply of property rights, including the protection of criminal law. To quote Judge Tompkins of the infamous fox case, the characteristics of intangible property raise a "novel and nice question."[5]

The novel and nice question explored here is how federal courts apply criminal laws that were written to deal with physical objects to takings of intangible objects. Indeed, even the term "taking" is something of a misnomer because intangible property cannot be taken in the strict sense; an interference can only violate an abstract right. The modern conception of property focuses on the rights that define the relationship of the owner against other people, rather than defining property as a physical res. Yet courts often fail to distinguish between the res or property object (be it tangible or intangible) and the bundle of separate and distinct rights by which property is defined.

This article examines the response of federal courts to fraudulent interferences with intangible property in the private sector. The federal criminal law and federal judges play significant roles in combating fraud and white collar crime,[6] and prosecutions for fraud have increased substantially.[7] The article begins by reviewing briefly the concepts of intangible property and fraud. Part III presents four Supreme Court cases[8] and several lower court decisions that apply the Court's rationales. The review of cases indicates that the Court has moved from a restrictive approach in using traditional criminal statutes to protect intangible prop-

5. Pierson v. Post, 3 Cai. R. 175 (N.Y. Sup. Ct. 1805) (considering whether the fox's hunter or its killer had acquired a property right in the fox).

6. *See* Eli Lederman, *Criminal Liability for Breach of Confidential Commercial Information*, 38 EMORY L.J. 921, 977 (1989) (noting the significant role of federal courts in the development of commercial information as property protected by criminal law); Geraldine Szott Moohr, *The Federal Interest in Criminal Law*, 47 SYRACUSE. L. REV. 1127, 1147 (1997) (noting the assumption that the federal government has an interest in white collar crime).

7. In 1997, 17% of the federal criminal caseload consisted of fraud charges, an increase from 12% in 1957. *See* Task Force on the Federalization of Criminal Law, *The Federalization of Criminal Law*, 1998 A.B.A. SEC. CRIM. JUST. L. REP. 23. With drug prosecutions removed, fraud prosecutions represented 26% of the federal criminal caseload in 1997. *See id.*

8. *See* United States v. O'Hagan, 521 U.S. 642 (1997) (insider trading and confidential business plan); Carpenter v. United States, 484 U.S. 19 (1987) (wire fraud and confidential business information); McNally v. United States, 483 U.S. 350 (1987) (mail fraud and honest services); Dowling v. United States, 473 U.S. 207 (1985) (National Stolen Property Act and copyright).

erty toward an approach that is arguably overly protective. Moreover, although the cases involve different federal offenses and different forms of intangible property, they share a common issue—whether the victim's loss constituted property for purposes of the statute being considered.

The analysis in part IV demonstrates that the answer to the property question depends in large part on whether courts focus on the type of interference or, instead, on the kind of property at issue. Selectively utilizing one or the other of these interpretive devices can broaden the concept of fraud and create new property interests in information. Although the trend to develop a broad theory of fraud is long-standing, the development of property rights in information through criminal law is new—and presents a cause for concern. The blunt determination of criminal law—guilty or innocent—may discourage socially beneficial activities and does not allow courts to fashion precise boundaries for property rights in information. Likewise, the criminal law forum is an inadequate one in which to consider the policy implications of creating property rights in information. These weaknesses are significant, given the current debate over the appropriate balance between providing incentives to create public goods and ensuring their efficient use. The creation of property interests in information also diminishes the autonomy and bargaining power of employees who are entrusted with business information. Given these concerns, part V of this article concludes that courts should limit the use of traditional fraud offenses when intangible property is involved. It also suggests guidelines to aid courts in determining the kinds of intangible information that should be subject to traditional federal fraud statutes.

II. PROPERTY AND THEFT CRIMES

> "The history of property and theft is a large subject, more or less the history of mankind."[9]

Although it is unnecessary to repeat the history of mankind, it is appropriate and useful to recall the historical relationship between criminal law and property.[10] Theft law developed in response to powerful social and economic forces.[11] In a landmark work, Jerome Hall explained

9. Nelson Smith, *The Alarming Invasion of Public Space*, HARPER'S, Mar. 1998, at 15.

10. *See* Kathleen F. Brickey, *The Jurisprudence of Larceny: An Historical Inquiry and Interest Analysis*, 33 VAND. L. REV. 1101, 1105–13 (1980) (explaining the origins of theft law in medieval England); Michael E. Tigar, *The Right of Property and the Law of Theft*, 62 TEX. L. REV. 1443, 1446–51 (1984) (explaining Roman origins of theft law); *see also* MODEL PENAL CODE § 223.1 commentary at 128 (1995) (summarizing historical developments of theft in English law); WAYNE R. LAFAVE & AUSTIN W. SCOTT JR., CRIMINAL LAW § 8.1, at 702–06 (2d ed. 1986) (same); ROLLIN M. PERKINS & RONALD N. BOYCE, CRIMINAL LAW 289–91 (3d ed. 1982) (same).

11. *See* Tigar, *supra* note 10, at 1444–45 (stating that the definition of theft was enlarged at the behest of the dominant class at particular moments to protect the system of social relations over which it presided and to extend its power to enforce that system). *But see* George P. Fletcher, *The Metamor-*

that early English courts and lawmakers changed the concept of larceny to protect the interests of the new merchant class.[12] Academic commentary indicates that the history of property and theft is one of expansion on two axes—the kinds of property that can be stolen and the types of interference that constitute theft. The first theft offenses prohibited the narrow interference of taking and carrying away personal property that belonged to someone else.[13] Utilizing common law, English jurists eventually criminalized other interferences with property, such as obtaining property through trickery (larceny by trick) and cheat.[14] Later, Parliament added other types of interferences when it enacted false pretense and embezzlement offenses.[15] Colonial American lawmakers incorporated these offenses into state codes.[16]

Under early English criminal laws, only movable chattels could be stolen.[17] One simply could not steal land or intangibles such as stocks, bonds, checks, promissory notes, or deeds.[18] Early theft law thus protected only the middle ground of personal property and excluded both ends of the property continuum; neither immovable land nor intangible interests were subject to theft. In contrast, modern theft offenses are written to protect all forms of property, including movable and immov-

phosis of Larceny, 89 HARV. L. REV. 469, 472–73 (1976) (explaining that theft law developed to accommodate the requirement of manifest criminality). *See generally* JEROME HALL, THEFT, LAW, AND SOCIETY (1952).

12. *See* HALL, *supra* note 11, at 14–33. When a carrier who was transporting the goods of a foreign merchant broke open the bales of cloth and stole the cloth, it did not appear that he had committed larceny because he was in lawful possession of the bales. *See id.* at 4–5. The ensuing decision created an exception to the possession element of common law larceny by ruling that although the carrier possessed the bales, he did not possess the cloth; therefore, in "breaking bulk" and taking the contents, he had committed larceny. *See id.* at 14–33. Known as *Carrier's Case*, Y.B. 13 Edw. 4, f. 9, pl. 15 (Ex. Ch. 1473), the case was one of a series that increased protection of merchants' interests. *See id.*; *see also* LAFAVE & SCOTT, *supra* note 10, § 8.1, at 702–04 (reviewing the development of the theory of constructive possession); Tigar, *supra* note 10, at 1454–55 (reviewing other cases).

13. *See* LAFAVE & SCOTT, *supra* note 10, § 8.1, at 702–06 (explaining that larceny was designed to prevent breaches of peace rather than to protect property).

14. *See* MODEL PENAL CODE § 223.1(2) commentary at 127.

15. *See* LAFAVE & SCOTT, *supra* note 10, § 8.1, at 705–06 (recounting that the eighteenth-century Parliament enacted false pretense and embezzlement statutes to fill gaps left by the courts); Tigar, *supra* note 10, at 1455 ("[B]y the beginning of the nineteenth century, English criminal law had developed a patchwork of theft offenses that criminalized almost any intentional interference with property rights.").

16. *See* United States v. Turley, 352 U.S. 407, 413–14 (1957) (noting that by 1919, most state codes included common law larceny, embezzlement, false pretenses, larceny by trick, and other types of unlawful takings). Today those offenses are found in comprehensive theft statutes that consolidated the offenses. *See* MODEL PENAL CODE § 223.1(1) (noting that the purpose of consolidation is to avoid procedural problems rather than eliminate common law distinctions).

17. *See* LAFAVE & SCOTT, *supra* note 10, § 8.4(a), at 717–18, § 8.7(e), at 749–50.

18. *See id.* § 8.4(a), at 717 (noting that written documents merged into things they represented, so that a deed merged into land and could not be stolen); *see also* MODEL PENAL CODE § 223.2 commentary at 166–67 (explaining that the immobility and indestructibility of real estate allowed it to be safely excluded from theft penalties).

able objects, contract rights, claims to wealth, and other intangible forms of property.[19]

Over time, the law criminalized more types of interference with additional kinds of property. Courts and legislatures developed more comprehensive theft crimes and protected a broader range of property interests. This dynamic relationship between property and criminality manifests itself today in cases involving fraudulent takings of intangible property. Before that relationship is explored, however, the following sections will present a brief historical review of the concepts of fraud and intangible property.

A. Theft by Fraud

Fraud is best understood as a concept rather than as a closely defined crime.[20] Although commentators have long noted the difficulty in defining fraud,[21] its central criterion is taking someone else's property by means of deception. The essential elements of fraud offenses are deceit and an injury to property.[22]

An action for fraud may be brought under civil law[23] or prosecuted by the state through criminal law.[24] Using deception to obtain another's property is the common feature of specific criminal offenses: larceny by trick,[25] false pretenses,[26] and theft by deception.[27] Although elements of

19. *See* MODEL PENAL CODE § 223.2 commentary at 166 (explaining that the comprehensive definition of property is intended to abrogate artificial common law restrictions).

The Model Penal Code defines "property" to mean anything of value, including real estate, tangible and intangible property, contract rights, choses-in-action and other interests in or claims to wealth. *See id*. § 223.0(6). Interestingly, the commentary to the Code does not discuss other forms of intangible property.

20. *See* Ellen S. Podgor, *Criminal Fraud*, 48 AM. U. L. REV. 729, 730 (1999).

21. *See* 1 MELVILLE M. BIGELOW, A TREATISE ON THE LAW OF FRAUD ON ITS CIVIL SIDE 3 (1890) ("It may be thought, and not without ground, to be both rash and dangerous to offer a definition of the term 'fraud.'"); WILLIAM W. KERR, A TREATISE ON THE LAW OF FRAUD AND MISTAKE 41 (1872) ("It is not easy to give a definition of what constitutes fraud."); 2 JAMES F. STEPHEN, A HISTORY OF THE CRIMINAL LAW OF ENGLAND 121 (1883) ("There has always been a great reluctance amongst lawyers to attempt to define fraud."). The drafters of the Model Penal Code did not attempt to define fraud. *See* MODEL PENAL CODE §§ 223.0–224.0.

22. *See* 2 STEPHEN, *supra* note 21, at 121–22 (stating that fraud requires two elements: deceit and actual or possible injury by means of that deceit).

23. The elements of common law civil fraud are: (1) a "false representation of fact made by the defendant;" (2) "[k]nowledge or belief" by defendant that the representation is false, or defendant does not have a "sufficient basis of information" to make the representation; (3) intent to "induce the plaintiff to act or to refrain from action;" (4) "[j]ustifiable reliance;" and (5) "damage to the plaintiff, resulting from such reliance." W. PAGE KEETON ET AL., PROSSER AND KEETON ON THE LAW OF TORTS § 105, at 728 (5th ed. 1984).

24. Criminal culpability arises when the actor intends to deprive another of property. *See* KERR, *supra* note 21, at 45 (noting that the distinction between civil and criminal fraud lies in a "superadded guilty intention" that bespeaks criminal fraud).

25. Larceny by trick requires deception by which the defendant obtains possession with intent to convert the property. *See* LAFAVE & SCOTT, *supra* note 10, § 8.2(e), at 711.

26. False pretenses requires a false representation of a material fact that causes the victim to pass title of property; the defendant must know that the fact is false and must intend to defraud. *See id.* § 8.7(b), at 740–44. Unlike larceny by trick, which deprives the owner of possession, false pretenses

these crimes may vary, deception is at the core of all fraud offenses. Without deception, there is no fraud.[28] Yet despite this common feature, case law suggests that the concept of fraud is broader than the specific offenses.[29]

The concept of fraud encompasses dishonesty, disloyalty, and a disregard for generally accepted standards of conduct. Fraud includes secretive acts of lying and cheating and often carries overtones of betrayal. A scheme to defraud often requires the victim's participation,[30] and in those cases the victim shares some complicity for the loss because she acted to her own detriment and trusted a liar. In this sense, the harm of fraud is different than that of an ordinary theft, which is at least forthright; victims know when purses are snatched and bear little if any responsibility for that event. The dishonorable nature of fraud may explain why jurists, legislators, and commentators speak of fraud as if it were a many-headed Hydra against which the innocent must be protected.[31] Some have sug-

deprives the owner of title. *See id.* § 8.2, at 706 (discussing the common law evolution of larceny offenses).

27. In those states that have adopted the Model Penal Code, the offense of false pretenses is known as theft by deception and likely is to be part of a consolidated theft provision. *See* PAUL H. ROBINSON, CRIMINAL LAW § 15.4, at 787 (1997).

Theft by deception requires (1) deception, by creating or reinforcing a false impression, preventing a victim from obtaining correct information, or failing to correct a false impression created by the defendant and (2) obtaining money or property. *See* MODEL PENAL CODE § 223.3 (1995). Section 224 of the Code provides specialized forms of theft by deception, such as forgery, fraud by check or credit card, and deceptive business practices. *See id*. §§ 224.1–224.12.

28. *See* MELVILLE M. BIGELOW, THE LAW OF FRAUD AND THE PROCEDURE PERTAINING TO THE REDRESS THEREOF 92 (1887) ("All fraud, properly speaking, involves something of deceit. A truly fraudulent act cannot be committed without the practice of deception."); 2 STEPHEN, *supra* note 21, at 121–22 (stating that fraud requires deception or, in some cases, mere secrecy).

29. *See* Hammerschmidt v. United States, 265 U.S. 182, 188 (1924) (noting that "to defraud" has wide meaning, signifying deprivation by means of "trick, deceit, chicane or overreaching"); United States v. Holzer, 816 F.2d 304, 309 (7th Cir. 1987) (stating that the legal meaning of fraud is not limited to deceit or misrepresentation but includes overreaching, undue influence, and other forms of misconduct); Gregory v. United States, 253 F.2d 104, 109 (5th Cir. 1958) (noting that the nontechnical measure of a scheme to defraud is a "reflection of moral uprightness, of fundamental honesty, fair play and right dealing in the general and business life of members of society"); *see also* A.T.H. Smith, *The Idea of Criminal Deception*, 1982 CRIM. L. REV. 721, 724 (stating that fraud is a "wider concept than deceit"). *But see* United States v. Brown, 79 F.3d 1550, 1562 (11th Cir. 1996) (disclaiming the use of language in *Gregory* as a general principle and noting that "fraud statutes do not cover all behavior which strays from the ideal; Congress has not yet criminalized all sharp conduct, manipulative acts, or unethical transactions").

30. *See* ALLEN A. ARLIDGE & JACQUES P. PARRY, ARLIDGE & PARRY ON FRAUD §§ 2-004 to 2-005, at 34–35 (2d ed. 1996) (noting that a complete definition of fraud is to deprive by deceit—that is, by deceit to induce a victim to act to his own injury).

31. *See* McNally v. United States, 483 U.S. 350, 356 (1987) (quoting remarks of Rep. Farnsworth who noted that a federal fraud measure would "prevent the frauds which are mostly gotten up in the large cities . . . by thieves, forgers, and rapscallions generally, for the purpose of deceiving and fleecing the innocent people in the country"); United States v. Goodman, 984 F.2d 235, 240 (8th Cir. 1993) (Fagg, J., dissenting) (criticizing the majority for "miss[ing] the mark in the real world where schemers . . . prey on ordinary people they deem ripe for plucking"); United States v. Kreimer, 609 F.2d 126, 132 (5th Cir. 1980) (stating that Congress intended federal fraud statutes to "protect the careless and the naive from lupine predators"); 1 BIGELOW, *supra* note 21, at 3 (stating that fraud "is manifested in such endless variety of form and phase, in such manifold and ever-changing disguises and colors").

gested that defining fraud closely is counterproductive,[32] and, perhaps for that reason, courts are seemingly content to adopt an "I know it when I see it" approach.[33]

Responding to the perceived need to protect the public, American courts continuously expanded the element of deception by which an actor obtained money or property.[34] Federal courts invoked precepts based on common law and also borrowed from—or ignored—civil law. For example, in 1896, the Supreme Court noted that the federal offense of mail fraud is not bound by common law precepts and held that deception includes promises regarding future returns of investment.[35] Later decisions borrowed from state agency law to hold that failure of a fiduciary to disclose a conflict of interest satisfied the deception requirement.[36]

These developments inevitably expanded the concept of property that is traditionally the object of fraud. Perhaps the most expansive example, to which we will return, is the notion that an employer may be defrauded of an intangible right, the right to honest services of an employee.[37] The following section turns to the evolution of the concept of property.

B. Intangible Property

In early American law, the term property referred to a physical object over which the owner had absolute control.[38] Liberal philosophers

32. *See* United States v. Maze, 414 U.S. 395, 405–08 (1974) (Burger, C.J., dissenting) (arguing that mail fraud should be used as a stopgap until Congress can pass specific legislation); Blachly v. United States, 380 F.2d 665, 671 (5th Cir. 1967) (refusing to define "defraud" in the context of mail fraud because doing so "would tend to reward subtle and ingenious circumvention").

33. *See* Podgor, *supra* note 20, at 739 (citing Weiss v. United States, 122 F.2d 675, 681 (5th Cir. 1941) ("[T]he law does not define fraud; it needs no definition; it is as old as falsehood and as versable as human integrity.")); *cf.* Jacobellis v. Ohio, 378 U.S. 184, 197 (1964) (Stewart, J., concurring) (coining the phrase "I know it when I see it" in the context of pornography).

34. State criminal statutes also use a broad deception element. In jurisdictions that have adopted the Model Penal Code, "deception" includes misrepresentations involving future promises, a failure to correct a false impression, and, in some cases, silence. *See, e.g.*, MODEL PENAL CODE § 223.3 (1995). A similar development has occurred in England. *See generally* Smith, *supra* note 29 (discussing judicial expansion of the term "deception" in the Theft Act of 1968).

35. *See* Durland v. United States, 161 U.S. 306, 313 (1896); *see also* United States v. Keane, 522 F.2d 534, 544–45 (7th Cir. 1975); United States v. States, 488 F.2d 761, 764 (8th Cir. 1973).

36. *See* United States v. Procter & Gamble Co., 47 F. Supp. 676, 678–79 (D. Mass. 1942) (citing Massachusetts civil cases finding fraud where someone had induced an employee to breach the duty of loyalty owed to the employer). Treatise writers of the 1880s recognized the concept of fiduciary or constructive fraud. *See* 1 BIGELOW, *supra* note 21, at lxii (distinguishing between actual and constructive fraud, which includes fiduciary, confidential, and kindred relations); KERR, *supra* note 21, at 125 (stating that equity prohibits a fiduciary from taking a benefit from the person toward whom he stands in such a relation). According to Kerr, the public policy justifying the notion of deceptive silence is the "difficulty . . . of obtaining positive evidence as to fairness of transactions which are peculiarly open to fraud." *Id.* ("The rule shut[s] the door against temptation.").

37. *See infra* text accompanying notes 145–64.

38. *See* 2 WILLIAM BLACKSTONE, COMMENTARIES *2 (defining property as the "sole and despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe"); *see also* JAMES W. ELY JR., THE GUARDIAN OF EVERY OTHER RIGHT 32 (1992) (noting that American courts adopted the English

justified property rights by relying on natural law.[39] Enlightenment philosophers replaced this theory of property with a positive, functional theoretical framework,[40] and modern-day commentators conceptualize property as a legal institution or a social construct designed to accomplish certain functions.[41] These functions serve the interests of the greater community as well as the owner of property.[42] Thus, the law creates property rights when a public policy justifies the award.

Modern courts and legislatures have modified each of Blackstone's criteria—physicality and absolute rights. The law now recognizes intangible as well as tangible property, and the rights that appertain to property are no longer absolute. Today, the term property refers to a set of distinct rights that relate to a tangible or intangible res.[43] It describes a tripartite relationship between the holder and the res, between the holder and other individuals, and between the holder and the state.[44] De-

common law of property and that Blackstone's views influenced American law long after the Revolution).

