WHEN SHOULD WE PERMIT DIFFERENTIAL PRICING OF INFORMATION?

William W. Fisher III*

Each year, the UCLA School of Law hosts the Melville B. Nimmer Memorial Lecture. Since 1986, the lecture series has served as a forum for leading scholars in the fields of copyright and First Amendment law. In recent years, the lecture has been presented by such distinguished scholars as Lawrence Lessig, Robert Post, Mark Rose, Kathleen Sullivan, David Nimmer, and Jonathan Varat. The UCLA Law Review has published each of these lectures and proudly continues that tradition by publishing an Article by this year's presenter, Professor William W. Fisher III.

I. The Phenomenon 2 II. POPULAR ATTITUDES 10 III. The Law 13 IV. Theories 20 A. Welfare 21 B. Fairness 28 C. Personhood 31 D. Culture 33 CONCLUSION 37	INT	RODUCTION	1
III. THE LAW 13 IV. THEORIES 20 A. Welfare 21 B. Fairness 28 C. Personhood 31 D. Culture 33	I.	THE PHENOMENON	2
IV. THEORIES 20 A. Welfare 21 B. Fairness 28 C. Personhood 31 D. Culture 33	II.	POPULAR ATTITUDES	10
A. Welfare	III.	THE LAW	13
A. Welfare			
C. Personhood			
D. Culture		B. Fairness	28
		C. Personhood	31
Conclusion		D. Culture	33
	CONCLUSION		

Introduction

The practice of charging different consumers different prices for access to informational products is becoming increasingly common. Several doctrines in copyright and patent law affect the ability of information sellers to engage in this behavior. The content and application of many of those doctrines are confused, in part because lawmakers disagree about whether the behavior

^{*} Hale and Dorr Professor of Intellectual Property Law, Harvard University. This Article was originally presented as the Melville B. Nimmer Memorial Lecture at the UCLA Law School in November 2006. I am grateful for the hospitality of the law school faculty and for the comments of the participants in the event. In preparing the Article, the research assistance of Chaim Kagedan, Michael Kaiser, Fred Medick, Douglas Rosenthal, and Katherine Ross was invaluable. The comments of Jonathan Zittrain were crucial in revising it.

is benign or pernicious. This Article asks whether insight into the merits of differential pricing can be gleaned from theories of intellectual property.¹

I. THE PHENOMENON

For millennia, goods were exchanged primarily through individualized and usually face-to-face transactions. Prices, the outcome of haggling, varied widely. As markets grew and goods gradually became more standardized, price differences diminished—until, by the eighteenth and early nineteenth centuries, national commodities markets for many goods appeared—with relatively stable prices for goods of a particular quality.²

There were important exceptions to this trend, however. A subset of firms with market power continued to differentiate among customers, demanding more from those who could pay more. This practice was especially common in the transportation industries, most of which were characterized by high fixed costs and low marginal costs. For example, as Andrew Odlyzko has shown, differential pricing was practiced in the sixteenth-century Danish Sound Tolls; in the rates charged for using canals in China, England, and France; and during the nineteenth century, in the railroad industries in England and the United States.³

Today, firms in many industries regularly engage in differential pricing. Airlines provide the most visible examples. As any traveler knows, the cost of being carried in an airplane from one city to another varies radically

On four previous occasions, I have briefly addressed this question in the course of essays focused primarily on other matters. See WILLIAM W. FISHER III, PROMISES TO KEEP: TECHNOLOGY, LAW, AND THE FUTURE OF ENTERTAINMENT 163-69 (2004); William Fisher, Theories of Intellectual Property, in NEW ESSAYS IN THE LEGAL AND POLITICAL THEORY OF PROPERTY 168, 196-98 (Stephen R. Munzer ed., 2001) [hereinafter Fisher, Theories of Intellectual Property]; William W. Fisher III, Property and Contract on the Internet, 73 CHI.-KENT L. REV. 1203, 1234-40 (1998) [hereinafter Fisher, Property and Contract on the Internet]; William W. Fisher III, Reconstructing the Fair Use Doctrine, 101 HARV. L. REV. 1659, 1709-10 (1988) [hereinafter Fisher, Reconstructing the Fair Use Doctrine]. My remarks on those occasions have been criticized, in some cases justifiably, as excessively enthusiastic concerning the potential benefits of differential pricing and insufficiently attentive to its hazards. See James Boyle, Cruel, Mean, or Lavish? Economic Analysis, Price Discrimination, and Digital Intellectual Property, 53 VAND. L. REV. 2007 (2000); Julie E. Cohen, Copyright and the Perfect Curve, 53 VAND. L. REV. 1799 (2000); Wendy J. Gordon, Intellectual Property as Price Discrimination: Implications for Contract, 73 CHI.-KENT L. REV. 1367 (1998). In this Article, I return to the subject and, aided by the criticisms directed at my earlier treatments, examine it in more depth.

