

admission as she did, ABC would not have enough revenues to continuing operating. In both cases (full hall and partially empty hall), it could be argued that Sally deprived ABC of the profits it would have received had she paid the price of admission. The problem is that the argument rests, once again, on a hard-to-prove, counterfactual assumption: namely, that *but for* her sneaking into the lecture, Sally *would have* paid the price of admission.

And what about the difference between sneaking into the full hall and sneaking into the partially empty hall? Why did the subjects rank the first scenario as more blameworthy? Recall that Sally “listened to the entire lecture without paying for it. The auditorium that day was full. *As a result, ABC could not sell Sally’s seat to someone else who wanted to attend the lecture.*” The italicized language suggests that, in this case, someone *was* willing to pay for admission to the lecture. Sally was thus not the free rider she was in the case of the partially empty hall. But for Sally’s sneaking in, ABC *would have* received the price of admission from that other person.

The loss to ABC is thus less speculative in the case of the full hall than in the case of the partially empty hall. Given the importance that the subjects apparently attached to the speculative nature of the loss, perhaps the law, in the interest of fair labeling, should reflect such a distinction. One possibility would be to require the government to prove as part of its case-in-chief that, but for the illegal admission, either the defendant or another would-be customer would have paid for a seat. This is not as far-fetched as it may seem. As noted above, copyright, trademark, and patent law all measure damages in terms of lost profits.¹¹¹ Requiring the government to prove what profits were lost as part of its case-in-chief would essentially shift the inquiry from the damages phase of the proceedings to the liability stage.

STEALING INTANGIBLES

At early common law, as discussed in Chapter 1, only property of a certain type could be subject to larceny: movable chattels such as cash, jewelry, furniture, vehicles, and other merchandise. Excluded from the protection of theft law were things at two ends of the property continuum: real property and intangible property.¹¹² The requirement

of asportation meant that neither land nor any form of intangible property could be subject to theft.¹¹³

By the nineteenth century, however, the definition of what constituted property for purposes of theft law had begun to expand. Old statutes were interpreted more broadly, and new, specialized statutes were enacted to deal with the misappropriation of certain kinds of intangible and semi-tangible property. As things like licenses, franchises, business good will, and interests in stock began to occupy an increasingly important place in the economy, it is not surprising that society sought protection—wisely or not—in the criminal law.¹¹⁴

By the time theft law was consolidated in the twentieth century, the definition of property subject to theft had become strikingly broad. As described in Chapter 1, an early draft of the MPC included within the list of things that would be treated as property subject to theft “patents, copyrights, and trademarks.”¹¹⁵ The final draft omitted references to these specific forms of intellectual property and instead simply referred to “tangible and intangible personal property.”¹¹⁶ The Theft Act similarly defined property as “money and all other property, real or personal, including things in action and other intangible property.”¹¹⁷ And the Canadian Criminal Code said simply that one commits theft if he steals “anything, whether animate or inanimate.”¹¹⁸ The question to consider is not so much how these specific provisions should be interpreted, but rather the extent to which theft should be understood *from a conceptual standpoint* to encompass misappropriation of intangibles.

Information and Ideas Not Protected by Intellectual Property Law

Later in this chapter, I will consider the misappropriation of things intellectual property law *does* protect, but for now I want to consider several forms of economically valuable information to which copyright, patent, trademark, and trade secrets law *does not* apply.¹¹⁹ Information itself is a hugely complicated concept, the science and theory of which have given rise to a new academic field of study.¹²⁰ I use the term here, loosely, to refer to things like compilations of names and addresses, data about stocks and bonds, patient medical histories, employee records, and diplomatic communiques. Precisely because

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such things do not enjoy the independent protection of intellectual property law, prosecutors have sought to rely on the general safety net provided by the law of theft to address their misappropriation.¹²¹

Such attempts have not always been successful. As a general matter, English and Canadian courts have tended to exclude information from the scope of property subject to theft. American courts have normally been more open to the possibility, but they have not been consistent in doing so.

Typical are three U.S. cases that send mixed signals. In the Supreme Court case of *Carpenter v. United States*, the defendant, Winans, was a reporter for the *Wall Street Journal*, one of two writers of the daily “Heard on the Street” column, which offered recommendations concerning the advisability of investing in selected stocks.¹²² *Journal* policy treated such information as confidential and prohibited its use, prior to publication, by anyone other than the *Journal* itself. Winans conspired with others to trade securities on the basis of prepublication information. In affirming his conviction for, *inter alia*, fraudulently misappropriating property from the newspaper, the Court said that the intangible nature of the information misappropriated “does not make it any less ‘property’ ” than other forms of property traditionally protected by the mail and wire fraud statutes.¹²³ It did not matter that the *Journal* still “had” the information even after Winans had used it.

Analogous is the Wyoming case of *Dreiman v. State*. The defendant in that case had previously been in a romantic relationship with the victim, which she broke off. After the victim changed to an unlisted telephone number, the defendant broke into her house and copied the phone number, her social security number, and her insurance policy numbers.¹²⁴ He also took tangible property. In upholding Dreiman’s conviction for burglary, the Wyoming Supreme Court held that, regardless of whether he had actually taken any tangible property, he would still have been guilty of the offense, since the confidential information he took *did* constitute property for purposes of burglary law.¹²⁵

In contrast is the Colorado case of *People v. Home Insurance Co.*, in which the defendants, investigators working on behalf of an insurance company, obtained confidential medical information concerning two patients at a Denver hospital. The physical records themselves never left the hospital file room; rather, the information in the records was conveyed over the telephone. Despite the broad definition of property

in its statute, the Colorado Supreme Court applied a rule of “strict construction,” and held that confidential medical information did not constitute a “thing of value” for purposes of theft.¹²⁶

The law in England and Canada is more uniform, if only because neither country has the profusion of separate jurisdictions the United States has. In the English case of *Oxford v. Moss*, a university student dishonestly gained access to a copy of an examination in advance of its administration.¹²⁷ After reading its contents, he returned the paper to where he had found it, at no time having had an intention to steal the tangible paper itself. The question was whether such confidential information was intangible property for purposes of the Theft Act. The appellate court said no, but provided little in the way of analysis. Judge Smith said simply that it was “clear” that civil cases involving the misappropriation of confidential information were inapposite.¹²⁸ Judge Wein said that the defendant had “no intention permanently to deprive the owner of” property.¹²⁹

Finally, in the Canadian case of *R. v. Stewart*, the defendant, as part of an effort to organize a hotel union, attempted to obtain confidential employee information, including names, addresses, and telephone numbers.¹³⁰ Had the scheme been carried out, no physical object would have been taken, just information. On appeal to the Canadian Supreme Court, the defendant’s conviction for encouraging theft was reversed on the grounds that confidential information of this sort did not constitute a “thing” for purposes of the theft statute. In reaching this conclusion, the court identified the same two factors I have identified as crucial to determining whether something should be regarded as property for purposes of theft law. It said that, to be the subject of theft, a thing (1) “must be of a nature such that it can be the subject of a proprietary right” and (2) “must be capable of being taken or converted in a manner that results in the deprivation of the victim.”¹³¹

With respect to the first factor, although it conceded that confidential information had been subject to protection in various civil cases, the *Stewart* court reasoned that such protections had “arise[n] more from an obligation of good faith or a fiduciary relationship than from a proprietary interest.”¹³² With respect to the second factor, the court said that, as a general matter, only tangible objects can be subject to the kind of deprivation that theft law requires “because if one appropriates confidential information without taking a physical object, for example

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1 by memorizing or copying the information or by intercepting a private
 2 conversation, the alleged owner is not deprived of the use or possession
 3 thereof.”¹³³ In the end, however, the court seems to have decided the
 4 case primarily on the basis of judicial restraint, stating that “the realm
 5 of information must be approached in a comprehensive way, taking into
 6 account the competing interests in the free flow of information. . . . The
 7 choices to be made rest upon political judgments that . . . are matters of
 8 legislative action and not of judicial decision.”¹³⁴

9 So, should the information at issue in these cases have been consid-
 10 ered property subject to theft or not? In each case, I think the informa-
 11 tion taken was indeed commodifiable, since information of these sorts
 12 is sold, legally and illegally, all the time.¹³⁵ The harder question is
 13 whether the taking of such information was rivalrous in the way that
 14 theft law requires. To answer that question, we need to look at each
 15 case individually.