39. *See* JOHN LOCKE, SECOND TREATISE OF GOVERNMENT, *in* TWO TREATISES ON GOVERNMENT 396 (Oskar Piest ed., 1947) (stating that "whenever one mingles his effort with the raw stuff of the world, any resulting product ought—simply ought—to be his"); ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS 55 (1863); Frank I. Michelman, *Property, Utility and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law*, 80 HARV. L. REV. 1165, 1204–05 (1968) (explaining the natural rights theory as ownership following labor); *see also* JEREMY WALDRON, THE RIGHT TO PRIVATE PROPERTY 16–25 (1990) (noting Hegel's justifications for private property).

40. This framework has antecedents in a variation of liberal theory, utilitarianism, which posits that the state creates property to achieve the greatest good. *See generally* JEREMY BENTHAM, AN INTRODUCTION TO THE PRINCIPLES OF MORALS AND LEGISLATION (H. Hart ed., 1970); JOHN STUART MILL, UTILITARIANISM (1863).

41. *See* FRIEDMAN, *supra* note 3, at 109 ("[P]roperty is not a thing, but a social concept."); Charles A. Reich, *The New Property*, 73 YALE L.J. 733, 771 (1964) ("Property is a legal institution the essence of which is the creation and protection of certain private rights in wealth of any kind."); Kenneth J. Vandevelde, *The New Property of the Nineteenth Century: The Development of the Modern Concept of Property*, 29 BUFF. L. REV. 325, 330 (1980) ("[P]roperty is a set of legal rules among persons.").

42. *See* Goldberg v. Kelly, 397 U.S. 254, 265 (1970) (stating that secure economic rights serve important government interests by enabling the poor to participate meaningfully in community life); RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 32–35 (4th ed. 1992) (stating that property provides incentives to promote creation and efficient use of resources); Reich, *supra* note 41, at 771 (stating that property and security of individual wealth are necessary to limit government power).

43. *See* Kaiser Aetna v. United States, 444 U.S. 164, 176 (1979) (noting that the property owner "lost one of the most essential sticks in the bundle of rights that are commonly characterized as property—the right to exclude others"); United States v. Shotts, 145 F.3d 1289, 1296 (11th Cir. 1998) (referring to the "modern theory that property is a 'bundle of rights'"); United States v. Frost, 125 F.3d 346, 367 (6th Cir. 1997) (stating that "property" refers to a "bundle of rights" that includes the rights to possess, use, exclude, profit, and dispose); United States v. Bucuvalas, 970 F.2d 937, 945 (1st Cir. 1992) (noting that "a 'property' interest resides in the holder of any of the elements comprising the 'bundle of rights'").

44. *See* Neel Chatterjee, *Should Trade Secret Appropriation Be Criminalized?*, 19 HASTINGS COMM. & ENT. L.J. 853, 866 (1997) (defining property as a "flexible concept used to describe groups of rights relating to things as a reward for social efforts"); *see also* Wesley N. Hohfeld, *Some Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 23 YALE L.J. 16, 21 (1913) (stating that property denotes the legal interest or aggregate of legal relations appertaining to a physical object).

spite these jurisprudential developments, however, the physical, absolute definition of property still animates many judicial decisions.[45]

The property bundle traditionally includes rights to possess, to use, and to enjoy the res; rights to transfer, to sell, to give, and to will it; and the right to exclude others from using or enjoying it.[46] A property owner may obtain a monetary remedy and injunctive relief through private causes of action. Nevertheless, the community, speaking through the legislature and courts, often constrains these rights. Thus, an owner cannot use property in a way that pollutes the environment, is often required to obtain a license to use the property, and cannot always disinherit a spouse.[47]

In general, these rights and limitations regarding physical property apply also to intangible property. The lack of a physical res has consequences, however, especially when traditional criminal statutes are involved. When the intangible property is information, further complications arise.[48] For example, consider Mary's recipe for carrot cake, which produces excellent cake and, therefore, has a market value. She may use the recipe, pass it on to neighbors, deny it to strangers, include it in a cookbook, or license its use to a bakery. If she obtains a copyright in the recipe, she gains certain exclusive rights over it for her lifetime plus seventy years.[49]

Although the recipe may take a tangible form when written (or when turned into a cake), it exists apart from any physical manifestation. Thus, it may be difficult for Mary to maintain exclusive use of the recipe. If she gives it to a neighbor, Mary loses control over the recipe because the friend may easily pass it to another person. Unlike the cake itself, which is finite and can be used, or eaten, by only a limited number of people, the recipe can be possessed and used simultaneously by an un-

45. *See, e.g.*, Moore v. Regents of the Univ. of Cal., 793 P.2d 479, 496 (Cal. 1990) (holding that excised cells from a spleen are not property for purposes of civil conversion); *infra* text accompanying notes 189–97, 209–10 (discussing absolute, physical rationales used to determine whether a business license is property).

46. *See* Pamela Samuelson, *Information as Property: Do* Ruckelshaus *and* Carpenter *Signal a Changing Direction in Intellectual Property Law?*, 38 CATH. U. L. REV. 365, 370 (1989).

47. *See* JOSEPH W. SINGER, PROPERTY LAW: RULES, POLICIES AND PRACTICES 4–5 (1993).

48. *See* Raymond T. Nimmer & Patricia Ann Krauthaus, *Information as a Commodity: New Imperatives of Commercial Law*, 55 LAW & COMTEMP. PROBS. 103, 104–05 (1992) [hereinafter Nimmer & Krauthaus, *Information as a Commodity*] (discussing the characteristics of intangible information property).

49. *See* 17 U.S.C. § 302, *amended by* 17 U.S.C. § 302(a) (Supp. IV 1998) (applying to works created after 1978); Sony Bono Copyright Term Extension Act and Fairness in Music Licensing Act of 1998, Pub. L. No. 105-298, 112 Stat. 2827.

Mary may not be successful in obtaining a copyright in her recipe, however. Creative work that involves a procedure or process does not qualify for copyright protection. *See* 17 U.S.C. § 102(b) (1994); *see also* Publications Int'l Ltd. v. Meredith Corp., 88 F.3d 473, 480–81 (7th Cir. 1996) (deciding that the recipes at issue were not subject to copyright); 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 218[I], at 2-108 to 2-109 (casting doubt on decisions that would extend copyright to recipes). *But see* Marcus v. Rowley, 695 F.2d 1171 (9th Cir. 1983) (holding that copying an entire work that included recipes is an infringement). Moreover, because the recipe is driven by its function, it probably lacks the requisite element of originality. *See* 17 U.S.C. § 102(a).

limited number of people. Thus, when Mary loses exclusive use of the recipe, she may continue to bake cakes—but so can everyone else. Although in theory she could sell her recipe, she will find it hard to find a buyer for a recipe that is no longer a secret.

Tangible and intangible property also differ as to the relative significance of economic value. Independent economic value is less significant when stolen property is a tangible object,[50] largely because the owner has also lost the rights of possession and use of that object. In contrast, when intangible property is "taken," the owner generally still possesses the property and may continue to use the information or idea.[51] As with Mary's recipe, often the victim's only loss is the diminished value of the intangible property. Hence, the weight of economic value increases when intangible interests are taken.

In the more precise language of economics, Mary's cake recipe is a public good.[52] The creation of the recipe took time and energy that could have been used for other purposes, yet when put in written form, it becomes easy and inexpensive for others to appropriate. Unless the recipe is kept secret, others may free ride by using it without compensating Mary. Unlike the cake, which would disappear if too many took a slice, the recipe can be used by any number of people at the same time—and could last forever. Once the information is taken (and a physical taking is not required), it cannot be returned. Unless a legal rule provides Mary with a remedy for loss of exclusive use, she may even stop creating recipes for sweet desserts.

Problems that involve public goods require precise treatment to encourage both initial production and efficient use of the material. The following discussion presents a venerable Supreme Court case that sought to balance these priorities.

50. The value of stolen property is used for grading or punishment purposes. *See, e.g.*, TEX. PENAL CODE ANN. § 31.03(e) (West 1989) (providing punishment ranges according to the value of the stolen property); *see also* LAFAVE & SCOTT, *supra* note 10, § 8.14(b), at 718 (noting the division of larceny into grand and petit larceny depending on the amount stolen).

51. *See* John T. Cross, *Trade Secrets, Confidential Information, and the Criminal Law*, 36 MCGILL L.J. 524, 534 (1991) (noting that traditional rules of property, which focus on the possession and the use of an object, do not make sense when the object is intangible and can be used by many); Lederman, *supra* note 6, at 940–41 (noting that, at common law, the mere tangibility of an object created a quasi-presumption of economic value).

52. *See* Chatterjee, *supra* note 44, at 860–62 (discussing the characteristics of a public good); William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright Law*, 28 J. LEGAL STUD. 325, 326 (1989); Gary Myers, *The Restatement's Rejection of the Misappropriation Tort: A Victory for the Public Domain*, 47 S.C. L. REV. 673, 684 (1996); Samuelson, *supra* note 46, at 369 (noting that intangible property has limitless sharing possibilities that make it difficult to maintain exclusive use).

C. An Early Application of the Concepts

Barred from gathering news from foreign sources during World War I,[53] International News Service (INS) copied Associated Press news stories and sold them to its newspaper clients.[54] Associated Press had won an injunction that prohibited INS from using the stories, which INS contested before the Supreme Court in *International News Service v. Associated Press*.[55]

The Court first considered whether INS had taken "property" that belonged to Associated Press.[56] Under the publish-with-notice requirements then existing for copyright protection, Associated Press held no copyright on the stories.[57] Moreover, even though the form of expression used to communicate news may be copyrighted, the majority conceded that a writer does not create the news element of the story.[58] The "history of the day" was not accorded constitutional copyright protection nor was it susceptible to dominion in the absolute sense.[59]

Professing to abandon any reliance on property rights, the majority next considered the type of interference at issue—unfair competition. According to the majority, the real issue was the news business; Associated Press must be able to price its product to cover cost and earn a profit.[60] Given that requirement, each competitor had a duty "to conduct its own business as not unnecessarily or unfairly to injure that of the other."[61] INS had not abided by this principle and was "endeavoring to reap where it has not sown," appropriating to itself the "harvest of those who have."[62] This type of appropriation was a form of unfair competition.[63]

Despite having grounded its decision in principles of tort law, the majority was unable to escape the lure of the property label. The Court indicated that news is property when, as here, it is a valuable interest

53. *See* International News Serv. v. Associated Press, 248 U.S. 215, 263 (1918) (Brandeis, J., dissenting).

54. *See id.* at 231. INS could profit from this conduct by selling the stories to newspapers on the West Coast. *See id.* at 238 (noting that the "telegraph and telephone easily outstrip the rotation of the earth").

55. *See id.*

56. *See id.* at 231.

57. Because of the large number of dispatches, Associated Press failed to comply with then-current requirements for obtaining copyrights covering the stories. *See id.* at 233; *see also* CRAIG JOYCE ET AL., COPYRIGHT LAW § 1.03[C][1], at 19 (4th ed. 1998) (explaining that the Copyright Law of 1909 protected a work upon publication only if the publication was accompanied by registration).

58. *See International News Serv.*, 248 U.S. at 234.

59. *See id.* at 234–35.

60. *See id.* at 235.

61. *Id.* at 235–36.

62. *Id.* at 239 (stating that the conduct of INS amounted to unauthorized interference with the normal operation of a legitimate business precisely at the point of profit).

63. *See id.* at 240.

created through investment and labor that is similar to goods in trade.[64] Confining the issue to the rights and obligations of the parties as to each other, the stories thus constituted "*quasi* property."[65]

Justices Holmes and Brandeis, in dissent, argued that news stories were not property.[66] The majority had been swayed by the economic value of the news and by the injustice of appropriating the fruits of another's labor, but the dissenters pointed out that neither value nor labor created a property right. Both Justices rejected the argument that an interest becomes property because it has economic value.[67] Justice Brandeis also dismissed the theory that would award a property right to the party who labored to create it.[68] Both Justices found that property is a creation of the law;[69] the law limits rights of property according to the public interest[70] when public policy demands it.[71]

Recognizing that the majority decision effectively created a new rule regarding property rights, Justice Brandeis argued vigorously against this course.[72] He thought a new rule, unless carefully crafted, could injure the general public.[73] Given the fundamental public policy choices and the many ways to tailor that policy, he believed it wiser to defer to Congress.[74]

The majority opinion illustrates the interplay between a property right and the method of interfering with that right. Defining the issue as one of unfair competition, the majority held that misappropriating the fruits of another's labor was the type of interference that justified relief.[75]

64. *See id.* "[News] has all the attributes of property necessary for determining that a misappropriation of it by a competitor is unfair competition because [it is] contrary to good conscience." *Id.*

65. *Id.* at 236 (conceding that neither the Associated Press nor INS had a property interest against the public after publication of the news).

66. *See id.* at 246 (Holmes, J., dissenting) (arguing that absent copyright, "there is no property [interest] in the combination or in thoughts or facts that the words express"); *id.* at 255 (Brandeis, J., dissenting) (citing English case law as support for the proposition that "news is not property in the strict sense").

67. *See id.* at 246 (Holmes, J., dissenting) ("Many exchangeable values may be destroyed intentionally without compensation."); *id.* at 250 (Brandeis, J., dissenting) ("But the fact that a product of the mind has cost its producer money and labor, and has a value for which others are willing to pay, is not sufficient to ensure it this legal attribute of property.").

68. *See id.* at 250 (Brandeis, J., dissenting) (finding that a property interest is not conferred merely because the product cost its producer money and labor).

69. *See id*. at 246 (Holmes, J., dissenting) (stating that property depends upon the exclusion by law from interference); *id.* at 250 (Brandeis, J., dissenting) (listing the few creations recognized as property under either common or statutory law).

70. *See id.* at 250 (Brandeis, J., dissenting) ("[T]he attribute of property is continued . . . only in certain classes of cases where public policy has seemed to demand it.").

71. *See id.* (Brandeis, J., dissenting) (noting that the right to exclude others may be qualified when property is affected with a public interest).

72. *See id.* at 262–63 (Brandeis, J., dissenting) (noting that the effect of the holding was to establish property rights and curtail free use of knowledge and ideas).

73. *See id.* (Brandeis, J., dissenting).

74. *See id.* at 264–67 (Brandeis, J., dissenting).

75. *See id*. at 240. Justice Brandeis also disagreed with the majority's belief that INS's conduct was a form of unfair competition. A claim of unfair competition required a special relation, a wrongful means of acquiring the knowledge, or an unlawful manner of use. *See id.* at 251 (Brandeis, J., dissent-

This rationale, however, gave Associated Press a property right as against INS. By barring INS from using news that Associated Press had collected, the Court effectively established a property right in the news.

The opinions also differed in their choice of public policies. The majority favored a policy that rewarded gathering and distributing news because news services enhance general welfare.[76] Its opinion reflects the value that creating a public good, such as news, should be encouraged by granting a remedy for its loss. The decision thus strengthened the incentive to provide news services. In contrast, the dissent was more concerned with the benefits that accrue from making the news available to the public. Justice Brandeis preferred a rule that encouraged free use of knowledge and ideas.[77]

The opinions in *International News Service* illuminate the nature of intangible property rights in information and introduce themes to which we shall return— the role of policy and law in defining property and the consequences of emphasizing either the kind of property or the type of interference with that property.[78] The case also foreshadows the problems raised by recent developments in technology that implicate property rights in information.[79]

III. FRAUD AND INTANGIBLE PROPERTY IN FEDERAL COURTS

The following discussion examines four Supreme Court cases that consider criminal takings of intangible interests and several lower court decisions based on those cases. The cases involve different kinds of intangible property and different types of interference, and they arise under different criminal statutes. Nevertheless, they share a common issue— whether the disputed informational interest is property. This is

ing); *see also id.* at 258 (noting also that unfair competition requires a manner or means of conducting business that involves fraud, force, or prohibited acts). None of these factors were at play in this case. *See id.* at 251, 259–62. Justice Holmes saw a subtle form of unfair competition because INS did not give proper credit to Associated Press. *See id.* at 246–48 (Holmes, J., dissenting).

76. *See id*. at 235–36.

77. *See id.* at 262–63 (Brandeis, J., dissenting).

78. *INS* survives today only in state law cases, having fallen victim to *Erie* in federal law cases. *See* Erie R.R. v. Tompkins, 304 U.S. 64, 79–80 (1938) (holding that federal courts sitting in diversity jurisdiction are to apply state substantive law and declaring federal common law to be "an unconstitutional assumption of powers" by the federal judiciary).

In its broad form, the misappropriation tort deals with "business malpractices offensive to the ethics of . . . society." *See* National Basketball Ass'n v. Motorola, Inc., 105 F.3d 841, 851 (2d Cir. 1997) (citations omitted) (holding that a broad form of misappropriation is preempted by the Copyright Act); RAYMOND T. NIMMER, INFORMATION LAW § 3.17, at 3-77 (1996) (noting that the "general doctrine of misappropriation . . . is not universally accepted," and "*the Restatement (Third) of Unfair Competition* . . . expressly rejects and criticizes the theory").

79. *See generally* Raymond T. Nimmer & Patricia Ann Krauthaus, *Copyright on the Information Superhighway: Requiem for a Middleweight*, 25 STAN. L. & POL'Y REV. 25 (1994) [hereinafter Nimmer & Krauthaus, *Copyright*]; Nimmer & Krauthaus, *Information as a Commodity*, *supra* note 48.

fundamental because fraud requires that its object be something capable of belonging to another.[80]

The Supreme Court first took a restrictive approach and limited the applicability of criminal law to traditional property objects.[81] The Court, however, soon shifted to a broader approach that emphasized the rights that attach to property rather than focusing on property as an object.[82] Lower courts moved between the two approaches and utilized numerous definitions of property that produced inconsistent case law.[83] In 1997, the Supreme Court corroborated an expansive view of both property and fraud.[84]

A. The Restrictive View— Transporting Intangible Stolen Property

1. The National Stolen Property Act

The National Stolen Property Act of 1934 (NSPA)[85] makes it a federal crime to transport across state lines certain kinds of property taken by theft or fraud.[86] Congress passed the Act to fill enforcement gaps in state theft laws that resulted when thieves fled to other jurisdictions.[87] The Act does not directly address the initial theft or fraud, conduct normally left to state law.[88] Nevertheless, its general purpose is to deter theft, conversion, and fraud.[89] The NSPA authorizes punishment of a person who "transports, transmits, or transfers in interstate or foreign commerce any goods, wares, merchandise, securities or money, of the value of $5,000 or more, knowing the same to have been stolen, converted or taken by fraud."[90] The crime is committed when an actor: (1) transports or causes to be transported; (2) in interstate commerce; (3) property valued at $5000 or more; (4) with knowledge that the property

80. *See* ARLIDGE & PARRY, *supra* note 30, at 73 (noting that "[t]he subject of a theft charge must be *property* . . . . That which belongs to no-one cannot be stolen.").

81. *See* McNally v. United States, 483 U.S. 350 (1987); Dowling v. United States, 473 U.S. 207 (1985); *infra* text accompanying notes 94–111 and 152–64.

82. *See* Carpenter v. United States, 484 U.S. 19 (1987); *infra* text accompanying notes 165–84.

83. *See infra* text accompanying notes 188–257.

84. *See* United States v. O'Hagan, 521 U.S. 642 (1997); *infra* text accompanying notes 272–96.

85. 18 U.S.C. §§ 2311–2322 (1994).

86. *See id.*

87. *See* Brooks v. United States, 267 U.S. 432, 438–39 (1925) (upholding the constitutionality of the precursor of the NSPA and noting enforcement problems that result from "quick passage of the machines into another state"); *see also* FRIEDMAN, *supra* note 3, at 266–67 (noting that the NSPA passed as part of a "flock of new penal laws" necessary because "[t]wentieth-century criminals had wheels and wings").

88. *See* United States v. Turley, 352 U.S. 407, 417 (1957) (stating that refinements of larceny are not related to the primary congressional purpose of the Act).

89. *See* United States v. Kroh, 896 F.2d 1524, 1529 (8th Cir. 1990) (noting that the aim of the statute is to punish the underlying act of fraud).

90. 18 U.S.C. § 2314 (1994). Congress amended the Act in 1988 to add the terms "transmits" and "transfers." *See* Anti-Drug Abuse Act of 1988, Pub. L. No. 100-690, § 7057(a), 102 Stat. 4181, 4402. The change was enacted without a Senate or House report. *See* 1988 U.S.C.C.A.N. 5937.

has been stolen, converted, or fraudulently taken from its rightful owner.[91]

Congress specifically listed the kinds of property with which it was concerned: "goods, wares, merchandise, securities or money."[92] Thus, the Act clearly prohibits transporting tangible property taken by theft or fraud across state lines. A more puzzling question is whether the Act applies to intangible property.[93] The following discussion reviews the Supreme Court's resolution of the question.