^{2.} See Morton J. Horwitz, The Transformation of American Law, 1780–1860, at 161, 173–80, 198–99 (1977).

^{3.} See Andrew Odlyzko, The Evolution of Price Discrimination in Transportation and Its Implications for the Internet, 5 REV. NETWORK ECON. 323 (2004).

depending on (among other things) the date on which one departs and the time that elapses before one's return. Private colleges and universities in the United States also engage in differential pricing. Typically, they charge very high tuitions, but then award need-based scholarships to students whose families cannot afford to pay that much.⁴ The net result: The cost of attending those institutions varies with students' wealth and income. Less notorious is the strategy known as "zone pricing" practiced by many oil companies. Gas stations in wealthy areas frequently are obliged to pay higher wholesale prices to distributors than are stations in poorer areas. That difference, of course, results in different prices paid by consumers at the pumps.⁵

The term economists usually use to describe this behavior is "price discrimination." Roughly speaking, that phrase means charging different consumers different prices for access to the same good or service. If one is being precise (as I will try to be), it also encompasses charging different consumers different prices for different versions of the same good or service when the variation cannot be explained by differences in the costs of the versions. (The classic illustration of the latter variant is the pricing of business-class and coach tickets on airlines. Last I checked, it cost roughly \$900 to fly round trip from Boston to Australia in coach and roughly \$15,000 for the same trip in business class. That difference cannot be explained on the basis of the extra costs associated with a wide leather seat, better food, and more attentive service.)

Price discrimination usually increases the profits of the firm that engages in it. Why then don't all firms do it all the time? Because, with rare exceptions, the practice is feasible only when three conditions coincide. First, as indicated above, the firm ordinarily must have market power. In other words, there must exist no readily available, equally satisfactory substitutes for the good or service the firm is selling. Otherwise, customers from whom the firm seeks to extract a high price will defect to competitors.⁶

Second, the firm must be able to prevent—or at least limit—arbitrage. In other words, it must stop customers to whom it sells goods or services at a low price from reselling them, either directly

^{4.} See Richard Vedder, Why Does College Cost So Much?, WALL ST. J., Aug. 25, 2005, at A10.

^{5.} See Alexei Barrionuevo, Secret Formulas Set the Prices for Gasoline, WALL ST. J., Mar. 20, 2000, at B1.

^{6.} For exceptions to this generalization, see Michael Levine, *Price Discrimination Without Market Power*, 19 YALE J. ON REG. 1 (2002).

or with the aid of intermediaries, to customers from whom the firm is seeking to extract a high price.

Third, the firm must be able to differentiate among its customers on the basis of the values they place on the firm's product. There are three main ways in which this can be achieved. In what economists refer to as first-degree price discrimination, the firm gathers information about individual buyers and attempts to charge each one the most that he or she is able and willing to pay for the good or service in question. In second-degree price discrimination, the seller does not know how much buyers are able and willing to pay, but induces them to reveal their resources or preferences through their purchasing decisions. Among the techniques of this sort are volume discounts and "versioning" (exemplified by the aforementioned differentiation of business-class and coach tickets). In third-degree price discrimination, the seller does not know the purchasing power of individual buyers, but is able to separate them into groups that correspond roughly to their wealth or eagerness. Classic examples are student and senior discounts.

Opportunities to engage in first-degree discrimination are unusual. But opportunities for second- and third-degree discrimination abound. One area in which they are proliferating especially rapidly is informational goods, by which I mean goods that either embody or consist entirely of innovations, which in turn are typically protected by copyright law, patent law, or some "neighboring" system of intellectual property law. Here are some examples:

A simple and increasingly important illustration of third-degree discrimination is academic discounts for software. Students and faculty are able to purchase many software programs for much less than are other customers. For example, as of this writing, they could obtain from the Academic Superstore a copy of Adobe Creative CS3 Design Premium, which ordinarily retails for \$1799.95, for \$589.95.