16 At first glance, information seems to be a classic, nonrivalrous public
 17 good: even if you copy down, without my permission, my telephone
 18 number, social security number, insurance policy numbers, medical
 19 information, exam questions, or employee information, I have not, it
 20 would appear, lost anything. On first look, then, the zero-sum para-
 21 digm seems unfulfilled.¹³⁶ But a fuller, more meaningful inquiry
 22 would consider whether the value of the information taken in each
 23 case was so substantially reduced as to cast doubt on its continued use-
 24 fulness. The principle is similar to that found in Section 77 of the
 25 draft Scottish Criminal Code (proposed in 2003 but never enacted),
 26 which says that a person (1) commits theft if he steals, (2) steals if he
 27 deprives another of property, and (3) deprives another of property if,
 28 *inter alia*, he “depriv[es] that person of its value.”¹³⁷

29 Was this test met in these four cases? In *Dreiman*, the defendant
 30 copied an unlisted phone number, social security number, and insur-
 31 ance policy numbers. The social security number and insurance policy
 32 numbers were not confidential, and there is no reason to believe they
 33 lost their value when the defendant copied them down. But a different
 34 analysis should apply with respect to the victim’s unlisted phone
 35 number. The whole point of having such a number was to avoid con-
 36 tact with her former boyfriend. By copying the number and thereby
 S37 eliminating its confidentiality as to him, the defendant deprived the
 R38 victim of the number’s essential value. In that sense, the unlisted
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phone number was stolen while the social security and insurance policy numbers were not. A similar analysis should probably apply in the case of *Moss*. In my view, where even a single student obtains the questions in advance, the integrity of the exam is compromised and its basic value negated. In such a case, it makes sense to say that a theft has occurred. A harder question is presented by the other three cases. Without more information than is given in the opinions, it is difficult to say whether or not the prepublication information at issue in *Carpenter* (traded on by only a small handful of investors), the medical information at issue in *Home Insurance*, and the employee information at issue in *Stewart* retained their basic value even after being copied and used.¹³⁸

And what about the recent case of WikiLeaks founder Julian Assange, who obtained copies of hundreds of thousands of confidential U.S. State Department files from a leaker, believed to be Army intelligence analyst Bradley Manning? In late 2010, Assange began giving the files to leading news organizations around the world to publish in their respective publications. Assange subsequently published the information on his own site. Putting aside questions about whether Assange and others violated the Espionage Act, it is worth asking whether any theft-related crimes might have been committed. To answer this question, we first need to ask whether information of this sort constitutes property that can be stolen. I assume that such information is commodifiable (if only on the black market). The harder question, again, is whether it is rivalrous. It appears that the State Department was not actually deprived of any physical documents; everything that was disseminated consisted of computer copies of documents of which the State Department retained the “original.” Once again, then, we need to ask whether the revelation of such confidential information deprived the State Department of its basic value. I would say yes; if there is any kind of information the value of which is tied to its confidentiality, it is probably information related to international diplomacy and national security.

If I am right about this, then we would need to ask what theft and theft-related crimes were committed and who committed them. First, I would say that Manning, the Army analyst who allegedly leaked the documents, breached his duty of confidentiality to the Army and converted the information to his own use; he therefore committed a kind

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of embezzlement. Assuming that Assange encouraged, aided, or abetted Manning in his act, then Assange could be regarded as an accomplice to theft or possibly a coconspirator. As for the news organizations, I assume that they were not involved until after the theft had already occurred. Nevertheless, they certainly knew that the information had been stolen, and instead of “returning” it to the State Department, they published it in their publications. The media companies could then, theoretically at least, be prosecuted for receiving stolen property. Of course, whether any of these sorts of prosecution would be good policy—especially in light of the public’s supposed “right to know”—is an entirely different question.

At this point, it is worth noting a certain conceptual convergence that has occurred. To commit theft, one must take or assume control over another’s property with the intent to deprive him of it permanently. The focus of this chapter is on the kinds of property subject to theft. But, as I have just shown with respect to information, simply because something counts as property for purposes of theft in one context does not necessarily mean it will count as property for purposes of theft in another. Whether something should count as property subject to theft will often turn not only on whether it *can* in some conceivable case be taken from its owner permanently, but also whether its owner actually *has* in some particular case been deprived of his property.

Identity Theft

Probably no theft-related crime has received more media and government attention in recent years than identity theft. It has been called the “fastest growing crime in America” and the “crime of the new millennium.”¹³⁹ According to a study conducted by Javelin Strategy & Research, the number of consumer victims of identity fraud in the United States increased 12 percent to 11.1 million adults in 2009, while the total annual fraud amount increased by 12.5 percent to \$54 billion.¹⁴⁰

The term *identity theft* first became common starting in the late 1990s as the Internet was coming into widespread use.¹⁴¹ States began passing laws specifically aimed at combating the problem,¹⁴² and Congress in 1998 enacted the Identity Theft Assumption and Deterrence Act.¹⁴³ The subject of identity theft has also generated a significant amount of

attention from social scientists, legal academics, and government agencies, who have sought to measure the prevalence of the crime, the means by which it is committed, its impact on victims, and the means by which it might be controlled.¹⁴⁴ But identity theft has attracted relatively little attention from criminal law theorists.¹⁴⁵ In this section, I aim to develop a conceptual analysis of this important crime.

Under both federal and state law, the term *identity theft* typically refers to the unauthorized use of another's identity or personal information for the purpose of (1) obtaining property or economic benefit of some sort or (2) committing some other, nonproperty offense, such as drug trafficking or terrorism.¹⁴⁶ I shall not be focused on cases in which the offender seeks to obtain property or commit some other crime by means of using a *false* identity, as opposed to using the identity of a *real* person. Nor shall I be directly concerned with cases in which the identity used belongs to a decedent.¹⁴⁷

Understood in the first sense of using another's identity or personal information to obtain property, identity theft typically involves two distinct *actus reus* elements and two distinct kinds of victim. With respect to *actus reus*, the identity thief must, first, obtain or possess another's personal information (such as credit card numbers, date of birth, social security number, mother's maiden name, password, or personal identification number). Often, this obtaining will be done by illicit means, such as housebreaking, deception, threats, force, computer hacking, phishing, telemarketing frauds, or intercepting mail. Indeed, there is evidence that obtaining personal information for use in identity theft is now one of the main motives for much burglary, robbery, theft from cars, and pickpocketing.¹⁴⁸ But identity information can also be obtained by legal means, such as where a waiter, clerk, sales representative, hospital employee, or landlord comes into possession of such information in the course of performing his job (we can think of this as a kind of "identity embezzlement"¹⁴⁹), or where the identity thief rummages through a trashcan or dumpster looking for personal information.¹⁵⁰

The second *actus reus* element consists of using the information to obtain property or credit or to avoid arrest or otherwise hide one's identity from law enforcement. This second step is carried out by taking over an existing account, opening a new account, using a credit or debit card, filing for a tax refund, obtaining a rental car, giving false information to a police officer, and the like. Typically, the identity thief will

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1 use the assumed identity repeatedly until the identity’s usefulness is
 2 exhausted. Often, the victim of identity theft will not even know that he
 3 has been victimized until long after the fact.¹⁵¹ Some identity thieves
 4 also sell identity information to others and “breed” additional identity-
 5 related documents such as driver’s licenses, passports, and visas.