2. The NSPA Does Not Protect Copyrights

In *Dowling v. United States*,[94] the Supreme Court determined that the NSPA does not apply to copyrights.[95] Dowling had recorded non-copyrighted performances of Elvis Presley[96] and sold them via mail order throughout the country.[97] The songs that Presley performed were protected by copyright, and the unauthorized record sales clearly infringed valid copyrights held by writers and composers.[98] The issue was whether copyright infringement constituted theft or fraud under the NSPA.[99]

The Court relied on circuit court precedents that had added the value of stolen intangible property to that of stolen tangible property in calculating whether the statutorily required value of $5000 was met.[100] The Court interpreted these cases to mean that the NSPA requires some physical identity between the property stolen and the property transported.[101] Therefore, the Act requires some physical taking. Copyrights,

91. *See* United States v. Wallach, 979 F.2d 912, 918 (2d Cir. 1992) (stating that the crime is complete when a defendant transports in interstate commerce property worth more than $5000 that the defendant knew was obtained via fraud); United States v. Weiner, 755 F. Supp. 748, 752 (E.D. Mich. 1991), *aff'd*, 988 F.2d 629 (6th Cir. 1993).

92. 18 U.S.C. § 2314.

93. *Compare* United States v. Smith, 686 F.2d 234 (5th Cir. 1982) (holding that copies of motion pictures are not within the reach of the Act), *with* United States v. Belmont, 715 F.2d 459 (9th Cir. 1983) (holding that copies of copyrighted motion pictures are subject to the Act).

94. 473 U.S. 207 (1985).

95. *See id*. Justice Powell, joined by two other Justices, dissented. *See id.* at 229 (Powell, J., dissenting).

96. In the vernacular, the records were "bootlegged" copies, recorded from various sources, such as studio outtakes, soundtracks, and tapes of concerts and television appearances. *See id.* at 210 & n.2. Bootlegging is now prohibited by the anti-bootlegging statute, which is part of the Uruguay Round Agreements Act dealing with international trade. *See* Pub. L. No. 103-465 § 513, 108 Stat. 4809, 4974–75 (1994) (codified as amended at 18 U.S.C. § 2319A (1994)); *see also* United States v. Moghadam, 175 F.3d 1269, 1282 (11th Cir. 1999) (upholding the constitutionality of the Act under the Commerce Clause).

97. *See Dowling*, 473 U.S. at 211–12.

98. *See id.* at 211 (noting that Dowling had not obtained licenses or paid royalties).

99. *See id.* at 229 (Powell, J., dissenting).

100. *See id.* at 216 (citing United States v. Seagraves, 265 F.2d 876, 877 (3d Cir. 1959); United States v. Greenwald, 479 F.2d 320, 322 (6th Cir. 1973)).

101. *See id.* (noting that the stolen goods in those cases were the same goods that were transported).

however, are not physical objects; rather, they are simply intangible rights very different from physical property.[102]

In reaching its decision, the Court emphasized the limited nature of the property rights in copyright.[103] Unlike the owner of other property, the copyright holder must tolerate limitations such as fair use and, in certain cases, compulsory licensing.[104] Although infringers invade a statutorily protected interest, they do not "assume physical control over the copyright nor deprive [the] owner of its use."[105] Thus, in the end, the Court was unable to reconcile the absence of a physical res with the idea of stealing that underlies the NSPA.[106]

The Court examined the copyright laws and concluded that the government's theory undermined the "carefully calibrated scheme" Congress had devised for criminal copyright infringement.[107] The use of the NSPA was "an indirect but blunderbuss solution to a problem treated with precision when considered directly."[108] The Court also noted that the purpose of the NSPA, to supplement state criminal laws, did not apply to copyright.[109] Ultimately, the majority thought it wiser to leave such choices to Congress.[110]

To reach its decision, the Court analyzed the kind of property at issue in the case. That analysis disclosed that copyrights confer only limited and intangible rights against use by others.[111] In contrast to the physical consequences of ordinary thefts, which deprive an owner of possession and use, theft of intangible property can only violate an abstract right. In sum, an offense that requires a physical taking does not apply when only abstract rights are involved.

102. *See id*. at 217 (concluding that copyrights "have a character distinct from the possessory interest of the owner of simple 'goods, wares, [or] merchandise'").

103. *See id.* at 216–17 (noting that copyright law confers "carefully defined and carefully delimited interests to which the law affords correspondingly exact protections").

104. *See id.* at 217 (noting that section 107 of the Copyright Act codifies the privilege of fair use and section 115 "grants compulsory licenses in nondramatic musical works").

105. *Id.*

106. *See id.* (concluding that copyright limitations render its "character distinct from the possessory interest of the owner of simple 'goods'").

107. *Id.* at 221–25.

108. *Id.* at 226. The Court noted that the Government's theory would also criminalize patent and trademark infringements, the governing legislation of which, unlike copyright, did not include criminal provisions. *See id*.

109. *See id.* at 219–20 (stating that enforcement of copyright infringement did not require supplemental federal action because Congress may legislate directly under the Constitution's Copyright Clause).

110. *See id.* at 228 (stating that Congress's deliberation in the copyright infringement area "demonstrates anew the wisdom of leaving it to the legislature to define crime and prescribe penalties").

111. In contrast, the dissent focussed on the type of interference, relying on precedent that broadly interpreted the term "stolen" in the NSPA. *See id.* at 231 (Powell, J., dissenting) (citing United States v. Turley, 352 U.S. 407 (1957) (holding that "the term 'stolen' included all felonious takings with intent to deprive the owner of rights and benefits of ownership, regardless of whether the theft would constitute larceny at common law")).

3. The NSPA and Noncopyrighted Intangible Property

Although the *Dowling* decision clearly applies to copyrights, it is unclear whether it also applies to other kinds of intangible property.[112] In *United States v. Brown*,[113] the Tenth Circuit relied on *Dowling*'s physical congruence rationale to decide that a computer source code, the owners of which had not obtained a copyright, was not a good for purposes of the NSPA.[114] Brown had copied the source code onto a computer disk in Georgia; he then transported the disk to New Mexico, where he printed the code.[115] The disk on which the source code was copied and transported belonged to Brown.[116] Brown argued that the information on the disk was intangible intellectual property, and the Act, therefore, did not apply.[117] Relying on *Dowling*'s physical congruence requirement, the court agreed. Emphasizing that the "essential ingredient of the statute," stolen physical goods, "was missing," the court held that the NSPA "applies only to physical goods."[118]

The Government, taking a different tact, argued that *Dowling* was inapposite because Brown had stolen the property—the computer code—rather than merely infringed a copyright.[119] Although the court conceded that Brown's conduct resembled traditional theft,[120] it did not find that fact persuasive; the source code, as intangible intellectual property, did not constitute goods under the Act.[121] Purely intellectual property thus fell outside the statute. Even though intangible property may be represented physically, it remains intangible.[122] Thus, the court focused on the key characteristic of intellectual property and information—its intangibility.

A year earlier, a district court had decided *United States v. Riggs*,[123] a case that also involved a computer file that contained noncopyrighted business information. The court similarly relied upon characteristics of property—but reached an opposite conclusion. In *Riggs*, the defendants,

112. A second issue is whether the decision applies to other federal crimes. *See infra* text accompanying notes 234–53.

113. 925 F.2d 1301 (10th Cir. 1991).

114. *See* United States v. Brown, 925 F.2d 1301, 1305–08 (10th Cir. 1991).

115. *See id*. at 1305. Brown was a former employee of the victim, a software company. *See id.* at 1303.

116. *See id.* at 1305.

117. *See id.* at 1303.

118. *Id.* at 1307 (stating that *Dowling* had held that 18 U.S.C. § 2314 applies only to physical "goods, wares or merchandise").

119. *See id.* (noting that Brown had no right to transfer the code from the company's computer system to his tapes; thus, the source code was "stolen").

120. *See id.* at 1308 (noting that the information that Brown took was not available to the public).

121. *See id.* The court noted that the previous federal appellate decisions approved by *Dowling* had involved stolen physical goods and did not apply the NSPA to a bare intangible. *See id.* at 1307 n.14 (referring to *United States v. Seagraves*, 265 F.2d 876 (3d Cir. 1959), and *United States v. Greenwald*, 479 F.2d 320 (6th Cir. 1973)).

122. *See Brown*, 925 F.2d at 1307.

123. 739 F. Supp. 414 (N.D. Ill. 1990).

without authorization, accessed and downloaded a corporation's computer file that contained confidential information regarding an emergency telephone call system and then printed it in a computer newsletter.[124] In so doing, the defendants had transferred confidential business information from one computer to another across state lines. The defendants, relying on *Dowling*, argued that the intangible information did not constitute goods, wares, or merchandise.[125] The court, however, took a narrow view of *Dowling* and found it inapposite because the Supreme Court had not considered the definition of goods.[126]

The court in *Riggs* held that confidential information was property. The court noted that the NSPA was enacted to cover *all* stolen property worth at least $5000 and that the computer file of business information satisfied the value requirement.[127] Thus, the court decided the property issue on the basis of whether it had market value. The court also refused to distinguish between information stored on paper or disk (which precedent had held was property) and information stored electronically in a computer's hard drive.[128] Wherever it is stored, the information was accessible and could be transferred and sold—in other words, it was tangible.[129] Information that is tangible, transferable, and salable is property and is a good under the NSPA.

In sum, *Dowling* and *Brown* recognized that all property is not the same and distinguished between intangible property and physical property. Constrained by prior decisions and the purpose of the statute, both courts held that the offense applied only to physical property. Interestingly, both also resisted efforts to direct their attention to the type of interference.[130] Note also that the contrary decision in *Riggs* was based on a traditional characteristic of property, its market value.

124. *See id*. at 417 (explaining that the defendant in Georgia accessed the file, downloaded it, and posted it to an electronic bulletin board from which another defendant transferred it to his computer in Missouri).

125. *See id.* at 422.

126. *See id.* at 421 n.9. Although formally accurate, the rationale in *Dowling* would appear to be relevant to whether the NSPA applied only to physical property such as goods, wares, and merchandise.

The Eighth Circuit also took a narrow view of *Dowling*. *See* United States v. Kroh, 896 F.2d 1524 (8th Cir. 1990), *aff'd on other grounds*, 915 F.2d 326 (1990) (en banc). In a case involving electronic transfers of fraudulently obtained loans, the defendant argued that *Dowling* required prior physical possession of the stolen goods. *See id.* at 1529. The court disagreed, noting that *Dowling* "suggests only that copyright infringement does not result in the property deprivation that [the NSPA] is intended to punish." *Id.*

127. *See Riggs*, 739 F. Supp. at 421–22.

128. *See id.* (distinguishing a situation in which a defendant memorizes information).

129. According to the court, information contained in the computer text file was accessible because it was in readable form in a particular storage place. *See id.* at 422.

130. *See* Dowling v. United States, 473 U.S. 207, 229 (1985) (rejecting the dissent's view that focused on the type of interference); United States v. Brown, 925 F.2d 1301, 1307 (10th Cir. 1991) (rejecting the Government's attempt to emphasize the conduct of theft).

B. Moving Toward a Broader Approach

1. The Mail Fraud Statute

The mail and wire fraud statutes prohibit frauds that involve communications sent by mail or interstate wires.[131] Congress passed the mail fraud provision in 1872,[132] and in 1952, it enacted the wire fraud provision.[133] The following discussion concentrates on the mail fraud statute, but it applies also to wire fraud; the provisions are jointly interpreted, and decisions that interpret one statute apply to the other.[134]

The mail fraud statute, passed pursuant to Congress's post office power,[135] was intended to protect the integrity of the post office.[136] In spite of this important purpose, judicial decisions eventually diminished the mailing element so that its modern function is now to provide federal

131. *See* 18 U.S.C. §§ 1341, 1343 (1994); *see also* Pereira v. United States, 347 U.S. 1, 8 (1954); United States v. Young, 232 U.S. 155, 161 (1914); United States v. Mandel, 591 F.2d 1347, 1360 n.9 (4th Cir. 1979).

132. The mail fraud statute presently provides:

> Whoever, having devised or intending to devise any scheme or artifice to defraud, or for obtaining money or property by means of false or fraudulent pretenses, representations, or promises, or to sell, dispose of, loan, exchange, alter, give away, distribute, supply, or furnish or procure for unlawful use any counterfeit or spurious coin, obligation, security, or other article, or anything represented to be or intimated or held out to be such counterfeit or spurious article, for the purpose of executing such scheme or artifice or attempting so to do, places in any post office or authorized depository for mail matter, any matter or thing whatever to be sent or delivered by the Postal Service, or deposits or causes to be deposited any matter or thing whatever to be sent or delivered by any private or commercial interstate carrier, or takes or receives therefrom, any such matter or thing, or knowingly causes to be delivered by mail or such carrier according to the direction thereon, or at the place at which it is directed to be delivered by the person to whom it is addressed, any such matter or thing, shall be fined under this title or imprisoned not more than five years, or both. If the violation affects a financial institution, such person shall be fined not more than $1,000,000 or imprisoned not more than 30 years, or both.

18 U.S.C. § 1341.

In 1988, in a separate provision, Congress amended the mail fraud statute to include honest services fraud. The amendment provides:

> For the purposes of this chapter, the term "scheme or artifice to defraud" includes a scheme or artifice to deprive another of the intangible right of honest services.

Id. § 1346.

133. *See id.* § 1343 (prohibiting a scheme to defraud executed by an international or interstate wire). The term "wire" includes telephone lines, radio, television, facsimile machines, and computer transmissions. *See* United States v. Norris, 34 F.3d 530 (7th Cir. 1994) (satellite cable programming); United States v. LaMacchia, 871 F. Supp. 535 (D. Mass. 1994) (computer bulletin board).

134. *See* Carpenter v. United States, 484 U.S. 19, 25 n.6 (1987) (noting similar language and applying the same analysis to both offenses).

135. "Congress shall have power . . . To establish post offices and post roads." U.S. CONST. art. I, § 8, cl. 7.

136. *See* Durland v. United States, 161 U.S. 306, 314 (1896) (stating that the purpose is to prevent the post office from being used to carry out fraudulent schemes).

jurisdiction over frauds that involve a mailing.[137] Thus, the statute operates as a general federal prohibition against frauds.[138]

Courts have broadly interpreted the statute.[139] The statute lent itself to broad readings because the conjunction "or" in the statutory phrase "any scheme or artifice to defraud, *or* for obtaining money or property by false or fraudulent pretenses" essentially bifurcated the statute into two offenses.[140] Reading "scheme to defraud" as an independent offense, courts then broadly interpreted the phrase. As a result, by 1987, the government routinely used mail fraud to protect a broad range of property interests and "interests that really had nothing to do with property."[141] Prosecutions proceeded under the theory that victims had been deprived of intangible rights.[142] In the private sector, this translated to the right to honest services of employees;[143] correspondingly, in the public sector, the theory conferred a right to honest public officials and corruption-free government.[144]

In *United States v. George*,[145] a typical case, an employee of Zenith accepted a kickback from a cabinet supplier and was convicted of honest services mail fraud.[146] Evidence suggested that Zenith had not suffered an actual monetary loss.[147] Nor had the defendant made an affirmative misrepresentation, although he had necessarily operated in secrecy. In upholding the conviction, the court noted that the defendant had a duty to "at least" tell Zenith that the cabinets could be purchased for less money.[148] The defendant had committed fraud by "holding himself out to

137. *See* United States v. Brumley, 116 F.3d 728, 734 (5th Cir. 1997) (referring to the "jurisdictional elements of mail usage"); United States v. Sawyer, 85 F.3d 713, 723 n.5 (1st Cir. 1996) (noting that the act of mailing is the hook that secures federal jurisdiction).

138. Since 1994, the provision also includes frauds executed through communications sent via private interstate carriers. *See* Violent Crime Control and Law Enforcement Act of 1994, Pub. L. No. 103-332, § 250006, 108 Stat. 1796, 2087 (codified as amended at 18 U.S.C. § 1341 (1994)).

139. *See Durland*, 161 U.S. at 313 (invoking the need to protect the mail to justify an expansive definition of fraud that includes future promises); *see also* United States v. Galloway, 664 F.2d 161, 166 (7th Cir. 1981) (Cudahy, J., concurring) (referring to the "judicially hypertrophied reach" of the mail fraud statute); United States v. Mandel, 591 F.2d 1347, 1360 (4th Cir. 1980) (acknowledging that Congress left the definition of key terms of the statute to the judiciary); Roger J. Miner, *Federal Courts, Federal Crimes, and Federalism*, 10 HARV. J.L. & PUB. POL'Y 117, 121 (1987) (criticizing the judicial evolution of mail fraud).

The Supreme Court recently clarified the import of the *Durland* decision, long relied upon to support expansive theories of fraud. The Court indicated that *Durland* endorsed only one exception to common law fraud, future promises. *See* Neder v. United States, 527 U.S. 1, 24 (1999) (stating that *Durland* did not hold that mail fraud encompasses more than common law fraud).

140. United States v. LaMacchia, 871 F. Supp. 535, 541 (D. Mass. 1994).

141. Borre v. United States, 940 F.2d 215, 218 (7th Cir. 1991).

142. *See id.*

143. *See id.*

144. *See id.*

145. 477 F.2d 508 (7th Cir. 1973).

146. *See id*. at 508–12.

147. *See id.* at 510 (noting that the supervisor thought that the prices were fair and reasonable and within the 10% profit margin that Zenith allowed suppliers).

148. *See id.* at 513.

be a loyal employee, acting in Zenith's best interests, but actually not giving his honest and faithful services."[149]

The deception element was satisfied by the defendant's failure to disclose his breach of fiduciary duty—in this case, accepting the kickback. The theory thus expanded the deception element of criminal fraud by identifying an employee's failure to disclose as deceitful conduct. The property element was met because the victim of the deceit, Zenith, lost its right to the honest services of its employee. The theory also broadened the conception of property by effectively giving employers a property right in honest services of their employees. Subject to significant criticism,[150] this theory was embraced by every circuit that considered it and was applied in both private and public sector cases for over twenty years.[151] Finally, in 1987, the Supreme Court considered the mail fraud statute. The following discussion reviews that decision and another handed down a year later. In those two cases, the Court first restricted federal fraud by confining its purpose to the protection of traditional concepts of property and then expanded the offense to include intangible property.

2. Fraud Protects Only Traditional Property

In *McNally v. United States*,[152] the Supreme Court unexpectedly rejected the honest services theory and held that the fraud offense was limited to the protection of traditional property rights.[153] An intangible right to honest services did not constitute property for purposes of mail fraud. The case involved a scheme in which the defendants, one of whom was the chairman of Kentucky's Democratic Party, operated a patronage arrangement that funneled insurance commissions paid by the state to favored companies.[154] The defendants were charged with depriving Kentucky and its citizens of their right to have state business conducted honestly.[155]

The appeal considered whether the term "scheme to defraud" encompassed an invasion of the right to honest services. The majority reviewed the legislative history of the mail fraud statute and concluded that Congress had passed the statute to protect people from fraudulent

149. *Id.*

150. *See, e.g.*, John C. Coffee Jr., *The Metastasis of Mail Fraud: The Continuing Story of the "Evolution" of a White Collar Crime*, 21 AM. CRIM. L. REV. 1 (1983); Daniel J. Hurson, *Limiting the Federal Mail Fraud Statute—A Legislative Approach*, 20 AM. CRIM. L. REV. 423 (1983); Miner, *supra* note 139.

151. *See* McNally v. United States, 483 U.S. 350, 376 (1987) (Stevens, J., dissenting) (characterizing the previous state and federal court holdings as "longstanding, consistent" interpretations).

152. 483 U.S. 350 (1987).

153. *See id*. at 360–61.

154. *See id.* at 352–53.

155. *See id.* at 352.

schemes aimed at money or property.[156] Congress had sought to punish thieves and forgers whose aim was to trick "innocents" into relinquishing their money.[157] The Court also found that an early amendment had reinforced the statute's original purpose to protect property rights.[158] Finally, the Court emphasized that the ordinary meaning of "defraud" denoted deceptions aimed at property rights.[159]

In light of the statute's purpose, the majority read the statute as a single prohibition banning schemes to defraud a victim of money or property.[160] Conceding the possibility of two rational readings of the statute, the Court invoked the doctrine of lenity to chose the less harsh interpretation.[161]

Although the Court clearly limited mail fraud to the protection of traditional property,[162] it did not expand upon or provide examples of such property.[163] The strong dissent argued that it was foolish to freeze the term in nineteenth-century notions of property, but this assertion was not based on a conception of property.[164] In the next term, the Court clarified its opinion.

3. Fraud Also Protects Intangible Business Information

In *Carpenter v. United States*,[165] the Court held that the mail and wire fraud statutes applied to intangible property such as confidential business information, as well as to traditional forms of property.[166] The

156. *See id.* at 356–59 (noting that the original impetus behind the mail fraud statute was to protect people from schemes to deprive them of money or property).

157. *See id.* at 356 (quoting comments of Rep. Farnsworth).

158. *See id.* at 357.