A classic example of second-degree price discrimination is the way in which book publishers typically package and release their products. In the usual case, a hardcover edition is sold at a substantial price and then, a few months or a few years later, a much cheaper paperback

^{7.} See Academic Superstore, http://www.academicsuperstore.com (last visited July 6, 2007). A less well-known example of third-degree price discrimination is the policy of some limousine services to charge wedding parties more per hour than other customers. Brides and grooms aware of this practice sometimes conceal the purpose for which they are renting limos. In at least one such instance, the driver, upon discovering "a woman in a wedding dress," left the bride and groom at the curb. See Patricia Cohen, Love, Honor, Cherish and Buy, N.Y. TIMES, May 9, 2007, at B1. Thanks to Jonathan Zittrain for alerting me to the story.

version is released. The gap between the retail prices of the two versions is greater than can be explained by the difference in the cost of producing them. Underlying this strategy is a blend of two distinct price-discrimination schemes. The first is versioning. Just as in the case of business-class versus coach airlines tickets, publishers expect price-insensitive consumers to plump for the premium (hardcover) editions, and less wealthy or more parsimonious consumers to prefer the economy model. The second strategy is what is sometimes known as intertemporal price discrimination. The reason that publishers do not ordinarily release paperback editions at the same time as hardback editions is that they do not want buyers who care little about price, but find paperbacks perfectly acceptable, to opt for the latter. So they wait until the market consisting of wealthy consumers has been pretty well exhausted (through sales of hardbacks) before putting the cheaper versions on the shelves.⁸

The same composite strategy underlies the "windowing" system through which most Hollywood movies (at least until very recently) have been marketed. Typically, the film is first licensed for performances in American movie theatres. Roughly three months later, it is released both in foreign theatres and through pay-per-view channels. Three months after that, DVD copies are made available for sale and rental. After three more months, it is licensed to premium cable television channels. A year later, it is shown on network television. Finally, after another three years, it is licensed to local television syndicators. The price per viewing paid by consumers in each of these windows is lower than in the preceding window. Again, we see here a combination of versioning, which prompts consumers to sort themselves by format, and intertemporal discrimination, whereby the most price-sensitive consumers have to wait the longest.⁹

With respect to patented processes and products, price discrimination commonly takes other forms. The most straightforward involves license terms. The owners of process patents commonly use formulae that make license fees vary with licensees' ability and willingness to pay—for example, by making the fees proportional to each licensee's total sales, or, if that is not permitted (a topic to which I will return

^{8.} For a thorough analysis of these practices, see Sofronis K. Clerides, Book Value: Intertemporal Pricing and Quality Discrimination in the U.S. Market for Books, 20 INT'L J. INDUS. ORG. 1385 (2002).

^{9.} A more extensive discussion of the windowing system may be found in FISHER, *supra* note 1, at 67–69.

shortly), by making the fees proportional to the number or value of the products that the licensee produces with the aid of the patented process. Another common technique is to license the patented technology at a low price, but to require licensees to purchase supplies for use with that technology only from the patentee. (We will provide you our canning machines cheaply, but you must buy the cans from us.) By setting the price of the supplies well above their cost, the patentee is able, in effect, to extract large fees from high-volume users, while keeping the technology affordable for low-volume users.

A more recently deployed price-discrimination strategy involves restricting the uses to which purchasers of patented products may put them. For example, buyers of patented medical device are frequently forbidden to use them more than once—even if sterilization would make multiple uses hygienic. As a result, healthcare facilities with many patients (and thus more resources) are forced to buy many of the devices and therefore pay high total fees to the patentee, while facilities with fewer patients (and thus fewer resources) pay less.¹⁰

An increasingly common technique, used by both copyright owners and patentees, is geographic price discrimination. Typically, the world is divided into zones, and prices are adjusted within each zone to maximize the firm's profits. For example, in the region-coding system employed by the manufacturers and distributors of DVDs, countries are clumped into six regions: North America; Western Europe, the Middle East, South Africa, and French Guiana; South Korea, Southeast Asia, and Indonesia; Australia and New Zealand; Africa and Central and Southern Asia; and China. Discs distributed in a given region are only playable on machines sold in those regions. This system enables the distributors of movies to release them at different times in different areas and, more importantly for our purposes, to sell them at different prices in different areas. For example, a set of DVDs containing Season Six, Part One of The Sopranos, coded for the first region, is currently available for \$63.27 on Amazon.com, while the same set, coded for the second region, is available for £52.01 (roughly \$101.41) on Amazon.co.uk, the British counterpart to Amazon.com.

^{10.} For documentation of this practice—and for a survey of the competing arguments concerning the motives of the manufacturers and the health risks associated with the reprocessing of such devices—see U.S. GEN. ACCOUNTING OFFICE, SINGLE-USE MEDICAL DEVICES: LITTLE AVAILABLE EVIDENCE OF HARM FROM REUSE, BUT OVERSIGHT WARRANTED (2000), http://www.gao.gov/new.items/he00123.pdf; Alec Klein, Hospitals Save Money, but Safety Is Questioned, WASH. POST, Dec. 11, 2005, at A1.