6 Identity theft also typically involves two kinds of victim. The first is
 7 the individual whose identity is stolen, usually referred to as a *consumer*
 8 victim. Such a person can suffer inconvenience, embarrassment, repu-
 9 tational injury, time wasted, bad credit, and monetary loss. The second
 10 kind of victim is the financial institution duped by the use of the stolen
 11 identity—the credit card company, bank, retailer, rental car agency, or
 12 other seller of goods or services. These institutions are typically the
 13 ones who absorb most of the financial loss.

14 With respect to the institutional or business victims, identity theft is
 15 basically indistinguishable from false pretenses. The identity thief uses
 16 a particular form of deception—the assumption of a false identity—to
 17 trick the institutional victim into handing over property. Although the
 18 scope of modern identity thefts may be larger than traditional frauds,¹⁵²
 19 and may be carried out using new computer technologies, the basic
 20 moral content of the act—in terms of harms and wrongs—is no dif-
 21 ferent from other frauds. And to the extent that false pretenses is
 22 properly understood as a form of theft, it is therefore also appropriate
 23 to think of this aspect of identity theft as a form of stealing.

24 What is especially interesting, and seemingly novel, about identity
 25 theft, however, are the harms and wrongs caused to the individual or
 26 consumer victim, the person whose identity is used without his permis-
 27 sion. Such harms can be painful and traumatizing. In T. C. Boyle’s
 28 novel *Talk Talk*, for example, a “high-living lowlife”¹⁵³ named Peck
 29 Wilson obtains a driver’s license and credit card using the identity of a
 30 young deaf woman named Dana Halter. Such use causes Dana great
 31 inconvenience and embarrassment: she’s arrested and jailed for an
 32 offense Peck committed, she loses her job, and finds herself being
 33 dunned by bill collectors for past-due accounts she never opened. A
 34 victim’s assistance counselor tells Dana she’s not alone in having had
 35 her identity misappropriated:

S37 [S]he trot[s] out one horror story after another: the woman who had
 R38 her rental application swiped from the desk in her landlord’s office
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and wound up with some thirty thousand dollars in charges for elaborate meals and services in a hotel in a city she'd never been to, as well as the lease on a new Cadillac, the purchase price and registry of two standard poodles and \$4,500 for liposuction; the twelve-year old whose mother's boyfriend assumed his identity till the kid turned sixteen and was arrested when he applied for a driver's license for crimes the boyfriend had committed; the retiree whose mail mysteriously stopped coming and who eventually discovered that thieves had not only filed a change of address but requested his credit reports from the three credit reporting agencies so that they could drain his retirement accounts, cash his social security checks and even appropriate the 200,000 frequent flier miles he'd accumulated. And it got worse: deprived of income, the old man in question—a disabled Korean War veteran—wound up being evicted from his apartment for non-payment of rent and was reduced to living on the street and foraging from Dumpsters.¹⁵⁴

As traumatic and invasive as this aspect of the crime undoubtedly is, however, does it make sense, conceptually, to call it theft? Exactly what kind of property, if any, is the identity thief misappropriating when he passes himself off as someone else? Can such misappropriation really be understood as stealing?

The identity thief could be stealing two kinds of thing. The first thing he seems to take is personal *information* about his consumer victim, such as her driver's license number, credit card numbers, passwords, and the like. Such information is obviously commodifiable; there is a tremendous market for its sale. The problem, however, is determining whether such information should be regarded as rivalrous or nonrivalrous. Once again, we need to know the precise nature of the defendant's interference with his victim's property.

In cases where the identity thief uses *O*'s identity information just once or twice, *O* will probably not lose the ability to use such information herself. *O* still has her property. The classic zero-sum paradigm of tangible property theft is thus not satisfied. *D* has committed, at most, trespass or unauthorized use.

But one can also imagine cases in which the use of *O*'s identity information is so extensive that *O* would lose the ability to use the information herself. A difference in degree thus becomes a difference in kind.

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The principle is roughly analogous to one discussed in Chapter 2. There I presented cases in which the unauthorized borrowing of property was treated as theft when such borrowing resulted in a major portion of the property's economic value being lost (think again of a formerly fresh baguette borrowed, without the owner's permission, for the week). Here, the suggestion is not that the identity thief merely intended to borrow the victim's identity. Rather, it's that unauthorized use of another's identity information should be treated as theft in those cases where such use causes the victim to effectively lose the use of her property. At some point, the value of such information becomes so depleted that it makes sense to say that it has been stolen. Crucially, in such cases, the identity theft victim is deprived not only her ability to exclude others from use of her property but also of the ability to use the property herself. This is essentially what happened in Boyle's fictional case. Peck's use of Dana's identity information was so damaging that it had the effect of substantially reducing the value of the information to Dana herself, at least in the commercial setting. With Peck using her identity, Dana could no longer get a loan, use her credit card, or avoid custodial arrest.

The idea that a relatively limited taking of information does not constitute a theft while a more substantial one does finds a useful analogy in American constitutional law. Under the Takings Clause of the Fifth Amendment, governmental regulations that impact property rights do not normally constitute a constitutional taking requiring the payment of just compensation, but when those regulations go "too far," in Justice Holmes' words, just compensation is required.¹⁵⁵ Exactly how far is too far, of course, can be quite too difficult to say, both in the Takings context and in the theft context. Conceptually, however, the basic principle that a difference in degree can constitute a difference in kind seems sound.

The second candidate for property taken by the identity thief is, as the name of the offense would suggest, the victim's personal identity itself. Whether such a thing should count as property presents a tough issue. On the one hand, it is true that, in many states, the right of publicity affords individuals a property-like interest in the use of their name, likeness, photograph, portrait, voice, and other personal characteristics in connection with the marketing of products and services.¹⁵⁶ Individuals who have their names or images used commercially

must be compensated, and if they are not, they can sue for damages. On the other hand, there is a difference between allowing one's name, likeness, or other personal characteristics to be used in return for payment and actually selling one's identity. I would argue that personal identities are nontransferable and therefore noncommodifiable. My identity is mine and yours is yours, and we could not transfer them to each other even if we wanted to.

To the extent that we are concerned about the injury to the victim's identity (as opposed to the injury to his personal information), a better model than theft would be the common law crime of false personation. False personation has traditionally involved passing oneself off as a police officer or other public official. For example, the federal false personation statute applies to anyone who "falsely assumes or pretends to be an officer or employee acting under the authority of the United States" and "in such pretended character demands or obtains any money, paper, document, or thing of value."¹⁵⁷ But the crime has also sometimes been more broadly defined to include any passing off as another person to obtain some benefit or avoid some penalty, including cases where a person stopped by the police gives a false name to avoid arrest.¹⁵⁸ Whichever way it is defined, false personation involves a distinct, noneconomic harm that results from the offender's passing himself off as someone else.

Intellectual Property

Whether intellectual property of various sorts should constitute property for purposes of theft law presents among the most complex and pressing set of issues dealt with in this book. I begin by considering (1) how government and the entertainment industry have used the rhetoric of theft law to characterize the infringement of intellectual property; (2) the extent to which social norms are consistent or inconsistent with such rhetoric; and (3) some of the broader conceptual and policy issues that are implicated. I then evaluate a range of specific forms of intellectual property in which the infringement-as-theft claims has been made: copyright, patent, trademark, and trade secrets. I shall argue that the fact that one form of intellectual property infringement does or does not meet the criteria for theft does not necessarily mean that other forms of intellectual property infringement will yield the same result.