159. *See id.* at 358 (relying on *Hammerschmidt v. United States*, 265 U.S. 182, 188 (1924), which held that "to defraud" commonly refers to "wronging one in his property rights by dishonest methods or schemes" and "usually signif[ies] the deprivation of something of value").

160. *See id*. at 358–59 (stating that the phrase "for obtaining money or property by means of false or fraudulent pretenses," clarified the phrase "devising a scheme to defraud"). The dissent argued that the statute prohibited two offenses: (1) executing a scheme to defraud and (2) obtaining money or property by means of false pretenses. *See id.* at 364–65 (Stevens, J., dissenting).

161. *See id.* at 359–60 (relying also on the clear statement rule, which requires that Congress convey its purpose clearly when federal legislation impinges upon a state interest). The decision was also based on a concern for federalism values. *See id.* at 360 (acknowledging the negative impact of federal intervention on state and local governments and framing the holding in terms of federalist principles).

162. *See id.* at 360.

163. The Court provided some guidance regarding the property requirement when a governmental entity was the victim: "any benefit which the Government derives from the statute must be limited to the Government's interests as property holder." *See id.* at 359 n.8 (distinguishing the broad definition of fraud found in the federal conspiracy statute). On the other hand, the opinion also noted that an early mail fraud decision had stated that the offense was to be interpreted broadly as to property rights. *See id.* at 356 (noting that *Durland* did not indicate that the phrase included other rights) (citing United States v. Durland, 161 U.S. 306 (1896)).

164. *See id.* at 373 (Stevens, J., dissenting) (relying on *United States v. Holzer*, 816 F.2d 304, 310 (7th Cir. 1987), to assert simply that confining "scheme to defraud" to the conception recognized in 1872 is "manifestly untenable").

165. 484 U.S. 19 (1987).

166. *See id*. (upholding mail fraud convictions).

scheme in *Carpenter* centered around a *Wall Street Journal* reporter who wrote a daily column in which he evaluated whether selected stocks were good investments.[167] The reporter passed unpublished columns to cohorts who worked at a brokerage house, and these co-conspirators bought or sold shares in pertinent companies before the column was published.[168] The success of the scheme depended upon knowledge of the information contained in the column and knowledge of when that information would become available to the general public.[169]

The defendants first argued that the *Journal* had not lost money or traditional property, as *McNally* requires.[170] The Court affirmed that mail and wire fraud are "limited in scope to the protection of property rights"[171] but nevertheless stated that *McNally* did not limit the statutes to tangible property rights.[172] Drawing on precedents that recognized intangible interests as property, including the *International News Service* decision,[173] the Court found that confidential business information, such as the publication schedule and the column, was property for purposes of wire fraud.[174]

The defendants argued further that the *Journal* had not lost property because the newspaper could still use its property—the information.[175] The Court disagreed, starting from the premise that the paper had a right to decide how to use its information.[176] The loss of that right, rather than the loss of the information, was what mattered. Because exclusivity is an "important aspect of confidential information and most private property," deprivation of exclusive use of property was a sufficient property loss for purposes of the statute.[177]

Finally, the defendants argued that their conduct did not amount to fraud.[178] Although not completely articulated, their point was that a violation of workplace rules was not a deceptive misrepresentation. The Court responded by observing that the element "to defraud" is satisfied

167. *See id.* at 22–23.

168. *See id.* (noting that in four months, the defendants made 27 trades and $690,000 in profit).

169. The defendants were also convicted of insider trading in violation of the securities laws. *See id.* at 21. The Court was evenly divided on the insider trading conviction and affirmed those counts. *See id.* at 24. The Court has since held that insider trading charges may be based on misappropriation of confidential information. *See* United States v. O'Hagan, 512 U.S. 642 (1997); *infra* text accompanying notes 272–96 (discussing *O'Hagan*).

170. *See Carpenter*, 484 U.S. at 25–26.

171. *Id.* at 25 (stating that the right to honest and faithful service is "an interest too ethereal in itself to fall within the protection of the mail fraud statute").

172. *See id.*

173. *See id.* at 26 (noting the treatment of news matter as stock in trade with commercial value) (citing International News Serv. v. Associated Press, 248 U.S. 215, 236 (1918)).

174. *See id.*

175. *See id*. (noting the defendants' additional argument that the *Journal* had not lost first public use of the column).

176. *See id.* (stating that the argument "miss[ed] the point").

177. *Id.* at 26–27.

178. *See id.* at 27.

in several ways, one of which is embezzlement.[179] The defendants had essentially embezzled the information by fraudulently appropriating and using information entrusted to them.

The *Carpenter* decision is significant; the Court endorsed the modern conception of property rights, continued to concentrate on the type of interference with those rights, and suggested another new theory of fraud. More specifically, the Court moved away from the *Dowling* and *McNally* decisions, which had relied on a traditional characteristic of property—its physicality. Instead, the Court utilized the abstract conception of property that defines property as a bundle of rights against others. When the defendants argued that they had not deprived the *Journal* of property because the newspaper could still use the publication schedule and column, the Court stated that loss of even one right—exclusive use—was a sufficient property interest.

The Court also emphasized the type of property interference when it considered whether a violation of workplace rules was a fraudulent deception. Persisting in the judicial habit of defining fraud by reference to the conduct at issue,[180] the Court endorsed a broad concept of fraud that included embezzlement. In discussing that conduct, the Court introduced the notion that misappropriation may constitute criminal fraud. The newspaper reporter had breached a promise not to reveal prepublication information about his column in violation of a fiduciary obligation to safeguard such information.[181] The Court believed he compounded this conduct by using the employer's information for personal benefit.[182] Almost ten years later, this theory reached fruition in *United States v. O'Hagan*,[183] which adopted the misappropriation theory in securities fraud and is the topic of later discussion.[184]

Well before *O'Hagan*, in 1988, Congress reinstated the honest services theory by amending the mail and wire fraud statutes.[185] Although honest services fraud does not require the government to establish a deprivation of traditional property, it does require that the actor be a fiduciary or person with some similar duty to provide honest and loyal serv-

179. *See id.* (relying on *McNally* and quoting *Hammerschmidt v. United States*, 265 U.S. 182, 188 (1924), for the proposition that it was "common understanding" that "dishonest methods or schemes" or "trick, deceit, chicane or overreaching" is deception).

180. *See* Geraldine Szott Moohr, *Mail Fraud and the Intangible Rights Doctrine: Someone to Watch Over Us*, 31 HARV. J. ON LEGIS. 153, 178–79 (1994) (criticizing the use of the common law method to interpret criminal statutes).

181. *See Carpenter*, 484 U.S. at 27.

182. *See id.* at 28 (relying on New York state law and noting that fiduciaries are not free to exploit information for their own personal benefit).

183. 521 U.S. 642 (1997).

184. *See infra* text accompanying notes 272–96 (discussing *O'Hagan*).

185. The brief amendment states that mail and wire fraud "include[] a scheme or artifice to deprive another . . . of honest services." 18 U.S.C. § 1346 (1995). *See generally* Geraldine Szott Moohr, *Mail Fraud Meets Criminal Theory*, 67 U. CIN. L. REV. 1, 14–15 (1998) (discussing the honest services amendment).

ices.[186] When the fraudulent scheme is executed by actors without such obligations, however, the government must then prove that the scheme involves the deprivation of property.[187] The property question arose in several contexts, and two are reviewed here. The following discussion begins with some particularly revealing cases that involve business licenses, then returns to copyright, this time in the context of fraud.

4. The Property Puzzle of Unissued Business Licenses

To engage in certain activities, such as driving a taxi or operating a bail bond business, an individual must obtain a license from a state, city, or federal government agency. A license from the government, which grants the holder a right to engage in some activity, is property of the person who receives it in the sense that it cannot be revoked without due process.[188] Nevertheless, a license is not necessarily the government's property before it is issued. The common question in the business license cases is whether a person who fraudulently obtained a license received property. The following discussion presents some of the theories that courts have utilized to resolve the issue.

a. Property Rights Are Fixed and Reciprocal

Some courts reasoned that because a license is property in the hands of the licensee, the license is also property before it is issued. In *United States v. Turoff*,[189] for example, the district court relied on that reasoning to find that a taxi medallion was city property.[190] The court also noted that licenses are a form of public largess, originate in the state, and thus are public property in the first instance.[191] Similarly, the Third Cir-

186. *See* Moohr, *supra* note 185, at 14–15.

187. In the wake of *McNally*, lower courts decided cases in which the conduct had occurred before the decision and, therefore, had to determine whether the object of various fraudulent schemes was some kind of property. *See* Frank v. United States, 914 F.2d 828, 835 (7th Cir. 1990) (Cudahy, J., dissenting) (noting the "understandably strong reluctance" of the Seventh Circuit to invalidate honest services frauds); Moohr, *supra* note 180, at 170 n.72 (noting the immediate effects of *McNally*).

188. *See* United States v. Granberry, 908 F.2d 278, 280 (8th Cir. 1990) ("A governmental permit may in some sense be property in the hands of the person who receives it."); United States v. Kato, 878 F.2d 267, 269 (9th Cir. 1989) (noting that a license is property once received by the recipient); Toulabi v. United States, 875 F.2d 122, 125 (7th Cir. 1989) (holding that drivers may not be compelled to surrender their licenses except on proof of wrongdoing); United States v. Murphy, 836 F.2d 248, 253 (6th Cir. 1988) (stating that a bingo license may be property once issued); *see also* Barry v. Barchi, 443 U.S. 55, 64 n.11 (1979) (noting that a horse trainer license cannot be revoked without certain procedural contingencies); Mackey v. Montrym, 443 U.S. 1, 10 n.7 (1979) (noting that due process applies to a state's revocation or suspension of a driver's license); Dixon v. Love, 431 U.S. 105, 112 (1977) (stating that "it is clear that the Due Process Clause applies to the deprivation of a driver's license by the State"); Goldberg v. Kelly, 397 U.S. 254, 262 n.8 (1970) (noting that wealth often takes the form of rights "that do not fall within the common-law concepts of property").

189. 701 F. Supp. 981 (E.D.N.Y. 1988).

190. *See id*. 989 (characterizing the opposing view as "A has nothing which, when he gives it to B, becomes something").

191. *See id.*

cuit held that a medical license was state property, rejecting the "embryonic" theory that licenses attain property status only when issued.[192]

In *United States v. Salvatore*,[193] the Fifth Circuit followed a similar rationale in finding that a video poker license was government property.[194] The court rejected the rationale that because unissued licenses had no value, they were not property.[195] The video poker licenses were valuable to Louisiana because the state expected to generate revenue from them.[196] Thus, the court rejected one argument based on value only to accept another. The court also thought that the argument that licenses are not state property inverted historical fact because licenses originate from the state.[197]

In contrast, the Sixth, Seventh, Eighth, and Ninth Circuits have decided that licenses are not property by distinguishing between issued and unissued licenses.[198] The Eleventh Circuit recently pointed out that issued licenses are property only because rights attach to the license after issuance.[199] These rights, in turn, stem from the modern theory that property is a bundle of rights that vest only in certain parties.[200]

b. The Government Interest Is Regulatory

Another theory, the regulatory rationale, views a license as a manifestation of an agency's interest in regulating certain commercial activities, rather than as a property interest. In *United States v. Schwartz*,[201] the Second Circuit used this theory to hold that the state's interest in an export license was not property.[202] The state's right to issue the license emanated from its regulatory role, rather than from its interest as prop-

192. *See* United States v. Martinez, 905 F.2d 709, 713, 715 (3d Cir. 1990) (stating that the government's power to enjoin the use of licenses was evidence of a property right).

193. 110 F.3d 1131 (5th Cir. 1997).

194. *See id.* at 1140 (relying also on Louisiana state law).

195. *See id.* at 1140–41 (characterizing the distinction between issued and unissued licenses as "esoteric" and "strained").

196. *See id.* at 1142.

197. *See id.* at 1141 (citing Reich, *supra* note 41, at 778).

198. *See* United States v. Granberry, 908 F.2d 278, 280 (8th Cir. 1990) (distinguishing between issued and unissued licenses); United States v. Kato, 878 F.2d 267, 269 (9th Cir. 1989) (same); Toulabi v. United States, 875 F.2d 122, 125 (7th Cir. 1989) (stating that although a chauffeur's license may be property of the licensee, as to the government, the license is not "a sliver of property"); United States v. Murphy, 836 F.2d 248, 254 (6th Cir. 1988) (stating that an unissued bingo permit is not property of the state).

199. *See* United States v. Shotts, 145 F.3d 1289, 1296 n.13 (11th Cir. 1998) (disagreeing with the notion that the distinction is based on the difference in monetary value between unissued and issued licenses).

200. *See id.* at 1296 (explaining that the right of due process exists only in the hands of the licensee). The government took a "creative approach" in *Shotts*, arguing that at the moment the licenses were typed, they became state property because the city then controlled the typed, but unissued, licenses. *See id.* at 1297 (rejecting that argument and noting that the government subscribes to the theory that possession is nine-tenths of the law).

201. 924 F.2d 410 (2d Cir. 1991).

202. *See id*. at 417 ("[A] regulatory license is nothing more than a formal embodiment of 'the necessary government approval.'").

erty holder.[203] The court found that the mere issuance of a document designed to formalize government regulation did not create government property and the government interest in a license was the same as its interest in other regulations.[204] In the words of another court, a license simply signifies that the state "will not hinder or penalize a person who pursues [certain] work."[205]

Courts that disagree have not engaged the regulatory rationale argument but instead distinguish the government interests in the particular license. Under this reasoning, some licenses represent more than a regulatory interest. The Seventh Circuit, for example, distinguished a television cable franchise from the taxi driver license that it earlier had held was a regulatory interest.[206] The Fifth Circuit emphasized that Louisiana intended to participate in, not merely regulate, the video poker gaming industry.[207] The state's expectation of significant revenues gave it an ongoing stake in its role as issuer of the licenses.[208]

c. The Physical Document Is Government Property

The physical document rationale rests on the fact that licenses are embodied in some physical form, and the physical manifestation belongs to the state. The paper, ink, and even the "23 pieces of tin" that authorize the license holder to operate taxis are tangible, physical objects that belong to the state.[209] When an actor lies to obtain this object, he has defrauded the state of property. Thus, a Ninth Circuit judge argued that pilot licenses constituted state property, reasoning that paper that belonged to a private person was "indisputably" property.[210]

At least two courts have repudiated the physical document rationale, the Second Circuit quite vigorously.[211] In addition, an Eighth Circuit panel characterized the physical nature of paper and ink as "simply negligible—de minimis as a matter of law and insignificant as a matter of fact."[212]

203. *See id.*; *see also Granberry*, 908 F.2d at 280 (noting that "licensing authorities have no property interest in licenses or permits"); *Toulabi*, 875 F.2d at 125 (finding that a license is "a promise not to interfere rather than a sliver of property").

204. *See Schwartz*, 924 F.2d at 417.

205. *Toulabi*, 875 F.2d at 125 (explaining that taxi driving is "something an applicant can do without city assistance").

206. *See* Borre v. United States, 940 F.2d 215, 220–21 (7th Cir. 1991) (distinguishing *Toulabi* because a city may operate cable television franchises and create easements and rights of way).

207. *See* United States v. Salvatore, 110 F.3d 1131, 1141 (5th Cir. 1997).

208. *See id.*

209. United States v. Turoff, 701 F. Supp. 981, 986–87 (E.D.N.Y. 1988) (noting the fact that the medallions were kept under lock and key showed that the agency had a possessory interest); *see also* Frank v. United States, 914 F.2d 828, 832–33 (7th Cir. 1990) (explaining that a confiscated driver's license is the property of the state department of motor vehicles).

210. *See* United States v. Kato, 878 F.2d 267, 271 (9th Cir. 1989) (Noonan, J., dissenting).

211. *See* United States v. Schwartz, 924 F.2d 410, 418 (2d Cir. 1991) (terming the proposition "patently absurd").

212. United States v. Granberry, 908 F.2d 278, 280 (8th Cir. 1990); *see also Schwartz*, 924 F.2d at

d. Property as a Right to Control

In the absence of monetary or physical loss, parties may bring an action under the "right to control theory" when they have been "'deprived of potentially valuable economic information.'"[213] An Eighth Circuit decision, *United States v. Granberry*,[214] used the control theory to reach conflicting conclusions in the same case.[215] Granberry had lied about his criminal record when applying for a license to drive a school bus.[216] The government argued that the defendant had thereby deprived both the school district and the state of various forms of the right to control expenditures and licenses.[217]

The court agreed that the right of the school district to control wages and hiring was a property interest,[218] characterizing the school district's interest as a right to control its money.[219] The district had lost money in the "very elementary sense that its money has gone to a person who would not have received it if all of the facts had been known."[220] Consequently, the district held a property interest in paying wages, distributing bus driving jobs, spending its money, hiring, and deciding with whom it would contract.[221] On the other hand, the court found that the state's intangible interest in controlling the distribution of licenses was not property.[222] The court thought that loss fell "on the abstract side of the *McNally* line."[223]

As with other rationales, other courts have explicitly rejected the control theory. The Seventh Circuit dismissed the theory as "the intangible rights doctrine by another name,"[224] and the Sixth Circuit found the right to control bingo permits to be an intangible right that did not meet *McNally*'s property requirement.[225]

417–18 (rejecting the proposition that a license constitutes tangible property because the paper, ink, seal, and symbol have physical existence).

213. United States v. D'Amato, 39 F.3d 1249, 1257 (2d Cir. 1994) (adopting the control theory in part because of language in *McNally* that noted that the jury instructions had not charged that the victim was "deprived of control over how its money was spent") (quoting United States v. Wallach, 935 F.2d 445, 462–63 (2d Cir. 1991); United States v. Shyres, 898 F.2d 647, 651–52 (8th Cir. 1990)).

214. 908 F.2d 278 (8th Cir. 1990).

215. Other courts also utilized the control theory to find that business licenses were property. *See* United States v. Bucuvalas, 970 F.2d 937, 945 (1st Cir. 1992) (noting that the right to control the issuance of liquor licenses is a property right); Borre v. United States, 940 F.2d 215, 222 (7th Cir. 1991) (holding that state control over the disposition of its property satisfies the property element).

216. *See Granberry*, 908 F.2d at 279.

217. *See id.* at 280.

218. *See id.*

219. *See id*. (finding that the right to control money is an integral part of the property right in money).

220. *Id.*

221. *See id*. The court nevertheless rejected the argument that the district had a right to control its tort liability. *See id.* (noting that such a theory "twists the word 'property' entirely out of its context").

222. *See id.*

223. *Id.*

224. Toulabi v. United States, 875 F.2d 122, 125–26 (7th Cir. 1989).

225. *See* United States v. Murphy, 836 F.2d 248, 254 (6th Cir. 1988).

e. The Import of the Business License Cases

In sum, courts generally determined whether licenses were property by measuring them against varying definitions and characteristics of traditional property. The decisions produced conflicting results and utilized a surprising variety of rationales.[226] Some courts buttressed their decisions with attenuated analogies to interests in real property.[227] Other courts invoked authorities on property law, including Blackstone, Hohfeld, Reich, and even Lewis Carroll.[228] Courts at times differed even when they utilized the same rationale. Complicating the confusion, judges within the same circuit explicitly disagreed with one another[229] and at times reached contrary results.[230] The most recently decided cases looked to the law of the state in which the conduct occurred.[231] As might be expected, the use of varying conceptions and definitions of property resulted in both restrictive and expansive decisions and a significant split among the circuit courts.[232] The courts' struggles, although not particu-

226. The decisions give substance to the complaint that the Supreme Court provided little guidance as to what it meant by property and intangible property. *See* United States v. Shotts, 145 F.3d 1289, 1296 n.14 (11th Cir. 1998) (commenting that "some courts have understood *McNally* to direct them to the esoterica of ancient property law to divine whether a particular item is some form of property"); United States v. Bucuvalas, 970 F.2d 937, 943 (1st Cir. 1992) (noting that *McNally* provides no insight as to interests that are "property in the hands of government").

227. *See Bucuvalas*, 970 F.2d at 945 (comparing a liquor license to a fee simple determinable with possibility of reverter); Borre v. United States, 940 F.2d 215, 220–21 & n.14 (7th Cir. 1991) (comparing a license to an easement); United States v. Turoff, 701 F. Supp. 981, 987 (E.D.N.Y. 1988) (analogizing a license to an easement in gross); *see also* United States v. Martinez, 905 F.2d 709, 713 (3d Cir. 1990) (noting that licenses are "property for purposes of equitable distribution").

228. *See* United States v. Schwartz, 924 F.2d 410, 418 (2d Cir. 1991) (citing Hohfeld to find that a license is property); *Borre*, 940 F.2d at 220 (citing Blackstone for same); *Turoff*, 701 F. Supp. at 986, 989 (citing Blackstone and Lewis G. Carroll for same).