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Intellectual Property and the Rhetoric of Theft

The idea that infringement of intellectual property should be conceived of as a form of “theft” or “piracy” shows up in a range of contexts on the American scene. The terms are used most commonly in connection with copyright infringement, which is probably the intellectual property offense most likely to be committed by members of the general public, and therefore the offense about which those who use the terms most want to see the public “reeducated.” (Infringement of patents and misappropriation of trade secrets both tend to be the province of commercial firms in competition with the owner of intellectual property; infringement of trademarks is committed by both those who produce and those who consume counterfeit goods.)

My main focus here will be on use of the term *theft* rather than *piracy*. Piracy is arguably a subcategory of theft. Its core meaning is violent theft or kidnapping at sea, but it has also been used to refer to the unlawful reproduction of copyrighted works or plagiarism since at least the early eighteenth century.¹⁵⁹ As such, the term is doubly problematic. Not only does it imply that misappropriation of intangibles is like misappropriation of tangibles, but it also implies that violent theft is like nonviolent theft. For present purposes, it is unnecessary to deal much with intellectual property piracy except to note its rhetorical force. Instead, I shall focus mainly on intellectual property theft.

As early as 1999, in announcing the U.S. Justice Department’s initiative to make intellectual property crimes a “major law enforcement priority,” then-Deputy Attorney General (now Attorney General) Eric Holder emphasized that unauthorized downloading of intellectual property is “theft, pure and simple,” and that “those who steal our intellectual property will be prosecuted.”¹⁶⁰ Similarly, Deputy Assistant Attorney General John Malcolm, whose department oversees copyright infringement cases, said to expect more of these kinds of prosecutions because “there does have to be some kind of public message that stealing is stealing is stealing.”¹⁶¹

The Departments of Justice and Commerce have also sought to use educational and public relations campaigns to convince the public, especially young people, that Internet “piracy is theft” and that “pirates are thieves.”¹⁶² One of the first such efforts grew out of a Department of Commerce white paper recommending that:

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Certain core concepts should be introduced at the elementary school level—at least during initial instructions on computers or the Internet, but perhaps even before such instruction. For example, the concepts of property and ownership are easily explained to children because they can relate to the underlying notions of property—what is “mine” versus what is “not mine,” just as they do for a jacket, a ball, or a pencil. At the same time that children learn basic civics, such as asking permission to use somebody else’s pencil, they should also learn that works on a computer system may also be property that belongs to someone else.¹⁶³

The white paper was followed by the launching of the Justice Department’s brightly colored, cartoon-filled “Cyberethics for Kids” Web site laying out “Rules in Cyberspace” in an easy-to-follow list of dos and don’ts, which includes:

DON’T steal copyrighted computer programs (“software”) by copying it from the Internet. This is the same as stealing it from a store. People work hard to develop new programs and deserve to be paid for them. If software designers don’t get paid for their work, they can’t continue creating new software, such as new educational games or tools that help with schoolwork.¹⁶⁴

The Obama administration has in no way backed down from such rhetoric,¹⁶⁵ and the idea that intellectual property infringement is theft continues to be reflected in the practice of the Department of Justice’s Bureau of Justice Statistics, the most important collector of data on criminal justice matters in the United States, which classifies statistics on all enforcement of federal intellectual property laws under the general rubric of *Intellectual Property Theft*.¹⁶⁶

The movie and music industries, meanwhile, have waged their own campaigns to convince the public that infringement is a kind of theft.¹⁶⁷ For example, in 2004, the Motion Picture Association of America (MPAA) produced a brief video that appeared before program content on many DVDs. The voiceover and text of the ad said:

You wouldn’t steal a car.
 You wouldn’t steal a handbag.
 You wouldn’t steal a mobile phone.
 You wouldn’t steal a DVD.
 Downloading pirated films is stealing.

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Stealing is against the law.

Piracy: it's a crime.¹⁶⁸

In addition, in a raft of civil lawsuits brought against major distributors of peer-to-peer file sharing software such as Napster, Grokster, and Scour.com, as well as thousands of individual alleged file sharers, the entertainment industry again repeatedly invoked the language of theft.¹⁶⁹ As the longtime MPAA President Jack Valenti, echoing Justice Department officials, put it in announcing the filing of a lawsuit against Scour.com, “This is about stealing, plain and simple. Creative works are valuable property and taking them without permission is stealing, whether you download movies illegally or shoplift them from a store. Technology may make stealing easy. But it doesn’t make it right.”¹⁷⁰

The same equation of illegal use of intellectual property with theft shows up in the legislative context (presumably owing, at least in part, to heavy lobbying by the entertainment industry). For example, when Congress chose to criminalize copyright infringement not involving an economic motive or commercial benefit, it did so in a statute entitled the “No Electronic Theft Act.”¹⁷¹ When it enacted the Economic Espionage Act of 1996, it made it a crime to “steal” confidential information, and explicitly labeled the offense “theft of trade secrets.”¹⁷² And when it passed the Prioritizing Resources and Organization for Intellectual Property Act of 2008 (“PRO-IP Act”), which increases civil and criminal penalties for trademark and copyright infringement, members of both houses repeatedly emphasized the view that such activities constitute a form of theft.¹⁷³

Social Norms

To what extent do ordinary citizens (at least in the United States) agree with the view espoused by their government and the entertainment industry that infringement of intellectual property is akin to theft?¹⁷⁴ Most citizens have relatively little opportunity to infringe patents or steal trade secrets, or to be the victims of such conduct, and probably do not have strong views on its wrongfulness. Ordinary citizens are more likely to have the opportunity to infringe copyrights (and perhaps trademarks, when considering whether to purchase counterfeit goods), and there are in fact a significant amount of data regarding people’s practices and attitudes with respect to such conduct.

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According to studies conducted by the Pew Internet & American Life Project in the middle of the last decade, somewhere between 14 and 29 percent of respondents reported that they had downloaded music files from the Internet.¹⁷⁵ Another 15 percent said they had downloaded video files. About a third of these users said they were using peer-to-peer networks, on which downloads are usually illegal. Fifty-eight percent of music downloaders said they “did not care about the copyright” on the files they downloaded, as opposed to the 27 to 37 percent who said they did care.¹⁷⁶ Certainly, the incidence of unauthorized downloading of material from the Internet remains far higher than the incidence of theft of tangible goods.¹⁷⁷ For example, it has been estimated that between 50 and 90 percent of all computer software used is unauthorized.¹⁷⁸ The music industry contends that more than 2.6 billion infringing music files are downloaded every month.¹⁷⁹ Copyright infringement alone is estimated to cost about \$58 billion and 373,000 jobs a year.¹⁸⁰ One can hardly imagine the kind of dystopian society we would be living in if the incidence of tangible property theft were even a fraction of that amount.

At the same time, it appears that significantly fewer people were making illegal downloads when the last Pew study was conducted in 2004 than when the earlier studies were conducted in 2002 and 2003—exactly the period in which the music and motion picture industries were most aggressive in pursuing lawsuits and in employing their public relations campaigns. Thus, in 2004, about a third of the former music downloaders—close to six million Internet users—said they had “turned away from downloading.”¹⁸¹ If nothing else, we can say that social norms in this area are in flux.

Exactly why many people seem to have abandoned such practices, at least for a time, is unclear, however. Four possibilities come to mind: One is that former downloaders now refrain from such conduct because they have been convinced that illegal downloading really is equivalent to theft, or at least is morally wrong to some extent. A second is that, whether or not they believe that illegal downloading is morally wrong, the former downloaders are afraid of possible lawsuits and criminal prosecutions if they download and get caught. A third possibility is that, with the closure of Web sites such as Napster, illegal downloading has become more difficult. A final possibility is that, with the advent of popular electronic services like iTunes, legal downloading has become more convenient.¹⁸²

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The empirical study described in Chapter 1 offers some useful insights here. Recall that subjects were asked which they regarded as more blameworthy: illegally taking a fifty-dollar physical book or illegally downloading a fifty-dollar computer file. Fifty-six percent said that taking the physical book was more blameworthy, 3 percent said that downloading the computer file was more blameworthy, and 41 percent said there was no difference. On a scale of 1 to 9, the average blameworthiness score was 7.65 for taking the physical book as compared to 6.30 for taking the computer file.

These data suggest that the general population may well be split on the question of infringement/theft equivalence. While a majority of people believe that, other things being equal, illegal downloading is *not* as blameworthy as stealing a tangible object, a significant minority of people (44 percent) believe that it is. A significant percentage of people also seem to believe that, even if illegal downloading is not *as wrong as* physical stealing, it is still wrong to some significant degree.

Background Issues in Intellectual Property Law

As suggested at the beginning of this chapter, one of the challenges in deciding what kinds of property should be subject to theft is balancing the demands of theft law with the demands of other law that governs the property sought to be protected. The challenge is particularly acute in the context of intellectual property law—a highly complex subject, with an ever growing body of legislation and an immense academic literature that reflects a wide range of fiercely fought policy and conceptual debates. For present purposes, it will have to suffice to identify only the most prominent landmarks.

One question is whether and to what extent intellectual property should even be regarded as “property” in the first place.¹⁸³ From a conceptual standpoint, the question is an important one because, if one assumes that intellectual property *is* analogous to tangible property, a range of implications about how to protect such property follows. Among these is the notion that the wrongful taking of intellectual property potentially constitutes theft. If one believed that intellectual property was *not* property, however, it is hard to see how theft law could ever apply. As a means of control, one would presumably have to look to other approaches, such as regulatory or tort law.

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A second and even more important question is, regardless of whether intellectual property is or is not property, how should it be regulated? There are two competing policy demands here. On the one hand is the problem of free riders. Anyone with access to a photocopier or a computer, broadband Internet connection, and peer-to-peer sharing software can easily engage in low-cost, large-scale copying.¹⁸⁴ If competition from subsequent copies reduces the price to the marginal cost of production, then the initial publisher will have little or no incentive to distribute the work in the first place.¹⁸⁵ To ensure sufficient incentive, intellectual property law gives creators limited rights in their creative outputs so that they may profit from their innovation and be motivated to produce even more new ideas.¹⁸⁶ Copyright, in other words, substitutes legal excludability for physical excludability.¹⁸⁷ The public, in turn, benefits from the opportunity to obtain ideas and inventions it would not otherwise have access to.

On the other hand, we should be cautious about providing *too much* protection to intellectual property. The purpose of copyright (and, by extension, other forms of intellectual property law) is, in the words of the Constitution, to “promote the progress of science and the useful arts.”¹⁸⁸ While restrictive intellectual property laws protect ideas from free riding, they also potentially impose barriers to others who want to use those ideas to make new inventions of their own, or to create new works of art, or write new works of scholarship. For this reason, intellectual property rights tend to be more limited in time and scope than rights in tangible property, and such rights are granted only when certain basic threshold requirements for protection are met. As Eduardo Moisés Peñalver and Sonia Katyal have put it, “[i]ntellectual property rights, though robust, are nonetheless frequently relativized by countervailing interests like freedom of expression, freedom of imagination, the right to innovate, and other public-welfare considerations.”¹⁸⁹ The question of how exactly to balance creators’ incentives to create with the public’s right to access new ideas is, in essence, *the* question that divides so-called intellectual property (IP) minimalists from IP maximalists. Maximalists maintain that intellectual property should be heavily protected so that people will continue to have economic incentives to produce more intellectual property. Minimalists maintain that intellectual property should be only loosely controlled to allow the free flow of information.

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1 Yet another question concerns the extent to which criminal law,
 2 whether in the guise of theft or not, plays an appropriate role in regu-
 3 lating intellectual property. The criminal law offers the most severe
 4 sanctions that can be imposed in a civil society and presents the risk
 5 that not only socially harmful conduct but also socially beneficial con-
 6 duct will be deterred. Minimalists almost invariably reject the use of
 7 criminal sanctions, except perhaps for the most egregious violations.¹⁹⁰
 8 But even those maximalists who favor an expansive approach to intel-
 9 lectual property rights would presumably concede that civil sanctions
 10 are ordinarily to be preferred over criminal ones.

11 Although I cannot hope to resolve these issues here, they are worth
 12 keeping in mind as the discussion proceeds.

13 Distinguishing among Types of Intellectual Property

14 Intellectual property law is hardly a monolith. While all forms of intel-
 15 lectual property share some important characteristics, there are also
 16 significant differences.¹⁹¹ Even if we were to determine that one form
 17 of intellectual property infringement was or was not theft-like, we
 18 could not thereby conclude that other forms of intellectual property
 19 infringement were or were not necessarily theft-like as well.¹⁹² We need
 20 to look at each of the major forms of intellectual property—copyright,
 21 patent, trademark, and trade secrets—on an individual basis.

22 Before beginning, I offer four brief clarifications. First, for purposes
 23 of discussion, I shall be focusing on the basic elements of these various
 24 forms of intellectual property as they exist, and as they differ from
 25 each other, under American law, while recognizing that they may not
 26 be formulated the same way in other jurisdictions. Second, I shall be
 27 focusing for the most part on worst-case scenarios—cases in which the
 28 infringer intended to infringe and in which the infringement was
 29 unambiguous. Third, the various forms of intellectual property that I
 30 will be dealing with should not be thought of as mutually exclusive.
 31 For example, when people say, loosely, that Facebook founder Mark
 32 Zuckerberg was sued for allegedly “stealing the idea” for his social net-
 33 work site from several Harvard classmates who allegedly had it first,¹⁹³
 34 they are (or should be) using that as a shorthand for describing a law-
 35 suit that alleges both copyright infringement and misappropriation of
 36 trade secrets (as well as breach of contract, breach of fiduciary duty,
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unjust enrichment, unfair business practices, and intentional interference with prospective business advantage).¹⁹⁴ Fourth, and perhaps most importantly, my goal at this point is not to determine whether it would be good policy, from the perspective of intellectual property law, to allow prosecution for misappropriation of copyright, trademark, patent, and trade secrets (though I touch on this issue in the final section of the chapter), but simply whether it makes sense within the conceptual framework I have been developing to think of misappropriation of intellectual property as a form of theft.