Professor Reich has the dubious distinction of being cited in support of opposing positions. *Compare* United States v. Salvatore, 110 F.3d 1131, 1141 (5th Cir. 1997) (citing Reich to find that a license is property), *Martinez*, 905 F.2d at 714 (same), and *Turoff*, 701 F. Supp. at 986–87 (same), *with Shotts*, 145 F.3d at 1286–87 & n.14 (citing Reich and finding that a license is not property).

229. *Compare Schwartz*, 924 F.2d at 418 (holding that an export license is not property), *with* United States v. Novod, 923 F.2d 970, 973–76 (2d Cir. 1991) (following *Schwartz* in a case involving a waste permit but registering the belief of two panelists that *Schwartz* was wrongly decided).

230. *Compare* Toulabi v. United States, 875 F.2d 122, 125 (7th Cir. 1989) (taxi operator license is not property), *with Borre*, 940 F.2d at 220 (cable franchise is property), *and* Frank v. United States, 914 F.2d 828, 833 (7th Cir. 1990) (driver's license is property).

231. *See Shotts*, 145 F.3d at 1295 (relying on Alabama law to determine that the state does not recognize a property interest in a bail bond license); United States v. Salvatore, 110 F.3d 1131, 1141–42 (5th Cir. 1997) (relying on Louisiana law to hold that the state has a property interest in a video poker license); *see also infra* text accompanying notes 255–57 (discussing the implications of use of state law).

232. Of the nine circuits that have considered the issue, six determined that a business license is not property for purposes of mail fraud. *See Shotts*, 145 F.3d at 1297 (bail bond license); *Schwartz*, 924 F.2d at 417–18 (export license); United States v. Granberry, 908 F.2d 278, 280 (8th Cir. 1990) (school bus driver permit); United States v. Kato, 878 F.2d 267, 269 (9th Cir. 1989) (private pilot license); *Toulabi*, 875 F.2d at 125 (taxi operator license); United States v. Murphy, 836 F.2d 248, 253–54 (6th Cir. 1988) (bingo gaming license).

Three circuits take the opposite view. *See Salvatore*, 110 F.3d at 1139 (video poker license is property for purposes of mail fraud); *Bucuvalas*, 970 F.2d at 945 (liquor license); *Martinez*, 905 F.2d at 713 (medical license); *see also* Donna M. Maus, Note, *License Procurement and the Federal Mail Fraud*

larly edifying, teach a simple lesson: using traditional definitions, conceptions, or characteristics of property does not produce a consistent or uniform law. Further complicating matters, the courts were no less perplexed when the property at issue was copyright, as the following discussion demonstrates.

5. Returning to Copyright— Infringement as Fraud

The Supreme Court's decision in *Carpenter*, that fraud protects intangible property,[233] contradicts the Court's holding in *Dowling*, which limited the NSPA to tangible property.[234] An obvious question arose: are copyrights property for purposes of mail and wire fraud? Two district courts that considered the issue reached, not surprisingly, contrary conclusions.

In *United States v. LaMacchia*,[235] the district court found that copyrighted computer software was not property for purposes of wire fraud.[236] Using the Internet, encrypted addresses, and the computer network of the Massachusetts Institute of Technology, LaMacchia devised a system that distributed free software applications and computer games to fellow hackers.[237] Although LaMacchia had not sought or derived any personal benefit, the scheme allegedly cost copyright holders more than one million dollars.[238]

LaMacchia invoked *Dowling* to argue that wire fraud could not be used to enforce copyright infringement.[239] The Government's most persuasive response was that *Carpenter* had squarely held that mail and wire

Statute, 58 U. CHI. L. REV. 1125, 1132 & n. 41 (1991) (noting that courts that had considered the issue were in "some disarray").

As this article was being prepared for publication, the Supreme Court granted certiorari in a case that promises to resolve the circuit split over whether unissued business licenses constitute property of the state. *See* Cleveland v. United States, 120 S. Ct. 1416 (2000). The district court held that unissued video poker licenses are property for purposes of mail fraud. *See* United States v. Cleveland, 951 F. Supp. 1249 (E.D. La. 1997), *aff'd*, 182 F.3d 296 (5th Cir. 1999).

233. *See* Carpenter v. United States, 484 U.S. 19 (1987); *supra* text accompanying notes 165–84 (discussing *Carpenter*).

234. *See* Dowling v. United States, 473 U.S. 207 (1985); *supra* text accompanying notes 94–126 (discussing *Dowling*).

235. 871 F. Supp. 535 (D. Mass. 1994).

236. *See id*. at 545.

237. *See id.* at 536 (explaining that LaMacchia was a student at the Massachusetts Institute of Technology).

238. *See id.* at 536–37. At that time, LaMacchia could not be charged with criminal copyright infringement. *See id.* at 542–43 (observing that under 17. U.S.C. § 506(a) as it was written at the time, the infringement must have been undertaken "willfully and for purposes of commercial advantage or private financial gain"). Congress has since amended this section of the Copyright Act to include infringement by electronic means when the actor reproduces or distributes copies of a work with a total retail value of $1,000 or more, thus removing the profit motive requirement. *See* 17 U.S.C.A. § 506(a)(2) (West 2000); Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998); No Electronic Theft (NET) Act, Pub. L. No. 105-147, 111 Stat. 2678 (1997); *see also* Note, *The Criminalization of Copyright Infringement in the Digital Era*, 112 HARV. L. REV. 1705, 1706–19 (1999) (providing the history of recent legislative initiatives to deter infringement).

239. *See LaMacchia*, 871 F. Supp. at 537.

fraud protected intangible property, and the software was intangible property.[240] The court, however, found that copyright was different from the confidential business information in *Carpenter*.[241] More specifically, Congress's enactment of a complex and responsive statutory scheme to protect copyrights was compelling evidence of the distinction.[242]

The court also reasoned that the Supreme Court's concerns in *Dowling* applied equally to mail and wire fraud. Just as in *Dowling*, the Government's position in this case subverted Congress's carefully calibrated scheme to protect creative effort.[243] The court also registered a concern with overcriminalization, noting that the Government's position would make criminals of home computer users who copy even a single computer software program.[244] Even though it found "nothing edifying" about LaMacchia's conduct,[245] the court focused on the kind of property at issue rather than on the type of interference. This choice led it to distinguish between the intangible business information protected by *Carpenter* and the intangible business property of copyrights.

In *United States v. Wang*,[246] the court reached a contrary conclusion, holding that wire fraud applied to copyrighted material.[247] In *Wang*, the defendants participated in a scheme to transmit a copyrighted confidential source code.[248] The defendants argued that their conduct amounted to copyright infringement and that it could not be prosecuted as wire fraud.[249] The court found *Dowling* to be inapposite[250] and invoked *Carpenter* to note that valuable, confidential business information was property protected by the mail fraud statute.[251]

In *LaMacchia*, the court followed the rationale and methodology of *Dowling* to distinguish among different kinds of intangible property. Copyright is unique; the holder "owns only a bundle of intangible rights which can be infringed, but not stolen or converted."[252] The court in

240. *See id.* at 543.

241. *See id.* (stating that property rights in copyright were "unique and distinguishable" from intangible rights protected by mail and wire fraud).

242. *See id.* at 544 (quoting *Dowling* and commenting that "copyright is an area in which Congress has chosen to tread cautiously").

243. *See id.* at 543–44. The Court pointed out that a first offender under the criminal copyright infringement provision may be imprisoned for not more than one year, while wire fraud results in a maximum prison sentence of five years. *See id.* at 544 n.17.

Moreover, similar to the NSPA, wire fraud was passed to fill a jurisdictional gap. Congress did not need to rely on supplemental federal action to protect copyright through mail and wire fraud because Congress could act directly in that area. *See id.* at 544.

244. *See id.*

245. *Id.* at 545 (describing the conduct as, at best, "heedlessly irresponsible, and, at worst as nihilistic, self-indulgent, and lacking in any fundamental sense of values").

246. 898 F. Supp. 758 (D. Colo. 1995).

247. *See id*. at 760 (stating that the "existence of a copyright does not limit the remedy").

248. *See id.*

249. *See id.* at 759–60 (relying on *Dowling*). The court framed the issue more broadly as whether the copyright statute was the sole and exclusive remedy for copyright infringement. *See id.* at 760.

250. *See id.* at 760.

251. *See id.*

252. United States v. LaMacchia, 871 F. Supp. 535, 543 (D. Mass. 1994) (quoting United States v.

Wang relied on *Carpenter*, reasoning that intangible business information was protected by wire fraud, and the copyrighted source code was intangible business property; therefore, wire fraud applied. Rather than distinguishing among different kinds of business information, this reasoning accepts the broad proposition that all business information is property.

6. The Problem of Inconsistent Decisions

Courts that sought to apply the lessons of *Dowling*, *McNally*, and *Carpenter* were unable to articulate a principled method of defining property. Tied to traditional notions of property, courts generally did not utilize the modern, abstract conception of property relied upon in *Carpenter*. Taken as a whole, the decisions illustrate the difficulties that ensue when courts use traditional definitions of property to identify the interests criminal fraud protects.

Given the myriad definitions of property, inconsistent decisions are inevitable. It is understandable, although not ideal, that courts analyzing the term "property" would reach different decisions where the term is used in different statutes.[253] When interpreting statutes, courts take the purpose of the legislation into account. It is less acceptable, however, that courts produce different definitions of property when they are interpreting the same statute. Inconsistent decisions are to be avoided; they undermine the development of a consistent, uniform, and national law of fraud. As one judge noted, persons who launch a scheme to defraud or engage in sharp dealing need only to research the circuit's case law to find out if they are obtaining property and thus committing a federal offense.[254]

Development of an inconsistent body of law is exacerbated when courts define property by looking to the law of the state in which the conduct occurred. Reliance on state law leads to the confusing possibility of fifty different versions of federal fraud.[255] Even more importantly, state law is not necessarily relevant to the issue of whether an interest is property for purposes of federal fraud.[256] As a federal statute, mail fraud

Riggs, 739 F. Supp. 414, 422–26 (N.D. Ill. 1990)).

253. *Compare* Dowling v. United States, 473 U.S. 207 (1985) (holding that intangible property is not property for purposes of the NSPA), *with* Carpenter v. United States, 484 U.S. 19 (1987) (holding that intangible business information is property for purposes of mail and wire fraud).

254. *See* United States v. Shotts, 145 F.3d 1289, 1295 n.8 (11th Cir. 1998).

255. *See id.* at 1294 (noting that the use of state law results in 50 different rules, differences within circuits, and differences due to the particular license at issue).

256. *See* Borre v. United States, 940 F.2d 215, 226 (7th Cir. 1991) (Easterbrook, J., concurring in part and dissenting in part) (noting that the state law of franchises is not related to the federal law of mail fraud).

In addition to using state law in the property inquiry, one federal circuit uses state law to determine whether the defendant owes fiduciary duties and whether a state lost honest services for purposes of honest services fraud. *See* United States v. Brumley, 116 F.3d 728, 734 (5th Cir. 1997) (holding that state law determines whether state and local officials provided honest services). The relevance of state law in defining mail fraud is a developing issue that merits a more thoughtful inquiry than can be pro-

is a "self-contained provision, which does not rely on any state enactment for its force."[257] Finally, inconsistent case law is contrary to a major justification for federal law, uniform enforcement. Against this background, the final discussion in this section surveys misappropriation fraud, a new type of fraud in the purchase or sale of securities.

C. An Even More Expansive Approach— Insider Trading and Business Information

The property in cases of insider trading fraud is confidential business information, which may, if made public, affect stock prices. When corporate officials or insiders, who are often privy to such information, use the information to profit personally by buying their corporation's stock, they engage in insider trading.[258] Insider trading is a specific form of fraud. Section 10(b) of the Securities Exchange Act of 1934 prohibits the use of any "deceptive device" in connection with the purchase or sale of securities.[259] As authorized, the Securities and Exchange Commission (SEC) adopted Rule 10b-5 to implement the statutory prohibition.[260] Al-

vided within the bounds of this article. For academic commentary, see George D. Brown, *Should Federalism Shield Corruption?— Mail Fraud, State Law and Post*-Lopez *Analysis*, 82 CORNELL L. REV. 225, 282 (1997); John C. Coffee Jr., *Modern Mail Fraud: The Restoration of the Public/Private Distinction*, 35 AM. CRIM. L. REV. 427, 452 (1998); Moohr, *supra* note 185, at 37.

257. McNally v. United States, 483 U.S. 350, 377 n.10 (1987) (Stevens, J., dissenting) (noting that the fact that the scheme to defraud may violate state law does not determine whether it violates the federal statute) (citations omitted).

258. Although a full analysis of insider trading is not necessary or possible for present purposes, the practice is not universally viewed as a bad one and is defended on the ground that it enhances market efficiency. *See* HENRY G. MANNE, INSIDER TRADING AND THE STOCK MARKET (1966) (arguing for the legalization of insider trading); *see also* Dennis W. Carlton & Daniel R. Fischel, *The Regulation of Insider Trading*, 35 STAN. L. REV. 857 (1983); Frank H. Easterbrook, *Insider Trading, Secret Agents, Evidentiary Privileges, and the Production of Information*, 1981 SUP. CT. REV. 309 (1981). *But see* Roger Sherman, *Review of Henry G. Manne, Insider Trading and the Stock Market*, 2 PAPERS ON NON-MARKET DECISIONMAKING 103 (Gordon Tullock ed., 1967) (now published as PUBLIC CHOICE).

Others condemn the practice on the grounds that it is unfair and undermines the integrity of financial markets. *See* Barbara Bader Aldave, *Misappropriation: A General Theory of Liability for Trading on Nonpublic Information*, 13 HOFSTRA L. REV. 101 (1984); Victor Brudney, *Insiders, Outsiders, and Informational Advantages Under the Federal Securities Laws*, 93 HARV. L. REV. 322 (1979); *see also* LEO KATZ, ILL-GOTTEN GAINS: EVASION, BLACKMAIL, FRAUD, AND KINDRED PUZZLES OF THE LAW 171–95 (1996) (presenting a rationale for condemning insider trading).

The academic commentary on insider trading is voluminous. *See, e.g.*, WILLIAM K. S. WANG & MARC I. STEINBERG, INSIDER TRADING §§ 2.1–2.4 (1996) (providing a summary and analysis of the relevant scholarship); Donna M. Nagy, *Reframing the Misappropriation Theory of Insider Trading Liability: A Post*-O'Hagan *Suggestion*, 59 OHIO ST. L.J. 1223, 1228 n.18 (1998) (noting the vast amount of legal scholarship on the law of insider trading and providing selected articles).

259. 15 U.S.C. § 78j(b) (1994). Section 10(b) of the Act provides:

> It shall be unlawful for any person, directly or indirectly, by the use of any means or instrumentality of interstate commerce or of the mails, or of any facility of any national securities exchange—
>
> (b) To use or employ, in connection with the purchase or sale of any security registered on a national securities exchange or any security not so registered, any manipulative or deceptive device or contrivance in contravention of such rules and regulations as the Commission may prescribe as necessary or appropriate in the public interest or for the protection of investors.

Id.

260. Rule 10b-5 provides:

though neither provision mentions insider trading,[261] the courts utilized the provisions to criminalize insider trading on the ground that trading based on nonpublic information was a deceptive device.

1. Insider Trading as Fraud

Under the classic notion of insider trading fraud, only insiders who have a fiduciary obligation to those with whom they trade violate the statute when they buy or sell stock of their corporation.[262] Insiders who trade on the basis of material nonpublic information deceive by failing to disclose the information to shareholders from whom they purchase.[263] Although the Supreme Court broadened the theory to include lawyers and other temporary fiduciaries of the firms,[264] it also held that outsiders, or those without a fiduciary duty to shareholders, did not violate federal securities law when they traded on nonpublic information.[265]

The misappropriation theory is an attempt to close this loophole. As first formulated, the proposed theory broadly prohibited anyone with access to material nonpublic information from trading.[266] When the Supreme Court rejected that theory,[267] the circuit courts adopted more con-

> It shall be unlawful for any person, directly or indirectly, by the use of any means or instrumentality of interstate commerce, or of the mails or of any facility of any national securities exchange,
> (a) To employ any device, scheme, or artifice to defraud,
> (b) To make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading, or
> (c) To engage in any act, practice, or course of business which operates or would operate as a fraud or deceit upon any person,
> in connection with the purchase or sale of any security.

17 C.F.R. § 240.10b-5 (1995).

261. The rule was formulated in response to a classic inside trade. *See* SEC v. Clark, 915 F.2d 439, 450–51 (9th Cir. 1990) (recounting the remarks of former SEC Assistant Solicitor Milton Freeman, who had drafted the rule in 1942).

262. *See* Chiarella v. United States, 445 U.S. 222, 228 (1980) (stating that "a relationship of trust and confidence [exists] between the shareholders of a corporation and those insiders who have obtained confidential information by reason of their position with that corporation").

Classic insider trading does not strictly apply to officials who sell their shares to a shareholder-to-be because they have no pre-existing duty as to the general public. The Supreme Court, however, has implied that fiduciary duties run to buyers as well as to sellers of stock on the ground that buyers are prospective shareholders. *See id.* at 227 n.8; *see also* United States v. Chestman, 947 F.2d 551, 565 n.2 (2d Cir. 1991) (stating that insiders' duties extend to both buyers and sellers).

263. Fiduciaries must disclose to those from whom they bought that they knew something that would make their shares more valuable. *See Chiarella*, 445 U.S. at 226; *see also* Cady, Roberts & Co., 40 S.E.C. 907, 911 (1961) (stating that insiders have a duty to abstain from trading unless they disclose all material inside information known to them). The rule effectively bars insider trading because, upon disclosure, the stockholder is not likely to sell the shares.

264. *See* Dirks v. SEC, 463 U.S. 646, 655 n.14 (1983).

265. *See Chiarella*, 445 U.S. at 235 (holding that the printer of corporate documents was not an insider and thus not liable for insider trading).

266. *See* United States v. Chiarella, 588 F.2d 1358, 1365 (2d Cir. 1978) (holding that "*[a]nyone*—corporate insider or not—who regularly receives material nonpublic information may not use that information to trade in securities without incurring an affirmative duty to disclose"), *rev'd*, 445 U.S. 222 (1980); *see also Chiarella*, 445 U.S. at 245–46 (Blackmun, J., dissenting).

267. *See Chiarella*, 445 U.S. at 235 (holding that the mere use of information not available to oth-

strained versions but were unable to agree on a theory that included outsiders.[268] In the absence of a generally accepted theory that captured outsiders, prosecutors utilized the mail and wire fraud statutes.[269] For example, the underlying conduct in *Carpenter* was a form of insider trading: the defendants traded stock on the basis of nonpublic information. But because they did not owe fiduciary duties to those with whom they traded, the defendants had not committed classic insider trading in violation of securities laws. The Second Circuit held, nonetheless, that the conduct constituted securities fraud on the ground that the reporter had breached a duty to his employer by misappropriating confidential business information.[270] In *Carpenter*, the Supreme Court let stand the appellate ruling without comment and agreed that the conduct described in the securities fraud charge violated the mail fraud statute.[271] Over a decade later, the Supreme Court returned to the insider trading problem.

2. Misappropriation of a Business Plan

In *United States v. O'Hagan*,[272] the Court settled the dispute among the circuits and adopted a version of the misappropriation theory that captures outsiders.[273] O'Hagan was a partner in a law firm whose client

ers did not violate securities laws and rejecting the parity of information theory); *id.* at 235 n.20 (rejecting the "access to information" theory).

268. Four circuits adopted a theory that banned insider trading by outsiders. *See* United States v. Chestman, 947 F.2d 551, 566 (2d Cir. 1991) (en banc) (noting that it had adopted fraud on the source theory of misappropriation in *United States v. Newman*, 664 F.2d 12 (2d Cir. 1981)); SEC v. Cherif, 933 F.2d 403, 410 (7th Cir. 1991) (holding that buying or selling securities "in connection with" fraud perpetrated on an employer to obtain material nonpublic information constituted a violation); SEC v. Clark, 915 F.2d 439, 453 (9th Cir. 1990) (holding that an employee's knowing misappropriation and use of his employer's material nonpublic information constituted a violation); Rothberg v. Rosenbloom, 771 F.2d 818, 822 (3d Cir. 1985) (stating that insiders on either side of a proposed transaction violated the rule by using insider information in violation of the fiduciary duty toward the corporation).

Two circuits disagreed. *See* United States v. O'Hagan, 92 F.3d 612, 617 (8th Cir. 1996) (rejecting the misappropriation theory), *rev'd*, 521 U.S. 642 (1997); United States v. Bryan, 48 F.3d 933, 943–59 (4th Cir. 1995) (same).