Copyright. Copyright law is meant to protect “original works of authorship” that are fixed in a tangible form of expression.¹⁹⁵ These include literary works, musical compositions, plays, motion pictures, sound recordings, architectural works, photographs, visual art, computer software, even, apparently, yoga postures and tattoos.¹⁹⁶ Copyright protection extends only to the expression of an idea, not the idea itself.¹⁹⁷ Copyright law gives the author a number of exclusive rights in the protected work, including the right to make copies and to distribute it to the public, have it performed, and displayed. It also provides the right to control derivative works, such as translations and screenplays that are based on the protected work. Such exclusive rights are limited by several important doctrines, the most important of which is the fair use doctrine, which allows limited unauthorized use of copyrighted works in contexts such as educational activities, news reporting, literary and social criticism, and parodies.¹⁹⁸ Rights in copyright are also limited in terms of duration—the life of the author plus seventy years.¹⁹⁹

Copyright infringement occurs when someone other than the copyright owner engages in any of the itemized rights without the owner’s permission.²⁰⁰ Thus, it is infringement to copy, adapt, distribute, perform, or display a protected work unless the act is expressly exempted (as in the case of fair use or first sale). Infringement actions can lead to injunctive relief, damages, and criminal sanctions. Criminal sanctions are reserved for cases in which the infringement (1) was committed for purposes of commercial advantage or private financial gain or (2) involved copyrighted works having a total retail value of more than \$1,000.²⁰¹

Is copyright infringement properly understood as a form of theft? (I put to the side the practical question whether, given the preemptive

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effect of federal copyright law, a state criminal prosecution for theft could actually be brought.²⁰²) Authorities significantly disagree on this question. On the one hand are statements from prosecutors, legislators, the entertainment industry, and at least some commentators to the effect that copyright infringement by downloading should be thought of as “stealing,” “piracy,” or “theft pure and simple.”²⁰³ On the other hand, various authorities have expressed skepticism about such an approach. Most significant is the Supreme Court’s 1985 decision in *Dowling v. United States*, in which the defendant was charged with violating the National Stolen Property Act, which makes it a crime to transport over state lines stolen “goods, wares, [or] merchandise.”²⁰⁴ The defendant had allegedly conspired to transport unauthorized recordings he had made of copyrighted songs performed by Elvis Presley. In reversing the conviction, the Supreme Court rejected the government’s argument that copyright infringement was an attack on the value of a copyright owner’s property tantamount to or actually theft. The Court reasoned that:

The copyright owner . . . holds no ordinary chattel. A copyright, like other intellectual property, comprises a series of carefully defined and carefully delimited interests to which the law affords correspondingly exact protections. . . . Thus, the property rights of a copyright holder have a character distinct from the possessory interest of the owner of simple “goods, wares, [or] merchandise,” for the copyright holder’s dominion is subjected to precisely defined limits.

While one may colloquially link infringement with some general notion of wrongful appropriation, infringement plainly implicates a more complex set of property interests than does run-of-the-mill theft, conversion, or fraud. As a result, it fits but awkwardly with the language Congress chose—“stolen, converted or taken by fraud”—to describe the sorts of goods whose interstate shipment [the statute] makes criminal.²⁰⁵

The majority opinion in *Dowling* thus makes clear that, at least within the context of the National Stolen Property Act, the Court does not regard copyright infringement as a species of theft. And there is English law to the same effect.²⁰⁶

Thinking of copyright infringement as theft is indeed problematic, but for reasons different than those emphasized by the Court in *Dowling*.

The real problem is not that copyright is “carefully defined and carefully delimited” by doctrines such as fair use. There are many cases in which rights in real or personal property are limited in duration and by various restrictions on use, and yet theft law would still apply. Imagine, for example, that *F* establishes a trust that gives his son, *S*, the right to live in Blackacre Manor during *S*’s lifetime and to have use of all of the fixtures therein. Assume that under the trust, ownership of the house and fixtures will pass to *F*’s granddaughter upon *S*’s death. Assume further that the trust also prohibits *S* from removing, disposing of, assigning, alienating, or encumbering any of the fixtures in the house. Now imagine that *D* breaks into Blackacre Manor one night and steals a valuable painting hanging on the wall. Despite the fact that *S*’s interest in the painting was limited in duration and scope of use, we would have no problem at all saying that the painting was clearly property that could be stolen and that *D* had therefore committed theft. By analogy, the fact that rights in copyright are limited in duration and scope of use should not by itself preclude the applicability of theft law.²⁰⁷

The real question is whether the kind of property protected by copyright law, though clearly commodifiable, is rivalrous and therefore subject to the kind of zero-sum transaction that theft law requires.²⁰⁸

To answer that question, consider the following hypothetical and its three variations. *O* has written a copyrighted monograph with a limited market potential (just for fun, we can say it’s an obscure book on the moral theory of theft law). The work is available for downloading from the publisher’s Web site for forty dollars. The publisher anticipates that it will sell about a thousand copies of the work and that almost all of these will be purchased by libraries and by a relatively small group of readers in *O*’s field, most of whom belong to the same small number of professional associations.

Variation 1: *D*¹ wants to read the monograph but does not want to pay the price charged, so she makes an illegal download for her own personal use.

Variation 2: *D*² thinks that forty dollars is too much for anyone to pay, so she downloads the book from the publisher’s Web site, makes a thousand digital copies, and sells them (or gives them away—it makes no difference) to libraries and individuals whom she has reason to believe would otherwise buy the book.²⁰⁹

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Variation 3: The paywall on the Web site where *O*'s book is being sold is easily circumvented, and a thousand of the otherwise most likely buyers—librarians and readers D^3 through $D^{1,002}$ —each acting independently of each other, make illegal downloads of the work for their own use.

Which, if any, of these cases involves stealing?

The first thing to observe is that, in all three cases, *O* and *O*'s publisher still “have” the work even after the illegal downloads have occurred: in none of the cases has *D* taken the only copy that *O* has. The material protected by copyright is thus a nonrivalrous public good and the classic zero-sum paradigm of tangible property theft would seem not to be satisfied.²¹⁰

Nevertheless, in each case, *O* has lost, or potentially lost, something of value. In the first variation, D^1 potentially deprives *O* of the income he might have received had D^1 paid for the download. The situation is analogous to the case of Sally, who sneaked into the hall to hear ABC's lecture in the empirical study. *O* has suffered a limited setback to his interests in property: D^1 has used *O*'s property without his permission, but he has not deprived him of it. We can say at most that D^1 's conduct involves an act of trespass, unauthorized use, or unjust enrichment.²¹¹

In the second variation, by contrast, D^2 potentially deprives *O* not only of the income he would have received had D^2 paid for the work, but also of the income he would have received had the thousand other potential buyers paid for it. D^2 has cut into *O*'s potential revenues much more significantly than D^1 . Indeed, the economic value of *O*'s property has been virtually negated. The situation here is analogous to the case of extreme identity theft in Boyle's novel. Once again, a difference in degree becomes a difference in kind. As in the case where *D* borrowed *O*'s fresh baguette for a week, D^2 's conduct here satisfies, or comes close to satisfying, the zero-sum paradigm that exists in cases of tangible goods. In such cases, we should be able to say that a theft has occurred.

As for the third variation, note that the total loss to *O* is the same as in the second variation. The difference is that no single agent is responsible for such loss. Instead, the responsibility is spread among a thousand independently acting agents, each of whose individual culpability is indistinguishable from D^1 's. The harm is significant in the

aggregate, but no single offender or group of offenders is sufficiently culpable to justify criminalization.²¹²

Patent. Patent law provides rights to inventors of new, useful, and nonobvious inventions, including chemical, electrical, and mechanical products and processes, as well as other pragmatic innovations in fields ranging from biotechnology to business methods.²¹³ An invention is judged useful if it is minimally operable towards some practical purpose; and it is judged nonobvious if it is beyond the ordinary abilities of a skilled artisan knowledgeable in the appropriate field.²¹⁴ To receive a patent, an inventor must file a patent application with the United States Patent and Trademark Office (PTO). The PTO examines applications to ensure that the invention meets the requirements of patent law. As in the case of copyrights, the term of patents is limited. Under current law, for patents filed on or after June 8, 1995, the term of the patent is twenty years from the earliest claimed filing date.²¹⁵ Granted patents confer the right to exclude others from making, using, or selling the patented invention. They may also be assigned or licensed to others.

Patent infringement occurs where the infringer “without authority makes, uses, offers to sell, or sells any patented invention.”²¹⁶ Patentees may file a civil suit to enjoin infringers and obtain monetary damages. Under current U.S. law, patent infringement is not a crime, though it is treated as such in a number of other countries, including Japan, Brazil, and Thailand; and proposals to make patent infringement a crime have been raised from time to time in the context of international law.²¹⁷

Patent infringement has on occasion been spoken of as a form of theft,²¹⁸ though such usage is less common than in the context of copyright or trade secrets. Is there an argument that patent infringement should properly be understood as such? Under U.S. law, the infringer’s intent is mostly irrelevant. An individual who was previously unaware of the existence of the patent in question, or even of the whole patent system, may nevertheless be found to be an infringer.²¹⁹ Furthermore, a large percentage of patents do not hold up upon scrutiny. One study of around three hundred litigated patents found that 46 percent of them were invalidated.²²⁰ Thus, a potential infringer often cannot be certain whether she is violating a legitimate patent.²²¹

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1 For purposes of analysis, however, I will focus on cases of clear,
 2 direct, and willful patent infringement.²²² The facts of *Avia Group*
 3 *International, Inc. v. L.A. Gear California, Inc.* provide a good exam-
 4 ple.²²³ L.A. Gear sold a shoe known as Model No. 584 (“Boy’s Thrasher”)
 5 that was designed and manufactured by the Taiwanese firm Sheng
 6 Chun. Avia, believing that the L.A. Gear shoe infringed its patent for
 7 an ornamental design used on an athletic shoe outer sole, sent L.A.
 8 Gear a letter demanding that it desist from selling the Boy’s Thrasher
 9 model. L.A. Gear then sent a letter to Sheng Chun stating, “[u]rgently
 10 need pattern corrections on Style 584 as to avoid infringement on
 11 AVIA Model 750. Sending these fax ideas for possible solutions.” Sheng
 12 Chun responded by stating that pattern modifications were “impos-
 13 sible.” L.A. Gear proceeded to place an order for manufacture of the
 14 shoe with the infringing patent anyway. A court subsequently deter-
 15 mined that Avia’s patent had been infringed. It permanently enjoined
 16 L.A. Gear from further infringement and awarded Avia substantial
 17 damages and attorney’s fees.

18 Is an intentional patent infringement case such as this (admittedly,
 19 not the typical case of patent infringement) properly understood as
 20 theft? The analysis is similar to that of copyright infringement. L.A.
 21 Gear’s use of Avia’s patent was nonrivalrous in the sense that it did not
 22 impact Avia’s ability to use the invention in any way. But this is not to
 23 say that Avia did not suffer a loss. Because L.A. Gear did not pay a
 24 license fee for use of the patent, Avia lost income it might otherwise
 25 have earned. That, by itself, would not be enough to constitute theft
 26 on my account, however, since it only speaks to Avia’s ability to exclude,
 27 not its ability to use. At most, it would constitute unauthorized use.

28 Based on the facts as presented in the opinion, it is impossible to say
 29 whether L.A. Gear’s unauthorized use of the patent was so extensive
 30 that it deprived the patent owner of the basic value of the patent. Such
 31 cases certainly do exist, however. An example is arguably provided by
 32 the case of Bob Kearns, the inventor of the intermittent windshield
 33 wiper, for which he obtained his first patent in 1964. Kearns tried to
 34 interest the American Big Three automakers in his invention, but none
 35 took him up on his offer.²²⁴ Within a couple of years, however, each
 36 company began to install intermittent windshield wipers on their cars,
 S37 allegedly in violation of Kearns’s patents. As a result of their infringe-
 R38 ment, the value of the patent was essentially lost.²²⁵ By the time the
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lawsuits were decided (and Kearns was awarded substantial damages) the patents had expired. In such a case, we might say that the defendants' trespass was so significant that it deprived the owner of the economic value of his property and thereby crossed the threshold to become theft.

Trademark. Trademark law protects words and symbols used by a merchant to identify its goods or services and to distinguish them from those of others.²²⁶ The symbol can be a word, a phrase, a design, an image, a sound, a color, or even a fragrance. Trademarks protect goods like *Knopf Borzoi* books, and service marks protect services like *Westlaw* computer research. To qualify as a mark, a symbol must “identify and distinguish” the good or service. A symbol becomes a mark upon bona fide use in commerce in connection with relevant goods or services. Trademarks have an initial validity of ten years upon issuance by the PTO, but owners can renew them indefinitely every ten years if the marks continue being used.²²⁷ Trademarks can also be obtained under state common law.

To infringe a trademark, an infringer must use the mark in commerce in connection with the sale of goods or services in such a way that it is likely to cause confusion, mistake, or deception.²²⁸ Like copyright law, trademark law has a number of doctrines that carve out certain areas of expression from control of the trademark owner, such as parodies and comparative advertising.²²⁹ Trademark law tends to rely more heavily on private enforcement than on criminal prosecutions. Criminal penalties have applied in the realm of trademark in the United States only since the adoption in 1984 of the Trademark Counterfeiting Act, which makes it a crime to engage in the intentional trafficking of counterfeit goods or services.²³⁰ Only the most egregious, “absolute core case of trademark infringement”—where a defendant uses the identical mark owned by a plaintiff on the same type of goods and sells those goods in direct competition in the same geographic area—leads to criminal prosecution.²³¹ Such cases are referred to as trademark *counterfeiting*, *infringement*, or *passing off*. The term *theft* is sometimes used as well,²³² though such rhetoric is less pervasive in the realm of trademarks than in the case of copyright and trade secrets.

As an example of a core case of trademark infringement, consider the facts of *Burger King v. Mason*.²³³ The defendants had entered into a

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franchise agreement with Burger King, which gave them the right to operate a number of Burger King restaurants and use the Burger King name and various associated trademarks and forms of trade dress. The relationship then soured, and Burger King terminated the agreements, as it was entitled to do. When the defendants nevertheless continued using the Burger King trademarks, Burger King sued for infringement. The court agreed that the defendants had violated Burger King's trademarks and awarded it post-termination profits earned by the former franchisees. The suit was a civil suit, but the facts nevertheless provide an appropriate vehicle to ask whether a defendant's intentional trademark infringement can properly be understood as a kind of theft.

Trademark infringement potentially affects two kinds of victim. The first are those consumers who believe that they are buying a genuine Whopper hamburger, iPhone, or Louis Vuitton hand bag when they are really buying a counterfeit knock off. In the *Burger King* case, it is doubtful that consumers suffered much harm. Since the defendants had previously been longtime Burger King franchisees, it seems unlikely that there was much difference between the genuine licensed Whoppers they were selling prior to termination and the counterfeit Whoppers they were selling post-termination. In cases where the defendant is selling, say, counterfeit pharmaceuticals or medical devices, however, and they prove to be ineffective or unsafe, the harm can be significant. In either case, though, selling counterfeit goods under a false trademark is a kind of fraud. The seller deceives the buyer into believing that he is buying something different from what he is actually buying. What is stolen is the consumer's money, just as it would be in any case of consumer fraud.

Trademark infringement also potentially causes harm to the owner of the mark. In some cases, the holder of the mark will lose a sale when his potential customer buys the counterfeit good rather than the real thing. (This is not always true, of course; many people who buy counterfeit Louis Vuitton purses on the street corner undoubtedly know that they are fakes and have no intention of buying the more expensive, genuine article.) In such cases, we might say that what the trademark holder has stolen is the money he might otherwise have earned had the customer bought the real thing rather than the fake. The situation is analogous to the case in which the copyright owner loses a sale

as a result of an illegal download or photocopy. The problem, once again, is that it's hard to know if, but for the infringement, the would-be infringer would have paid for the trademarked good.

In other cases, the owner of the mark is harmed by being deprived of the license fee he might otherwise have received had the seller of the counterfeit goods properly licensed the trademark. Once again we must speculate about counterfactuals. I would guess that many people who sell counterfeit Louis Vuitton purses on the street corner lack the money or inclination to pay whatever the Louis Vuitton company charges for the privilege of selling goods with its trademark. Except in those cases in which there is evidence that the infringer *would have* paid the license fee, it's hard to conclude that this is what is being stolen.