269. *See generally* Michael R. Dreeban, *Insider Trading and Intangible Rights: The Redefinition of the Mail Fraud Statute*, 26 AM. CRIM. L. REV. 181 (1988) (discussing the use of mail and wire fraud to combat securities fraud).

270. *See* United States v. Carpenter, 791 F.2d 1024, 1031 (2d Cir. 1986) (stating that an employee's use of an employer's information in breach of the duty of confidentiality is an adequate predicate for a securities violation), *aff'd*, 484 U.S. 19 (1987).

271. *See* Carpenter, 484 U.S. at 24; *supra* notes 165–84 (discussing mail fraud aspect of *Carpenter*).

272. 521 U.S. 642 (1997).

273. *See id*. The decision also held that Rule 14e-3(a) is a proper exercise of the SEC's prophylactic power. *See id.* at 666–67. Rule 14e eliminates the requirement of a fiduciary duty and prohibits fraudulent trading in connection with tender offers. *See id.*

Reaction to the decision may best be described as mixed. *See* Janet E. Kerr & Tor S. Sweeney, *Look Who's Talking: Defining the Scope of the Misappropriation Theory After* United States v. O'Hagan, 51 OKLA. L. REV. 53, 55 (1998) (concluding that the Court's test for liability is too broad, making it difficult for individuals to understand the legality of their actions); Kimberly D. Krawiec, *Fiduciaries, Misappropriators and the Murky Outlines of the Den of Thieves: A Conceptual Continuum for Analyzing* United States v. O'Hagan, 33 TULSA L.J. 163, 175 (1997) (noting that the *O'Hagan* misappropriation theory is "incredibly vague"); Nagy, *supra* note 258, at 1227 (arguing that the Court en-

intended to make a tender offer for the common stock of Pillsbury.[274] After learning about the intended offer from a fellow partner, O'Hagan bought call options and common stock in Pillsbury.[275] Because O'Hagan owed no fiduciary duty to the sellers of Pillsbury stock, the Eighth Circuit held that this conduct did not comprise classic insider trading.[276]

The Supreme Court disagreed and adopted a theory of misappropriation fraud that prohibits outsiders who possess nonpublic information from trading on that information.[277] This theory met the statutory requirements of securities fraud: (1) a "deceptive device" or contrivance (2) used "in connection with the purchase or sale of securities."[278] Closely following the property and fraud rationales of *Carpenter*, the Court had little difficulty in finding deception. First, confidential business information is property, which a fiduciary may not use for personal benefit.[279] Second, deception through nondisclosure occurs when the actor does not inform the source of the information that he or she plans to use the information to trade in securities.[280] If the actor informs the source about that intention, there is no deception and thus no violation of federal securities laws.[281] O'Hagan violated the securities laws when he used confidential information in trading securities; he breached a duty to disclose his intention to the sources of the information, his law firm and its client.[282] This theory premises liability on the deception of the source of the confidential information. The Court thus eliminated the requirement of classic insider trading that the actor have a fiduciary relationship with the buyers and/or sellers of stock.

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dorsed an unnecessarily restrictive misappropriation theory that will frustrate the prosecution of future cases); Richard W. Painter et al., *Don't Ask, Just Tell: Insider Trading After* United States v. O'Hagan, 84 VA. L. REV. 153, 155 (1998) (stating that the Court "rendered a confusing opinion that left many questions unresolved"); A.C. Pritchard, United States v. O'Hagan*: Agency Law and Justice Powell's Legacy for the Law of Insider Trading*, 78 B.U. L. REV. 13, 17 (1998) (stating that the misappropriation theory fills the gap left by the classical theory that severely undermined policy interests served by prohibiting insider trading and "secures the law of insider trading to firmer foundations"); James W. Morrissey, Note, United States v. O'Hagan*: A Results-Oriented Approach to Insider Trading Cases*, 48 DEPAUL L. REV. 161, 163–64 (1998) (concluding that the Court adopted a results-oriented approach); *The Supreme Court, 1996 Term—Leading Cases*, 111 HARV. L. REV. 197, 410–11 (1997) (arguing that the Court erred in foreclosing the fraud based on the marketplace variation of misappropriation theory).

274. *See O'Hagan*, 521 U.S. at 648.

275. *See id.* at 648 & n.1. When the client announced its plan to purchase Pillsbury, the value of Pillsbury stock increased; O'Hagan sold his shares and realized over $4.3 million in profit. *See id.* O'Hagan was convicted of 17 counts of securities fraud, 17 counts of securities fraud under 14(e) relating to tender offers, 20 counts of mail fraud, and 3 counts of money laundering. *See id.*

276. *See id.* at 653 n.5.

277. *See id.* at 649.

278. *Id.* at 651.

279. *See id.* at 652–55 (relying on *Carpenter*).

280. The Court also indicated that the deception element may be satisfied when a fiduciary pretends loyalty while secretly using the principal's information for personal gain. *See id*. at 652.

281. *See id.* at 655 (stating that essential deception is "feigning fidelity to the source of the information").

282. *See id.* at 655–56.

The Court held that the misappropriation theory also satisfied the statutory requirement that the deception be "in connection with the purchase or sale of a security."[283] This is a significant leap, given that the deception of the source is not connected to the ultimate trade. But the majority stated that fraud against the source was not consummated until O'Hagan used the information to purchase securities.[284] At that point, O'Hagan deceived his law firm and its client and simultaneously harmed members of the investing public.[285]

The majority in *O'Hagan* adhered closely to *Carpenter*. It approved *Carpenter*'s view that confidential business information, in this case a firm's plan to buy another company, was property.[286] The opinion also endorsed the *Carpenter* view that depriving another of exclusive use of information was a violation of a property right that merited criminal sanctions.[287] The majority again followed *Carpenter*'s lead when it condemned that kind of interference and noted that undisclosed use of employer information is akin to embezzlement.[288] Although the Supreme Court had characterized the rule prohibiting insider trading as a catchall provision, it had insisted that "what it catches must be fraud."[289] The Court in *O'Hagan* complied with this requirement by formulating a new theory of criminal fraud—misappropriation fraud.[290]

Misappropriation fraud continues the expansion of two elements of fraud—deception and harm. The theory adopts the idea that a fiduciary's failure to disclose material information is a deception. Loss of exclusive use of information, even when there has been no monetary loss, satisfies the harm element. Like honest services fraud, misappropriation fraud divorces the conduct of deception from the consequences, or harm, of that deception.[291] In the case of insider trading, the actor's deception is a fail-

283. *Id.*

284. *See id.* (noting that section 10(b) refers to the "purchase or sale of [any] security," not to identifiable parties).

285. *See id.* (noting also that if a misappropriator puts information to some other use, securities fraud may not be charged). Justice Thomas joined by Chief Justice Rehnquist dissented on this point. Justice Thomas found the theory "inconsistent and incoherent." *Id.* at 692 (Thomas, J., concurring in the judgment in part and dissenting in part) (arguing that the statutory language "in connection with" demanded "more integral connection between the fraud and the securities transaction"). Given the criminal context of the case, Justice Thomas would require that the SEC adopt a formal regulation embodying the Agency's misappropriation theory. *See id.* (Thomas, J., concurring in the judgment in part and dissenting in part) (noting that an open-ended criminal statute is "unusual"). Justice Scalia thought that lenity forced the Court to construe the statute to require that deception be aimed against a party to the transaction. *See id.* at 679 (Scalia, J., concurring in part and dissenting in part).

286. *See id*. at 654.

287. *See id.*

288. *See id.*

289. Chiarella v. United States, 445 U.S. 222, 235 (1980).

290. Confusingly, misappropriation fraud has little to do with wrongful pilfering or theft of confidential information. Defendants may have lawful access to the information involved and, indeed, may not perform their job without such access. The defendant in *Carpenter* actually created the information he was found guilty of taking. *See* Carpenter v. United States, 484 U.S. 19, 22 (1987).

291. *See* Moohr, *supra* note 185, at 23–26 (discussing the lack of symmetry between deception and harm in honest services fraud).

ure to disclose to one party an intent to use the information, even though the harm of trading on inside information falls on third-party victims—the shareholders who sell their shares without complete information.

The outer limits of the theory are, at least for now, unclear. The Court emphasized that the duty to disclose runs to the source of the information.[292] Under the facts of the case, this is not surprising; O'Hagan owed traditional fiduciary duties to both the partners of his law firm and to the client that required him to disclose his intention to trade. It was unnecessary to clarify the respective rights of the client and its agent, the law firm, because the defendant owed fiduciary duties to both entities. Yet the opinion appears to countenance a duty to disclose based on something less than the duties that arise from a confidential or fiduciary relationship. The Court suggested that a duty can arise from having been entrusted with the confidential information[293] or that a duty emanates from the deception itself.[294] Although courts have been generous in finding that a fiduciary duty exists in mail and wire fraud cases,[295] finding a duty in either of the above cases represents a significant change.[296]

As to property, the Court stated that the deception deprived the source of a property right—exclusive use of the information. The source of the information used by the actor, however, may not always be the owner or the creator of the information, as was the client in this case. Indeed, the law firm could also have been the only source of information. Thus, the source in future cases may simply be an agent. Nevertheless, the decision appears to give the source-as-agent an exclusive right to use the information. The decision apparently confers a property right on the source that is broader than that which the principal delegated to its agent.

292. *See O'Hagan*, 521 U.S. at 652 & n.6 (explaining that misappropriation of confidential information is a breach of a duty owed to the source of the information).

293. *See id.* at 652 (noting the "deception of those who entrusted him with access to confidential information").

294. *See id.* at 655 (noting that deception involves feigning fidelity to source of information).

295. *See, e.g.*, United States v. Dowling, 739 F.2d 1445, 1449 (9th Cir. 1984) (finding that a duty was created by the statutory obligation to obtain a license); United States v. Margiotta, 688 F.2d 108, 122 (2d Cir. 1982) (finding a fiduciary duty based on the reliance of others and de facto control).

296. *Cf.* United States v. Chestman, 947 F.2d 551, 569, 571 (2d Cir. 1991) (equating a "similar relationship of trust and confidence" with a fiduciary duty and holding that in the circumstances of the case, a husband did not owe fiduciary duties to his wife); *see also* Kerr & Sweeney, *supra* note 273, at 55 (noting the breadth of the test for liability, which covers "virtually any relationship"); Painter et al., *supra* note 273, at 175–77 (noting that the Court left unclear whether those with access to confidential information are fiduciaries).

The Ninth Circuit has rejected the idea that deception or deceit triggers a duty to disclose the fraudulent scheme in mail and wire fraud. *See Dowling*, 739 F.2d at 1449 (rejecting the Government's argument that illegal conduct alone constitutes the basis of a duty to disclose); *see also* United States v. LaMacchia, 871 F. Supp. 535, 542 (D. Mass. 1994) (discussing the reasoning of the Ninth Circuit in *Dowling*).

IV. MANIPULATING "PROPERTY" AND "FRAUD" TO CREATE RIGHTS IN INFORMATION

This survey began with the Court's narrow, restrictive decisions that limited the NSPA and the fraud statutes to losses of physical property. The opinions in *Carpenter* and *O'Hagan* then rejected that view and expanded the concepts of fraud and of property: more conduct is found to constitute deception, and more interests are found to be property. Indeed, these Supreme Court decisions and some lower court opinions recall the English common law cases that expanded the definition of larceny to protect the property of the emerging merchant class.[297] In a strikingly similar vein, federal courts are adopting new theories of a criminal offense and broadening the concept of property in response to economic and social forces. This time, however, the offense is fraud, and the valuable interests are intangible information. Now, as then, the result is to criminalize more conduct and to create new property rights.

The following discussion analyzes the interpretive devices that courts have used to expand definitions of deception and to develop property rights in information. The final section analyzes in greater detail the implications that flow from the development of property rights in information.

A. The Choice Between Property (Harm) and Interference (Conduct)

As described in part II, fraud and property are malleable concepts. The abstract concept of property as a system of rights, now without the concrete limits imposed by a physical res, justifies expansive notions of property interests. The dishonorable and disloyal nature of fraud supports broad interpretations of the elements of the offense—deception and harm. In addition to using these characteristics to expand the concepts, courts also shifted between two interpretive choices: the kind of property and the type of interference.[298] These choices loosely mirror the distinction in criminal law between harm (lost property) and conduct (deception in fraud). A court's choice is often guided by the language and purpose of the particular statute.[299]

When courts analyze the kind of property at issue, they are essentially deciding whether the victim's loss is the kind of harm that the statute sought to punish and to prevent. Thus, in *Dowling*, the Court ana-

297. *See supra* notes 10–19 and accompanying text (recounting the early history of theft law).

298. *See* Tigar, *supra* note 10, at 1443 (noting that theft law focuses upon which things are property and what interference with that thing will be punished); *see also* Lederman, *supra* note 6, at 946 (utilizing that distinction in analyzing state law protection of information on variables of content of information and mode of transfer).

299. In *Dowling*, for example, the Court determined whether transporting copyrights across state lines was the type of harm the NSPA addressed. *See* Dowling v. United States, 473 U.S. 207, 214 (1985) (noting that the NSPA defined the harm by specifically listing "goods, wares, or merchandise").

lyzed characteristics of copyright to determine that the NSPA did not address intangible property.[300] Similarly, the majority in *McNally* emphasized traditional property rights to reject the argument that mail fraud covered an intangible right to honest services.[301] Although lower courts often used property definitions to find that the defendants had not violated a property interest,[302] the wide range of traditional property definitions at times led to the opposite result.[303]

Other courts abandoned traditional definitions and relied instead on the abstract conception that property consists of rights that attach to an interest. The Supreme Court established this principle by holding that the right to exclude others from using one's intangible property was a property right for purposes of fraud,[304] and lower courts followed suit.[305] On the whole, the cases demonstrate once again that judicial power to define property in a particular way is a powerful analytic device that strongly influences the outcome.[306]

Alternately, courts focused on the type of interference prohibited by the fraud statute; this choice emphasizes the defendant's conduct. The breadth of a scheme to defraud and of the concepts of deceit and deception enables courts to formulate a conception of fraud in terms of the conduct at issue.[307] Again, the *Carpenter* decision is instructive. The Court focused on the defendant's unauthorized and undisclosed use of an employer's information for personal benefit. Offended by this conduct, the Court expanded embezzlement, a crime traditionally confined to money, to include intangible property and then converted an act of embezzlement into fraud to find that using the information involved decep-

In considering the purpose of mail fraud, the majority in *McNally* first determined that the statute was enacted primarily to prevent harm to property interests, McNally v. United States, 483 U.S. 350, 356–59 (1987) (rejecting the interpretation of mail fraud that emphasized the conduct element and focusing instead on the purpose of preventing harm of lost property); a decision that the dissent did not accept, *see* McNally v. United States, 483 U.S. 350, 364–68 (Stevens, J., dissenting) (emphasizing the type of interference and arguing that the statute prohibited conduct of "scheming to defraud").

300. *See Dowling*, 473 U.S. at 207.

301. *See McNally*, 483 U.S. at 350.

302. *See* United States v. Brown, 925 F.2d 1301, 1307–09 (10th Cir. 1991) (holding that the NSPA protects only physical property); Toulabi v. United States, 875 F.2d 122, 125–26 (7th Cir. 1989) (holding that a state's right to issue a taxi operator license is a regulatory, not a property, interest); United States v. LaMacchia, 871 F. Supp. 535, 543 (D. Mass. 1994) (holding that wire fraud does not protect stolen copyrights).

303. *See* United States v. Riggs, 739 F. Supp 414, 422 (N.D. Ill. 1990) (relying on notions of transferability and value to find that the noncopyrighted source code was property); United States v. Turoff, 701 F. Supp. 981 (E.D.N.Y. 1988) (relying on the physical taxi medallion to find that the license to operate a taxi was property of the state).

304. *See* Carpenter v. United States, 484 U.S. 19, 25–27 (1987). The Court also emphatically stated that confidential business information is property. *See id.* at 26.

305. *See* United States v. Bucuvalas, 970 F.2d 937, 945 (1st Cir. 1992) (noting that a "'property' interest resides in the holder of any of the elements comprising the 'bundle of rights'"); United States v. Granberry, 908 F.2d 278 (8th Cir. 1990) (relying on the control theory).

306. *See* Tigar, *supra* note 10, at 1470.

307. *See* Moohr, *supra* note 180, at 178–79 (explaining that vague fraud statutes allow factfinders to derive the elements of the offense from the factual circumstances of the case, which results in open-ended, progressive creation of crimes by the judiciary).

tion.[308] The decision enlarged the concept of fraud, blurred the difference between fraud and embezzlement, and broke new ground by finding that an actor could embezzle something other than money. Most recently, in *O'Hagan*, the Court endorsed those broad notions to develop the new theory of misappropriation securities fraud. Although the parameters of misappropriation securities fraud are unclear, as is its ultimate effect on mail and wire fraud, the theory significantly expands the conception of securities fraud.[309]

Decisions that rest on broad theories of fraud develop, and effectively create, new property rights. When courts find that an actor's conduct violates the mail and wire fraud statutes, they unavoidably treat the interest that was taken or interfered with as if it were property.[310] Criminalizing the conduct sweeps whatever the victim lost into the property category. When the court focuses on the type of interference, the object of the fraud assumes the status of a protected property interest. Thus, the Court in *O'Hagan* effectively gave the source of information, who may in future cases be neither the creator nor the owner of the information, a property right of exclusive use of that information. Moreover, the Court conferred the property right even though one source of the information—the law firm—could not have lawfully used it. Similarly, honest services fraud gives employers a property right in the honest services of employees. It also gives the employer a property right in the information known to the employee—that a supplier would take less money, for example.[311] In sum, the symbiotic relation between intangible property and fraud results in the creation of new forms of fraud and property. The following discussions consider the implications of this development.

308. *See Carpenter*, 484 U.S. at 27. The exercise brings to mind the practice of Procrustes, who stretched the bodies of victims to fit his bed. *See* Donald V. Morano, *The Mail Fraud Statute: A Procrustean Bed*, 14 J. MARSHALL L. REV. 45, 47 n.3 (1980).

309. The inexorable expansion of federal fraud is a familiar subject that has been soundly criticized. This latest formulation raises similar and significant issues relating to separation of powers, federalism, legality and vagueness, the First Amendment and due process, overcriminalization, and delegation of lawmaking power to prosecutors. Although this is not the place to catalogue the unappealing consequences of an evolving and ambiguous criminal law, the concerns are significant and demand attention.

For critiques of federal law of fraud, see generally Brown, *supra* note 256; Coffee, *supra* note 150; John Calvin Jeffries Jr., *Legality, Vagueness, and the Construction of Penal Statutes*, 71 VA. L. REV. 189 (1985); Miner, *supra* note 139; Moohr, *supra* note 180; and Gregory H. Williams, *Good Government by Prosecutorial Decree: The Use and Abuse of Mail Fraud*, 32 ARIZ. L. REV. 137 (1990). *See also* Moohr, *supra* note 185, at 2–3 nn.9–10 (providing a list of scholarly critiques).

The delegation issue is the subject of more recent debate. *See* Dan M. Kahan, *Three Conceptions of Federal Criminal-Lawmaking*, 1 BUFF. CRIM. L. REV. 5, 17 (1997); Dan M. Kahan, *Is* Chevron *Relevant to Federal Criminal Law?*, 110 HARV. L. REV. 469, 472 (1996) (suggesting that lawmaking authority in criminal law be delegated to the U.S. Department of Justice). *But see* Podgor, *supra* note 20, at 768 (stating that "executive efficiency does not warrant discarding . . . 'legislative supremacy'").

310. *See supra* text accompanying notes 75–78 (discussing the effect of the holding in *International News Service*).

311. *See* United States v. George, 477 F.2d 508, 512–13 (7th Cir. 1973) (noting the defendant's duty to the tell the employer that a supplier was willing to sell cabinets for substantially less money).

B. Information— The Newest Kind of Property

As the Supreme Court has noted, courts interpreting criminal law routinely depend upon definitions of property that were developed in civil cases.[312] In light of this practice, the failure of courts to make similar distinctions among kinds of information is disquieting. The law does not now uniformly protect intangible rights in information and often offers only limited relief. For example, trade secret law, which is a creature of state law, confers varying levels of protection to trade secrets,[313] and commentators are undecided about whether such information should be subject to civil misappropriation.[314] Another example is factual compilations; the Supreme Court has characterized copyright protection of compilations as "thin" and limited to the selection and arrangement of facts.[315] Specialists in the law of information strongly believe that a different lexicon to describe rights in information is necessary to create a balance appropriate to modern information resources.[316] Similarly, protection of other forms of property— and the standards by which property is defined— are also developing.[317] Finally, there is significant criticism based on the effect of expanding protection for intangible information in the civil context.[318] In other words, whether information is property is an open and "borderline" issue.[319]

312. *See Carpenter*, 484 U.S. at 26 (citing civil law for the proposition that confidential business information is property); Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1001 (1984) (noting that property interests are created and defined by existing rules such as state law); *see also* ARLIDGE & PARRY, *supra* note 30, at 74 (noting that the question of who owns the property may involve fine points of civil law and stating that courts must apply the law of property whenever the issue rears its head in a criminal case).

313. *Compare Ruckelshaus*, 467 U.S. at 1003 (holding that a trade secret is property for purposes of a Fifth Amendment taking by the government), *with* Todd H. Flaming, Comment, *The National Stolen Property Act and Computer Files: A New Form of Property, A New Form of Theft*, 1993 U. CHI. L. SCH. ROUNDTABLE 255, 272–73 (noting that "trade secret law is a patchwork of uncertain case law developed in a variety of jurisdictions" and that, as a creature of state law, is inconsistent, complex, and highly unpredictable).

314. *See generally* Robert G. Bone, *A New Look at Trade Secret Law: Doctrine in Search of Justification*, 86 CAL. L. REV. 241 (1998); Myers, *supra* note 52; Robert L. Tucker, *Industrial Espionage as Unfair Competition*, 29 U. TOL. L. REV. 245 (1998); Robert Unikel, *Bridging the "Trade Secret" Gap: Protecting "Confidential Information" Not Rising to the Level of Trade Secrets*, 29 LOY. U. CHI. L.J. 841 (1998).

315. *See* Feist Publications v. Rural Tel. Serv. Co., 499 U.S. 340, 348 (1991). The Court held that a telephone directory, in which listings were arranged alphabetically, did not possess the requisite originality to qualify for copyright protection because the Constitution authorizes copyright protection only for original expression. *See id.* at 362; *see also* Harper & Row, Publishers, Inc., v. Nation Enter., 471 U.S. 539, 547 (1985) (noting that in the realm of factual narratives, the law is currently unsettled).

316. *See, e.g.*, Nimmer & Krauthaus, *Copyright*, *supra* note 79, at 37.

317. *See* College Sav. Bank v. Florida Prepaid Postsecondary Educ. Expense Bd., 527 U.S. 666 (1999) (holding that the right to be free from a competitor's false advertising about its own product and the right to be secure in one's business interests are not property for purposes of the Due Process Clause because neither bears any relationship to any right to exclude others); Florida Prepaid Postsecondary Educ. Expense Bd. v. College Sav. Bank, 527 U.S. 627, 642 (1999) (stating that "patents . . . have long been considered a species of property" subject to the Due Process Clause, and infringement interferes with an owner's right to exclude others).

318. *See generally* JAMES BOYLE, SHAMANS, SOFTWARE, AND SPLEENS: LAW AND THE

Nevertheless, when courts determine that an interest is property in the course of interpreting a criminal statute, they reflexively assume that a full set of absolute property rights then attaches to the interest.[320] Courts often use the term property as if the notion of property has an intrinsic meaning, a habit that masks the self-justifying circularity of the inquiry.[321] This reflexive reaction is inconsistent with modern property law, which teaches that property rights are limited and that those limitations are determined by reference to public policy. Thus, the determination that an interest is property only begins the inquiry. The more important and sensitive task is to decide what specific rights attach to that property interest. When criminal sanctions are involved, the pertinent consideration is whether the specific interest at issue should be protected by penal sanctions. As *International News Service* illustrates, that determination depends on choices between competing public policies.[322] The following sections discuss two policies that are implicated when courts use criminal law to accord interests the status of property.

1. Efficient Use of Information

In a broad sense, intangible information is a public good, similar to Mary's carrot cake recipe. The recipe is subject to virtually costless unauthorized use, which, in turn, may discourage its original creation because Mary cannot recoup the investment of time and money required to create it.[323] Legal rules are thus necessary to assure the creation of this form of property. The rules, however, must balance two competing goals.[324]

CONSTRUCTION OF THE INFORMATION SOCIETY (1996) (arguing for a restriction of intellectual property rights, expansion of the public domain, and greater sensitivity to the needs of both sources and audiences); Easterbrook, *supra* note 258 (discussing tensions between principles that encourage creation of information and those that allow the existing stock of information to be used well); Wendy J. Gordon, *On Owning Information: Intellectual Property and the Restitutionary Impulse*, 78 VA. L. REV. 149 (1992) (arguing against the expansion of property rights in intellectual property through common law causes of action); Samuelson, *supra* note 46 (urging caution in using property labels in legal disputes concerning information).

319. ARLIDGE & PARRY, *supra* note 30, at 73.

320. The *Carpenter* decision did not consider whether all the rights that attach to tangible property automatically attach to intangible property. *See* Carpenter v. United States, 484 U.S. 19, 25–28 (1988). Nor did it consider whether violating a single right—exclusive use—should generate criminal charges. Instead, the Court appeared to assume that deprivation of exclusive use was a property loss to which criminal sanctions applied. This assumption, however, is not necessarily the case, as the *Dowling* opinion illustrates. *See* Dowling v. United States, 473 U.S. 207, 221–27 (1985) (examining the nature of copyright to ascertain what rights appertained to that form of property).

321. *See* Felix S. Cohen, *Transcendental Nonsense and the Functional Approach*, 35 COLUM. L. REV. 809, 814 (1935) (noting the logical flaw of justifying legal rules in legal terms); Cross, *supra* note 51, at 535 (noting the circularity of the argument and the importance of recognizing that the term "property" is a conclusion, not an analysis); Tigar, *supra* note 10, at 1468–69 (recounting Marx's critique of a definitional property argument).

322. *See supra* text accompanying notes 64–71 (discussing the creation of property rights).

323. *See supra* text accompanying notes 48–52 (discussing distinctions between tangible and intangible property).

324. *See generally* Easterbrook, *supra* note 258 (discussing the competing policies of providing incentives to create knowledge versus encouraging its optimal use).

The first is to encourage development of knowledge and information; this is accomplished by awarding one or more exclusionary rights—property rights—to the creator. The second goal is to encourage efficient use of that knowledge, usually accomplished by limiting the right to exclude use by others in some way.[325]

The most efficient way to use information is to allow its free use by not giving the creator any exclusionary right to block use by others.[326] In the long run, however, this choice imperils the creation of new work; without such rights, creators have no monetary incentive to produce anything new. At the other extreme, assigning full and lasting monopoly rights to creators would permit them to charge too much for use. This option may also result in a decline in production of new work; expanded ownership rights would impede future creation by diminishing the public domain upon which new creators depend for ideas and models.[327] Thus, providing incentives to creators may paradoxically decrease the quantity of new work.[328] A vibrant public domain ensures and enhances cultural and scientific progress[329] while also avoiding socially wasteful practices, such as "duplicative efforts to reinvent the wheel."[330] Thus, efficient, optimal use rests between the two extremes.

To illustrate the problem of a reduced public domain, consider the plight of a scientist who plans a genetic research project that would investigate the treatment of disease through genetic implantation. Unfortunately for the scientist, the cell lines necessary for the research are the patented property of a university medical center, and the university charges a substantial sum for their use.[331] The scientist cannot afford to pay and must abandon the project or delay it while she develops her own

325. The Constitution's authorization of power to Congress to issue copyrights is a clear articulation of the policy choice. Congress is empowered "to 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. Consequently, the copyright statute awards an exclusive property right to the author but limits that right to a term of years and subjects it to exceptions, such as fair use. *See* 17 U.S.C. §§ 106–121 (1994).

326. *See* Myers, *supra* note 52, at 684.

327. *See* BOYLE, *supra* note 318, at 155 (suggesting that limiting material in the public domain can restrict debate and impede innovation by future users); David Lange, *Recognizing the Public Domain*, 44 LAW & CONTEMP. PROBS. 178 (1981) (observing that it is necessary to view the public domain as a field of individual rights fully as important as other property rights); Myers, *supra* note 52, at 697–98 (noting the need to maintain a vibrant public domain).

328. *See* Landes & Posner, *supra* note 52, at 332 (noting that a diminished public domain ultimately increases the cost of producing new work).

329. *See* Gordon, *supra* note 318, at 167–68 (noting that requiring payment for each use of intellectual heritage "would destroy the synergy on which cultural life rests"); Landes & Posner, *supra* note 52, at 332 (stating that the creation of new work typically involves borrowing or building upon prior work).

330. *See* Feist Publications v. Rural Tel. Serv. Co., 499 U.S. 340, 354 (1991) (noting that proscription against copyright for facts is designed to prevent "wasted effort" and saves time and effort by allowing users to rely on facts contained in prior works) (citations omitted); Edmund W. Kitch, *The Law and Economics of Rights in Valuable Information*, 9 J. LEGAL STUD. 683, 709 (1980).

331. The facts in *Moore v. Regents of the University of California*, 793 P.2d 479 (Cal. 1990), suggest this scenario.

cell lines. A less dramatic, but more immediate example, is the current debate over database protection. Databases are integral to commercial and educational activities on the Internet, and their creators are pressing for a federal law to ensure that their compilations are not appropriated by others.[332] On the other hand, scientists and librarians have expressed fears that the proposals could hamper scientific research and hurt competition in the commercial database industry.[333]

Despite the significance of efficient use, evidence suggests that courts and legislators—in an effort to encourage production of public goods—overlook the need to encourage such use of knowledge and information.[334] This trend tilts the balance toward creators and away from users.[335] Criminal fraud actions, such as those surveyed here, indicate that criminal law is part of this trend to protect property rights in information. At first appraisal, the trend does not seem inappropriate; criminal laws are consistent with other legal rules that ensure the creator can recoup investment and earn profit. The interest in stimulating creative development thus argues for protecting information against unauthorized use through criminal law. Nevertheless, the profound impact of criminal sanctions on efficient use argues against the use of criminal sanctions. Criminal law is simply too blunt an instrument to achieve the required balance between creation and use,[336] a point to which I shall return. Its use may shrink the public domain, both directly by extending property rights to new interests, such as those in information, and indirectly by deterring potential use.

2. Employee Mobility

A second public policy affected by expanded property interests in information, although not as global in its implications, has significant impact on employees. That policy is to foster competition and economic growth by balancing the interests of firms in protecting business informa-

332. *See Fair Use of Databases*, N.Y. TIMES, Nov. 15, 1999, at A26 (concluding that database creators should not be granted rights allowing them to control how others use information in new ways).

Congress is currently considering two bills. *See* H.R. 354, 106th Cong. § 1402 (1999) (limiting the reuse of factual information and allowing the owner to control future use); H.R. 1858, 106th Cong. § 103 (1999) (allowing the reuse of factual information). As reported in the House, H.R. 354 provides criminal penalties for a willful violation for purposes of financial gain or that causes at least $50,000 damage in a one-year period. *See* H.R. 354, 106th Cong. § 1407(a) (1999).

333. *See Fair Use of Databases*, *supra* note 332; Letter to the Editor, *In Information Age, Who Owns Data?*, N.Y. TIMES, Nov. 21, 1999, at A14.

334. *See* Gordon, *supra* note 318, at 151–53 (noting the reversal of the long-standing policy of protecting public interest in the efficient use of property); Landes & Posner, *supra* note 52, at 326 (noting that the use of public good is a "neglected consideration"); *see also* BOYLE, *supra* note 318, at 38 (noting that scholarly analysis often ignores the goal of efficient flow of information in its concern to provide incentives to creators).

335. *See* Gordon, *supra* note 318, at 156 (stating that the trend is the result of fairness arguments and the importance of the high-technology information sector of the economy).

336. *See* Dowling v. United States, 473 U.S. 207, 226 (1985) (referring to criminal law as a "blunderbuss solution").

tion and the interests of employees in securing employment that fully rewards their skill and knowledge. An appropriate balance enables both employers and employees to pursue their separate goals, despite the natural tension that exists between their interests. Firms want to keep information regarding business practices from their competitors, while employees want freedom to change jobs or to open their own businesses.[337] Such moves require that employees be free to utilize general skills and knowledge developed in their previous jobs. Treating all business information as if it were property limits employee mobility.[338]

Protecting more information by according it the status of property increases the number of employees subject to an obligation to keep information confidential.[339] Employees who unavoidably use information acquired in former employment risk a charge of fraud.[340] The suggestion that such prosecutions are rare, although seemingly reasonable, is not an adequate response. An overbroad and vague concept of property rights in information chills employee mobility because employees and new employers may prefer not to risk criminal charges. The indiscriminate award of property rights in information thus alters the bargaining positions of employees and employers and ultimately reduces employee autonomy.[341]

337. *See* James Pooley, *The Top Ten Issues in Trade Secret Law*, 70 TEMP. L. REV. 1181, 1183 (1997) (noting the need to develop a way to protect information that properly balances the interests of creators of information with the interests of mobile employees).

338. *See* John C. Coffee Jr., *Hush!: The Criminal Status of Confidential Information After* McNally *and* Carpenter *and the Enduring Problem of Overcriminalization*, 26 AM. CRIM. L. REV. 121, 140 (1988) (arguing that the use of criminal law to protect an employer's information effectively creates covenants not to compete).

339. *See* Edmund W. Kitch, *The Expansion of Trade Secrecy Protection and the Mobility of Management Employees: A New Problem for the Law*, 47 S.C. L. REV. 659, 664 (1996) (noting the impact of increased civil protection of trade secrets).

340. Under the mail and wire fraud statutes, the fraud must be accompanied by a mailing or interstate wire, jurisdictional requirements not difficult to establish. *See* 18 U.S.C. §§ 1341, 1343 (1994) . Because mail and wire fraud are predicate offenses under RICO, employees may also be sued under the civil RICO provision for treble damages. *See* § 1964(c) (authorizing private actions for treble damages under RICO). Prosecutors may also utilize the recently enacted Economic Espionage Act that prohibits interferences with a broad range of property, including business information and trade secrets. *See* §§ 1831–1839 (Supp. II 1996).

Federal prosecutors have filed criminal charges against employees who changed jobs. *See* Chatterjee, *supra* note 44, at 888 (recounting the facts of *Cadence Design Systems Inc. v. Avanti! Corp.*, 125 F.3d 824 (9th Cir. 1997)).

A suit in European and American courts by General Motors (GM) against a former employee and Volkswagen (VW) ended in criminal charges. *See* General Motors v. Lopez, 948 F. Supp. 656, 661 (E.D. Mich. 1996). After GM filed a civil suit in the United States against the employee and Volkswagen to prevent the former executive from divulging trade secrets, criminal fraud charges were brought in Germany. *See id.* The civil suit, which included a racketeering charge that left VW open to treble damages, was settled. *See id.* VW agreed to pay GM $100 million and to buy $1 billion worth of GM parts. *See* Edmund L. Andrews, *International Business: None Prove So Stubborn As a Giant Spurned*, N.Y. TIMES, Jan. 11, 1997, § 1, at 37 (noting GM's collaboration with German and American criminal law enforcement authorities).

341. *See* Chatterjee, *supra* note 44, at 889; Coffee, *supra* note 338, at 139 (stating that an expanded definition of property may reallocate social control between the employer and the employee in favor of the employer).

Using criminal law to protect the confidential business information of employers may even be perverse because civil courts are reluctant to enforce contracts that restrain postemployment options of employees.[342] To subject employees to penalties when they use information learned in previous employment is inefficient in that it prevents employees from working for the firm that values them most highly.[343] The result is incompatible with a policy that favors competition and with judicial reluctance to enforce covenants not to compete.

C. General Concerns Relating to Creating Property Through Criminal Law

Criminal law is thought to be more effective than civil law in deterring harmful conduct, and it is, therefore, tempting to use criminal law to protect valuable information. Nevertheless, criminal law is not an appropriate context in which to create property rights. First, the blunt criminal verdict may produce the unintended consequence of overdeterrence. Individuals may then be unwilling to embark upon socially beneficial activities, such as engaging in genetic research or exchanging facts from databases, because those activities risk involvement with the criminal justice system.[344] In addition to reducing the public domain, the social costs include diminished competition when firms are afraid to collect data about their competitors or when employees are reluctant to search for optimal employment.[345]

A second general concern stems from the intangible nature of information. In contrast to tangible property, the absence of concrete,

342. To encourage competition, courts enforce covenants not to compete only when they are of brief duration and limited geographical scope. *See* Dawson v. Temps Plus, Inc., 987 S.W.2d 722, 726 (Ark. 1999) (stating that public policy favors competition and upholding a provision in the shareholder buyout that barred competition for five years in a 70-mile radius). The Texas legislature's largely unsuccessful attempt to override the common law regarding covenants not to compete illustrates the strength of that public policy objective. *See* Light v. Centel Cellular Co., 883 S.W.2d 642, 643–44 (Tex. 1994) (reviewing legislation).

Courts also distinguish between confidential business information and trade secrets. *See* AMP Inc. v. Fleischhacker, 823 F.2d 1199, 1205–06 (7th Cir. 1987) (refusing to protect generalized confidential business information regarding strategic planning, product development, and manufacturing, financial, and marketing information); SI Handling Sys., Inc. v. Heisley, 753 F.2d 1244, 1259 (3d Cir. 1985) (distinguishing between technical information that constituted trade secrets and business information).

Some employers require employees to sign anticompete covenants and nondisclosure restrictive covenants to protect trade secrets. *See* American Software USA, Inc. v. Moore, 448 S.E.2d 206, 209 (Ga. 1994) (upholding a nondisclosure restrictive covenant that was strictly limited to trade secrets and finding the anticompete agreement that applied to "any" of employer's licensees "anywhere in the United States" to be unreasonable).

343. *See* Chatterjee, *supra* note 44, at 889 (noting that an employer's only recourse is to restrain former employees because it is impossible to return the information).

344. *See* HERBERT L. PACKER, THE LIMITS OF THE CRIMINAL SANCTION 68 (1968) (stating that people should be able to plan their conduct with assurance that they can avoid entanglement with criminal law).

345. *See* Coffee, *supra* note 338, at 151 (noting that employee efforts to avoid entanglement with criminal law carry "compliance costs" such as uncertainty, apprehension, and financial concerns); Pooley, *supra* note 337, at 1187.

physical boundaries creates inherent uncertainty over the boundaries of property rights in information.[346] To prevent unwitting infringement by innocent users, property rights in information should have precise legal boundaries and articulated, specific rights.[347] The simple determination that conduct does or does not violate a criminal statute fails to delineate such boundaries.[348]

A criminal trial is not an appropriate or adequate forum in which to decide issues that implicate significant societal goals. Most basically, the issue of whether public policy justifies the creation of a property right is not before the court. Even if a court were inclined to consider the issue sua sponte, it has not been briefed, and there are no advocates to argue that a verdict will negatively affect social policies, such as ensuring a vibrant public domain.[349] Although civil trials are not immune to these problems, the narrow, well-defined issues before a criminal court leave less opportunity to consider the effects of the verdict on public policy. Moreover, despite the inadequacy of the criminal forum, determinations regarding property are likely to influence the public debate.[350] The criminal determinations may be viewed as evidence of the need to offer increased protection to intangible interests in information.

The policy choices regarding information as property and its effect on employee mobility are abstract, and their effect on public policy is significant. The choices are ultimately political in nature, inevitably privileging one group over another.[351] They are also not susceptible to easy resolution. These considerations argue for legislative rather than judicial action,[352] and Congress has passed new statutes designed to address

346. *See* Gordon, *supra* note 318, at 163 (noting the need for sharp lines and boundaries); Myers, *supra* note 52, at 695 (noting that without certainty provided by physical property, it is "all too easy to tread innocently upon intangible rights").

347. *See* International News Serv. v. Associated Press, 248 U.S. 215, 262–63 (1918) (Brandeis, J., dissenting) (stating that the creation of a new property right required established boundaries that could be wisely guarded).

348. Arguably, a civil cause of action, which results in pricing the loss, offers a better opportunity to define the boundaries of property rights in information. *See* Chatterjee, *supra* note 44, at 895–97.

A related issue that argues against punishing takings of information through traditional criminal fraud is that using such statutes to regulate use of information may be an exercise in overcriminalization. *See* Coffee, *supra* note 338, at 148, 151 (noting significant costs of overcriminalization, such as selective prosecution and distrust of criminal law).

Another consideration is the wisdom of outlawing conduct that most people do not consider immoral. Although criminal law may educate and change perceptions about what is lawful, at some level it must reflect community values. Lawmakers have rejected attempts to punish those who copy a video or record a tape because there is consensus that these are not wrongful actions. *See* Dowling v. United States, 473 U.S. 207, 221, 225 (1985) (noting that Congress hesitated before imposing felony sanctions for copyright infringement and carefully chose limited infringements that required a severe response).

349. *See* Gordon, *supra* note 318, at 279 (noting that litigation contains a structural bias against the articulation of community interests because the community cannot be a litigant).

350. *See id.* at 154 n.20 (noting that although *Carpenter* does not grant a common law property right to producers against strangers, it may be used to buttress such results); Samuelson, *supra* note 46, at 387–88 (suggesting that *Carpenter* may have an expansive impact).