Finally, it is often said that trademark infringement has the effect of devaluing the trademark owner's brand. For example, if a consumer believes she is buying a (presumably) high-quality Louis Vuitton handbag, but actually receives a cheap Taiwanese knock off, she is likely to think less of the brand in the long run. Trademarks are thus at least semi-rivalrous in the sense that if anyone other than the trademark owner uses the mark, it will normally interfere with the benefits the owner derives from the mark.²³⁴

This last kind of harm is analogous to the harm caused to individuals by identity theft. Just as the identity thief makes use of the good reputation V has developed by paying his bills on time and staying out of trouble, the trademark infringer makes use of the good reputation built up around another's mark. In normal cases, such use will not rise to the level of theft; it will once again be closer to unauthorized use or trespass. But there are extreme cases in which the use of an owner's mark is so pervasive, the level of confusion so high, and the value of the mark so depleted, that one could say that a theft has occurred. For example, through a process referred to as "genericide," formerly trademarked names such as *Thermos*, *Aspirin*, *Yo-Yo*, *Escalator*, and *Cellophane* all have passed into the public domain as a result of their generic use.²³⁵ As a result, these marks have lost virtually all value to their owners. Were this to happen as a result of intentional infringement, we might conclude that a theft had occurred.

Trade Secrets. Thomas' English Muffins are known for their distinctive "nooks and crannies," the tracery of air pockets that covers their

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1 inside surface. The technique for making Thomas' muffins is so secret
 2 that it has been split up into several pieces, including the basic recipe,
 3 the moisture level of the muffin mixture, the equipment used, and the
 4 manner in which the muffins are baked.²³⁶ While many of Thomas'
 5 employees know one or more pieces of the technique, only seven
 6 employees in the whole company are said (at any given time) to know
 7 every step. One of these was Ralph Botticella, formerly a vice president
 8 in charge of bakery operations for the company that owns Thomas'. In
 9 January 2010, Botticella left Thomas' and accepted a job with rival
 10 baker Hostess Brands, which apparently has long wanted to know
 11 Thomas' secrets. In the actual case, Thomas' gained an injunction
 12 barring Botticella's move, and Hostess withdrew its offer of employ-
 13 ment. But, if Botticella had gone to work for Hostess, and if he had
 14 shared Thomas' secret technique for making English muffins (which
 15 he had agreed not to share), would that have constituted stealing?
 16 More generally, should misappropriation of trade secrets be regarded
 17 as a form of theft?

18 To qualify as a trade secret, information must (1) have been the sub-
 19 ject of reasonable efforts to maintain its secrecy; and (2) derive com-
 20 mercial value from not being generally known or readily ascertainable
 21 by others.²³⁷ The case law reveals an enormous variety of information
 22 subject to the trade secrets laws, including lists of customers, marketing
 23 data, bid price information, technical designs, manufacturing
 24 know-how, computer programs, and chemical formulae.²³⁸

25 Misappropriation of a trade secret can occur in two basic ways.
 26 Sometimes, trade secrets are obtained by breach of a confidential rela-
 27 tionship, as where an employee leaves her old employer and starts work
 28 on her own or for a competitor.²³⁹ This is exactly what Thomas' feared
 29 would happen in the Botticella case. Trade secrets can also be misap-
 30 propriated by those who have no special relationship to the trade
 31 secret holder, by illegal means, such as wiretapping, bribery, fraud, or
 32 theft of personal property.²⁴⁰

33 Traditionally, misappropriation of trade secrets was treated as a
 34 matter of state civil law under the Restatement (Third) of Unfair
 35 Competition, the Uniform Trade Secrets Act, and the Restatement of
 36 Torts.²⁴¹ Since 1996, misappropriation of trade secrets has also been
 S37 treated as a federal crime under the Economic Espionage Act, which
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provides for imprisonment of up to ten years and fines as high as \$5 million.²⁴²

There is a lively debate about exactly how misappropriation of trade secrets should be conceptualized. Under the traditional common law view, trade secrets law was conceived of as a means to enforce certain standards of commercial conduct.²⁴³ The law of trade secrets sought to balance the need to protect business assets from interference with the need to promote competition between businesses.²⁴⁴ Under this view, infringement of trade secrets constituted a type of unfair competition.²⁴⁵ A second view is that misappropriation of trade secrets consists of what is essentially a breach of contract.²⁴⁶ Yet another theory holds that trade secret infringement constitutes a kind of unjust enrichment.²⁴⁷

According to what is probably the dominant view, however, trade secrets are properly understood as a form of property. In *Ruckelshaus v. Monsanto*, this meant that research data submitted to a federal agency documenting the safety of the submitter's product would be considered property within the meaning of the Fifth Amendment's Takings Clause, and that due compensation would therefore be required.²⁴⁸ But the view that trade secrets are a form of property is also quite relevant in the context of theft law. Indeed, in no area of intellectual property law are the language and conceptual apparatus of *property* and *theft* more present than in the case of trade secrets law. Most notable is the Economic Espionage Act, which uses the term *owner* to refer to one who seeks to enforce a right in a trade secret, *steal* to refer to what the infringer does to the secret, and *theft* to refer to its misappropriation.²⁴⁹

Like copyright law, the law of trade secrets offers less expansive property rights than is typically found with respect to tangible property. One who holds a trade secret does not have a guaranteed right to the exclusive use of the secret. The right to sue is triggered only when the secret is wrongfully used or taken. If someone else independently discovers the secret information—whether through purposeful scrutiny, luck, or accident—the original owner loses exclusive rights in it. Thus, as Gerry Moohr has put it, trade secrets are property only in a “conditional sense.”²⁵⁰ (On the other hand, unlike copyright and patent, trade secrets law is not limited in duration; trade secrets remain enforceable as long as they remain subject to reasonable efforts to

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maintain their secrecy and derive commercial value from not being generally known or readily ascertainable by others.)

As I argued above, however, the mere fact that a property right is limited in duration or scope is not sufficient to rule out its eligibility for propertization under the law of theft. We need to consider the extent to which the owner loses and the thief gains. Consider again the case of Thomas' English Muffins. If Botticella were to share with Hostess Thomas' secret technique for achieving nooks and crannies, Thomas' would still have the information. In that sense, trade secrets are nonrivalrous. But there is also an important sense in which Thomas' would be losing something that victims of copyright, patent, and trademark infringement do not lose—namely, the confidentiality of the information. Once possessed by Hostess, one of Thomas' main rivals in the baking business, the knowledge of how to make nooks and crannies becomes significantly less valuable to Thomas'. The case is thus analogous to the "theft of confidential information" cases—*Dreiman*, *Moss*, Wikileaks, and possibly *Carpenter*, *Stewart*, and *Home Insurance*—discussed earlier. In that sense, of all the kinds of intellectual property infringement discussed, infringement of trade secrets is the one most appropriately characterized as a form of theft.

Again, this is not to say that trade secret misappropriation necessarily should be treated as a crime. There may well be compelling public policy reasons for refraining from doing so, including concerns (expressed by the court in *Stewart*) about employee mobility and incentives to produce new products and ideas. It is merely to say that the paradigm of theft seems to fit misappropriation of trade secrets more closely than it does the misappropriation of copyright, patent, or trademark.

Virtual Property

My discussion of the types of property that can properly be subject to theft concludes with a consideration of so-called *virtual goods*. To understand what is meant by this term, it is necessary to recognize two different ways that computer code functions.²⁵¹ Most computer code is nonrivalrous; one person's use does not prevent others' use. Computer code of this type is analogous to various forms of intellectual property and is most appropriately protected by the law of copyright and patent,