351. *See* Tigar, *supra* note 10, at 1471 (noting that neither property nor the theft laws that enforce it are neutral).

352. Justice Brandeis is once again instructive. *See International News Serv.*, 248 U.S. at 262

the protection of information.[353] Thus, given the public policies at issue and the inadequacy of the criminal forum, courts should reevaluate the judicial tendency to develop property rights in information.

V. IMPLICATIONS FOR COURTS

Judicial decisions regarding criminal laws that broaden the concept of traditional fraud or utilize expansive concepts of property have effectively created property rights in information. In the course of interpreting criminal statutes, courts are making policy choices regarding the efficient use of public goods and competition fostered by employee mobility. To avoid making such policy choices, courts should limit the use of traditional fraud offenses when intangible property is involved.

Several considerations support this recommendation. The creation of a property right is a significant policy decision, and in the case of public goods it may disturb the balance between development and use. Modern property concepts provide further support for limiting the use of traditional fraud offenses. A basic tenet of property law is that the designation, property, does not necessarily convey a full set of absolute rights. Thus, courts may determine that, although a violation of exclusive use of information is a property right, it is not a right that the statute was enacted to protect. A concern over the use of the criminal law forum also supports the recommendation; it is not an adequate one in which to balance complicated, political, and competing public policy goals. Nor can that forum tailor the precise legal boundaries required when intangible property interests are involved.[354]

More specific support for the recommendation is found in the factors courts use to interpret criminal statutes, legislative history, and statutory language. Congress enacted the mail and wire fraud statutes to protect traditional property interests; it did not consider whether the broad category of confidential business information or intangible property should be accorded protection from criminal fraud.[355] The doctrines of strict construction and lenity authorize narrow readings of criminal statutes when the statute and Congress's purpose is unclear.[356] The following

(Brandeis, J., dissenting) (presenting permutations of various rules and their effects to argue that legislators, rather than the judiciary, should tailor a new property right).

353. *See* Computer Fraud and Abuse Act, 18 U.S.C. § 1030 (1994) (banning interference with computers); Copyright Act, 17 U.S.C. § 506 (1994) (providing enhanced felony sanctions for copyright infringement); Economic Espionage Act, 18 U.S.C. §§ 1831–1839 (1994).

354. *See* Dowling v. United States, 473 U.S. 207, 225–26 (1985) (contrasting criminal fraud and copyright statutes in terms of precision and effect).

355. *See* McNally v. United States, 483 U.S. 350, 356–59 (1987) (discussing the legislative history of mail fraud and concluding that Congress passed it to protect people from frauds involving money or property).

356. *See McNally*, 483 U.S. at 359–60 (1987) (applying the rule of lenity and strict construction); *Dowling*, 473 U.S. at 229 (1985) (invoking the time-honored interpretive guideline that "ambiguity concerning the ambit of criminal statutes should be resolved in favor of lenity") (quoting Liparota v. United States, 471 U.S. 419, 427 (1985)); *id*. at 213 (noting that federal crimes "are solely creatures of

discussion offers suggestions for limiting the application of traditional fraud offenses to new conceptions of property.

A. Reconsidering Carpenter

In *Carpenter*, the Court stated that "confidential business information" constituted property.[357] For several reasons, the statement begs to be refined.[358] First, although the proposition appears to end discussion of property rights in intangible interests, it is inadequate as a standard and leads to unintended consequences. Business information, even when modified by the adjective "confidential," is a vague category that appears to include any intangible interest that its owner regards as confidential. Nevertheless, even a cursory analysis indicates that all business information is not the same; a business plan is different from computer software or a drug formula. Finally, the abstract concept of business information includes intellectual property and trade secrets now regulated through specific doctrines, statutes, or state law. Yet after *Carpenter*, courts can avoid the limitations imposed by those specific doctrinal rules simply by characterizing the interest as business information rather than, for example, copyright.[359]

In addition to these problems, the Court's property analysis is weak and subject to question. More specifically, the analysis is not grounded in strong precedent, ignores a key characteristic of intangible property, and is internally inconsistent.

First, the precedent on which the Court relied to find that confidential business information is property stands for a more limited proposi-

statute" and their scope should be strictly determined (quoting *Liparota*, 471 U.S. at 424)); *see also* United States v. O'Hagan, 521 U.S. 642, 679 (1997) (Scalia, J., concurring in part and dissenting in part) (dissenting on the ground that the majority opinion does not comport with the principle of lenity) (quoting Reno v. Koray, 515 U.S. 50, 64–65 (1995)).

357. *See* Carpenter v. United States, 484 U.S. 19, 25 (1987).

358. One resolution is to confine *Carpenter* to its factual predicate as an insider trading case. The case represents a government effort to punish fraudulent conduct in the sale of securities that did not satisfy the elements of securities fraud. *See* Coffee, *supra* note 338, at 131 (suggesting that the Court turned to mail fraud to sidestep greater problems with the misappropriation theory of insider trading).

Even the prosecutors did not initially think the defendant's conduct was a property offense, and they tried it as an honest services case. Only on appeal, after the *McNally* decision had invalidated the honest services theory, did the government argue that the *Wall Street Journal* had been deprived of property. *See* Craig M. Bradley, *Forward: Mail Fraud After* McNally *and* Carpenter*: The Essence of Fraud*, 79 J. CRIM. L. & CRIMINOLOGY 573, 585 (1988)

Thus, the decision in *Carpenter* is the result of two attempts to punish lawful conduct that constituted neither securities fraud nor honest services fraud. As such, it is a poor vehicle for expanding property rights in information.

Lower courts, however, may not relish a direct attack on a Supreme Court holding that recently has been relied upon by the present Court. *See* United States v. O'Hagan, 521 U.S. 642 (1997) (relying on *Carpenter*). Nevertheless, *O'Hagan* does not necessarily bar courts from reconsidering *Carpenter*. That decision was driven by the public policy to protect the securities markets, dealt with a specific form of fraud, and may be readily confined to insider trading.

359. *See* United States v. Wang, 898 F. Supp. 758, 760 (D. Colo. 1995) (rejecting the defendants' argument that the proper charge was copyright infringement because the alleged proprietary confidential information was protected by copyright).

tion: confidential information is property for some purposes.[360] Second, the Court compounded its overstatement that business information is property when it did not consider the unique characteristics of intangible property. Tied to a physical conception of property, the Court assumed that intangible property was the same as tangible property and should be treated the same; thus, when it is misappropriated, criminal fraud applies. Yet, as we have seen, intangible property is different.[361] The assumptions that apply to losses of physical property are not necessarily relevant to intangible property. When tangible property is taken, the owner loses possession and, effectively, all rights that attach to the object. In contrast, when intangible property is taken, the owner still possesses and may even use the property. Because owners lose only exclusive use, their harm is lost financial value.

The failure of the Court to recognize this characteristic results in a third problem with the decision. The victim in *Carpenter*, the *Wall Street Journal*, did not suffer any financial loss.[362] The *Journal* lost only exclusive use of the information. This fact expands the breadth of the holding: under *Carpenter*, a loss of exclusive use, and only of exclusive use, was a sufficient loss of property to merit criminal sanctions.[363] It also contradicts the Court's endorsement of its previous decision to rely on the "common understanding" that "to defraud . . . usually signif[ies] the deprivation of something of value."[364]

These problems with the property aspect of *Carpenter* justify refining the proposition that business information is property. The limitations of the criminal forum and concerns for the public domain also argue for a narrower conception of business information. The courts might decline to assume that all business information is subject to the fraud statutes, which requires criteria that distinguishes between and among kinds of business information. The following discussion presents two factors courts might consider in such an analysis.

360. *See* Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1001–04 (1984) (holding that trade secrets are property for purposes of the Takings Clause); Dirks v. SEC, 463 U.S. 646, 653 n.10 (1983) (noting that a business plan is property for insider trading purposes); Board of Trade v. Christie Grain & Stock Co., 198 U.S. 236, 250–51 (1905) (holding that market quotations are property for purposes of breach of a confidentiality agreement).

The Court in *Dirks* cited a treatise for the proposition that information is property. *See Dirks*, 463 U.S. at 653 n.10 (citing 3 WILLIAM M. FLETCHER ET AL., FLETCHER CYCLOPEDIA OF THE LAW OF PRIVATE CORPORATIONS §§ 848, 900 (rev. ed. 1975 & Supp. 1982)). The treatise, which dealt with the common law duty of officers and directors not to mismanage the corporate assets, indicates that confidential information is a corporate asset. *See id.*

361. *See supra* notes 48–52 and accompanying text (discussing the characteristics of intangible property).

362. *See* United States v. Carpenter, 791 F.2d 1024, 1035 (2d Cir. 1986) (conceding that the *Journal* could not trade on the information without damaging its reputation), *aff'd*, 484 U.S. 19 (1987); *id.* at 1037 (Miner, J., dissenting) (characterizing the court's decision to enforce the *Journal*'s policy while at the same time conceding that the paper could engage in the same conduct as "especially ludicrous").

363. *See Carpenter*, 484 U.S. at 26–27 ("[I]t is sufficient that the *Journal* has been deprived of its right to exclusive use of the information.").

364. *Id*. at 27 (citing McNally v. United States, 483 U.S. 350, 358 (1987)).

B. The Public Nature of Business Information

Information may be a public good, may not be a public good, or may fall somewhere in between. Information has properties of a public good because it is often more expensive to create than it is to copy and use. When it can be used freely by others, its creator may not be able to appropriate enough of its value as compensation to induce its creation. Nevertheless, all public goods are not the same. The public nature of the good is one of degree because, in some cases, a market incentive exists that encourages creation.

Consider the case of a university's cell line as an example of a public good.[365] The community would certainly benefit if the genetic researcher were free to use the line. Efficient use thus argues for free distribution. But that decision would severely limit the incentive for universities to carry out research; the market would not adequately compensate those who developed the cell line if it could be obtained by others at no cost. Thus, by establishing property rules, the law creates incentives that motivate creation because it allows the university to own and sell the result. On the other hand, when legal rules serve to motivate their creation, cell lines will not exist in the public domain where they could be freely used for further research.

In contrast, information such as business plans or production schedules is less public. Firms are likely to create this type of information even in the absence of legal rules that create incentives because the profit incentive provided by markets is an adequate inducement. This is not to suggest that the value of a business plan will not decline if it is used by another but merely that there is a difference in degree among kinds of public goods. Simply stated, some public goods are not as public as others.

This insight suggests that courts might distinguish between kinds of business information by ascertaining their position on a "publicness" continuum. Information that is truly public, such as a novel or computer software, merits the creation of legal rules, including the protection of criminal law. Indeed, Congress has provided specific civil and criminal laws to protect this form of property, and those laws presumably take into account the countervailing risk of discouraging efficient use. Criminal provisions in the Copyright Act protect owners from willful infringement, and the recently enacted Economic Espionage Act provides criminal sanctions for theft of trade secrets.[366] Because Congress has created statutory criminal remedies, truly public goods need not be subject to traditional fraud statutes. It is not only unnecessary to employ traditional

365. *See supra* notes 331–33 and accompanying text.

366. *See* Copyright Act, 17 U.S.C. § 506 (1994) (providing felony sanctions for copyright infringement); Economic Espionage Act, 18 U.S.C. §§ 1831–1839 (1994). Patent and trademark law do not include criminal provisions, which indicates that Congress does not think criminal sanctions are necessary to protect those property rights. *See* Dowling v. United States, 473 U.S. 207, 225–26 (1985).

fraud statutes, but their use may even upset the balance that Congress has reached. The use of additional criminal offenses, which have different penalty structures, may discourage efficient use of the information.

Information that is not as public, because it need not depend on incentives provided by legal rules, lies at the other end of the continuum. Those who develop this kind of information are motivated to do so by existing market incentives. The public is less concerned about encouraging creation of such information or maintaining it in a vibrant public domain, and Congress has, thus far, declined to protect the information through special legislation that confers rights to ban others from using it. Nevertheless, traditional fraud statutes may be used to punish and prevent interferences with this type of information when the conduct causes economic harm to the owner or creator. This scenario entails further analysis of the victim's loss of financial value, considered in the following section.

Analysis of the kinds of information that occupy the ends of the continuum provides a rough guide for identifying the kinds of information to which traditional criminal fraud statutes should apply. The difficult problem is how to treat information that falls between the two ends of the continuum. Relying on the law of trade secrets is not particularly helpful because, unlike copyright and patent, it is not uniformly based on a theory of public goods. Although some trade secrets, such as a formula for a drug or a recipe for carrot cake, may rise to the level of a public good, others, such as lists of suppliers and clients, are not public to the same degree. Thus, courts must examine the specific information at issue to determine its placement on the public goods continuum.

C. Objective Economic Value of Nonpublic Information

The purpose of the mail and wire fraud statutes is to prevent harm; they specifically require that the actor caused or intended to cause a loss of property.[367] When a person is fraudulently deprived of information that is nonpublic, courts should ascertain whether the victim of the deceit suffered a harm. The real harm of losing exclusive use of intangible in-

367. The Court in *McNally* held that the mail fraud statute was enacted to prevent the harm of lost property. *See McNally*, 483 U.S. at 359–60 (specifically rejecting an interpretation that would have made the crime one of conduct). In *Carpenter*, the Court endorsed the harm requirement and defined it as lost value. *See Carpenter*, 484 U.S. at 27; *see also* United States v. D'Amato, 39 F.3d 1249, 1257 (2d Cir. 1994) (stating that fraud requires proof that "deceit is coupled with a contemplated harm to victim") (citing United States v. Starr, 816 F.2d 92, 98 (2d Cir. 1987)); United States v. Regent Office Supply, 421 F.2d 1174, 1181 (2d Cir. 1970) (holding that the Government must prove that the defendant contemplated actual harm and that the purpose of the scheme must be to injure) (citing Horman v. United States, 116 F. 350, 352 (6th Cir. 1902)); Moohr, *supra* note 185, at 23–24 (discussing the harm element of federal fraud statutes).

The harm requirement is also consistent with the culpability required by the fraud statues—specific intent to defraud. *See Carpenter*, 484 U.S. at 28 (noting the lower court's finding of specific intent); *see also* Moohr, *supra* note 185, at 39–41 (discussing the specific intent requirement).

formation is likely to be a pecuniary loss of the economic value of the information.

When physical objects are stolen, criminal law does not usually inquire closely into their value; the loss of the object suffices as harm.[368] In contrast, and as developed earlier, the value of intangible property is more significant.[369] When others interfere with intangible information, the creator of that information still possesses it and may continue to use it. The victim's real loss, therefore, is in the form of diminished financial value. In those cases, application of traditional fraud statutes, enacted to prevent harm of lost property, is appropriate.

But when loss of exclusive use does not result in lost or diminished economic value, the fraud statutes should not apply. In some cases, the information may have no financial value because the owner cannot realistically sell or even use it.[370] Thus, courts should not assume that victims who lost exclusive use of information incurred a financial loss. Rather, they might require proof that the interference resulted in some objective measure of lost financial value. Proof of objective economic value ensures that the victim sustained a loss that merits criminal sanctions.[371]

The question remains of how to ascertain whether the victim lost some measure of objective economic value.[372] As a starting point, it is clear that courts should avoid some methods of ascertaining economic harm. For instance, the gain of the defendant is not necessarily equivalent to what the victim lost, and courts should not entertain notions of unjust enrichment. The fraud statutes are written in terms of harm to the victim of the deceit, except in the case of honest services fraud.[373] Nor is proof of independent economic harm equivalent to the term "thing of value" that is an element in some federal offenses, such as bribery.[374] In bribery, the value element has been interpreted as the subjective evaluation of the defendant,[375] while the formulation recommended here requires an independent, objective evaluation of economic harm.

368. *See* Lederman, *supra* note 6, at 940–41.

369. *See supra* notes 48–52 and accompanying text (discussing aspects of intangible property).

370. As noted, the newspaper that lost exclusive use of information in *Carpenter* did not incur a financial loss. Nor would it have traded on the basis of the information, given the potential damage to its reputation. *See supra* text accompanying notes 362–63.

371. *See* Chatterjee, *supra* note 44, at 867 (noting that valuations of trade secrets require independent social or economic value); Coffee, *supra* note 338, at 142 (suggesting that *Carpenter* be restricted to apply only to information with "independent economic value").

372. This exercise is not tantamount to proving damages, which the fraud statutes do not require. *See* Neder v. United States, 527 U.S. 1, 25 (1999) (explaining that the prohibition of an inchoate "scheme to defraud" renders the common law elements of reliance and damages inapposite).

373. *See* 18 U.S.C. §§ 1341, 1343, 1346 (1994).

374. *See id.* § 201(b)(1).

375. *See* United States v. Williams, 705 F.2d 603 (2d Cir. 1983) (holding that worthless shares of stock were "thing[s] of value" because the defendant subjectively valued them and noting that the phrase has consistently been given broader meaning); *see also* United States v. Morison, 844 F.2d 1057, 1077 (4th Cir. 1988) (failing to reach the issue of whether classified government information was a thing of value for purposes of 18 U.S.C. § 641 because it found that the defendant had taken tangible photographs and reports).

Identifying a proper measure of independent economic loss is somewhat more subtle than it first appears because the value of the information and the value of the victim's loss are not necessarily equivalent; to reiterate, the victim may continue to use the information. Professor Melville Nimmer suggests three reference points for determining the value of information: (1) market value, (2) actual cost to create or replace, and (3) loss to the original owner.[376] The third category, the victim's loss, is of concern here, and Professor John Cross has elaborated more fully on it. He distinguishes between use value and monopoly value of information. More specifically, use value occurs when the information lowers the marginal costs of producing a firm's output, and monopoly value exists when only one party has access to the information.[377] In most cases, interference with information does not result in lost use value because victims retain possession and ability to use the information.[378] Nevertheless, the value of the use of the information may be diminished to some extent, especially when the actor actually made use of it. There are doubtless further permutations in evaluating whether the victim sustained economic harm. The point here is that economic loss is a predicate for applying traditional fraud statutes.

Keeping the focus of a court on the harm element of the statute is consistent with the purpose of the fraud statutes. The recommendation reduces the emphasis on the conduct element of deceit and, therefore, has the advantage of tempering the judicial practice of defining new types of fraud in terms of the conduct at issue. Turning away from conduct also lessens the likelihood of creating new forms of property through the criminalization of a wide range of deceptive conduct.

The practical effect of narrowing the range of confidential information subject to traditional fraud statutes is that the statutes will be used less often. This does not mean, however, that victims and society are without recourse to criminal remedies in appropriate cases. The limitation of traditional fraud statutes should merely shift prosecutorial attention to new statutes that Congress specifically has enacted to deal with criminal takings of intangible property.[379] Although further analysis of these offenses, especially the Economic Espionage Act, is necessary, Congress presumably considered and balanced the public policy objec-

376. *See* NIMMER, *supra* note 78, § 14.02[A].

377. *See* Cross, *supra* note 51, at 558 (noting that monopoly value exists only when the information also has use value).

378. The entity may, however, have lost the monopoly value of the information. *See id.* at 557, 561–65 (noting that traditional theft statutes protect the use value of information). Some information has only use value, while trade secrets, for example, have both use and monopoly value. *See id.* at 559. Value may also depend on potential users, so that an infringer can acquire a monopoly value that the owner did not have. *See id.* at 559–60 (providing an example of stolen examinations, which had use value to the university but had use and monopoly value to the student who took them).

379. The new generation of statutes generally strengthens protection of intangible property. *See, e.g.*, 17 U.S.C. § 506 (1994) (providing enhanced felony sanctions for copyright infringement.

tives.[380] In addition, as Professor Ellen Podgor has noted, there are significant advantages to relying on specific fraud offenses.[381] The use of specific statutes avoids the vagueness problems inherent in the traditional fraud offenses and reduces prosecutorial overreaching while still allowing appropriate prosecutions.

VI. CONCLUSION

The conclusion reached here, that traditional fraud statutes should not protect all forms of intangible information, disassociates Proudhon's equation of property and theft. This conclusion is not as outrageous as it first appears. Modern property law teaches that property rights are not absolute; they are separate and distinct from one another, and a full set of rights does not attach to all forms of property. To achieve socially beneficial goals that serve the interests of the greater community, property rights are often limited. The analysis of public goods and the employment relationship shows that using criminal sanctions may harm important community interests and that criminal law is an inadequate forum in which to consider these issues. In light of these concerns, courts should not automatically designate intangible information as property for purposes of traditional federal fraud statutes. Contrary to Prodhoun's maxim, property is not always theft.

380. Although an analysis of these provisions must await another day, they may raise many of the same issues as the traditional statutes. *See* James H.A. Pooley et al., *Understanding the Economic Espionage Act of 1996*, 5 TEX. INTELL. PROP. L.J. 177, 178–88 (1997).

381. *See* Podgor, *supra* note 20, at 735 (noting that general fraud statutes invite ambiguity and prosecutorial indiscretions).