Recently, however, this system has been corroding. Multiregion DVD players, capable of playing discs distributed anywhere, are proliferating, and software enabling users to remove the region coding on discs is readily available on the Internet. The net result: Opportunities for arbitrage are increasing and, as a result, the power of the distributors to sustain different prices in different regions is diminishing.¹¹

The distributors of textbooks also sell them for very different prices in different parts of the world. For example, economics textbooks commonly cost twice as much in the United States as in England. Why? The most plausible explanation is that, in the United States, students typically are required to purchase textbooks, whereas in England they function more as optional study aids. Elasticity of demand is thus much greater in England.¹²

International geographic price discrimination of informational goods is perhaps most notorious in the pharmaceutical industry. It is widely assumed that drug manufacturers commonly sell their products at sharply different prices in different parts of the world. Verifying that assumption is harder than one might think. But recent work by Patricia Danzon and Michael Furukawa substantiates it, specifically with respect to patented products.¹³ Diagram A, taken from their paper, compares drug prices in the United States with those in eight other countries.¹⁴

^{11.} The leading candidate for the format that will replace the DVD—the Blu-ray Disc—has an analogous "regional playback control" system that is supposed to be less vulnerable to circumvention. It divides the world into different units (suggesting that movie distributors' sense of the appropriate boundaries between markets have changed since the inception of the DVD), but otherwise functions similarly. Information concerning the boundaries of the new regions may be obtained from Hugh Bennett, *The Authoritative Blu-ray Disc* (BD) FAQ: X. Copying Deterrents and Content Protection, EMEDIA, Aug. 28, 2006, http://www.emedialive.com/articles/readarticle.aspx?articleid=11760.

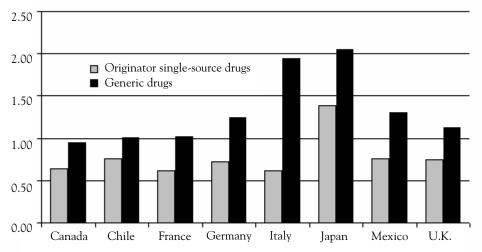
^{12.} See Christos Cabolis et al, A Textbook Example of International Price Discrimination, 95 ECON. LETTERS 91 (2007), available at http://www.econ.ucy.ac.cy/~sofronis/pub/TEIPD-EconLet.pdf.

^{13.} See Patricia M. Danzon & Michael F. Furukawa, *Prices and Availability of Pharmaceuticals: Evidence From Nine Countries*, HEALTH AFF., Oct. 29, 2003, at W3-521, http://content.healthaffairs.org/cgi/content/full/hlthaff.w3.521v1/DC1; see also Judith L. Wagner & Elizabeth McCarthy, *International Differences in Drug Prices*, 25 ANN. REV. PUB. HEALTH 475 (2004).

^{14.} See Danzon & Furukawa, supra note 13, at W3-527.

DIAGRAM A¹⁵

Price Indexes: On-Patent Brand-Name (Originator, Single-Source) Versus Generic Drugs, Manufacturer Prices in Eight Countries Relative to U.S. Prices, Adjusted for U.S. Discounts, 1999



SOURCE: Calculations based on data from the IMS Health Midas data set, 1999. **NOTE:** United States equals 1.0.

Note that for patented products, prices are lower than in the United States in all countries except Japan, whereas the prices of generics are comparable to or higher than those in the United States in all countries. Many circumstances contribute to these variations, ¹⁶ but the strong correlation between the prices of patented drugs in a given country and its per-capita income suggests that one contributing factor is price discrimination by patentees. ¹⁷ Beyond question, the prices of some specific kinds of drugs—for example, vaccines and contraceptives—are deliberately adjusted to match the purchasing power of the consumers in different countries. ¹⁸

An especially important instance of geographic price discrimination for pharmaceutical products concerns patented AIDS drugs. Generally speaking, consumers in wealthy countries are able and willing to pay more

^{15.} Originally published in Danzon & Furukawa, *supra* note 13, at W3-527, and reprinted here with permission of the authors.

^{16.} See Kevin Outterson, Pharmaceutical Arbitrage: Balancing Access and Innovation in International Prescription Drug Markets, 1 YALE J. HEALTH POL'Y L. & ETHICS 193 (2005).

^{17.} See Danzon & Furukawa, supra note 13, at W3-533 to -534.

^{18.} See Jens Plahte, Tiered Pricing of Vaccines: A Win-Win-Win Situation, Not a Subsidy, 5 LANCET INFECTIOUS DISEASES 58 (2005), available at http://www.tik.uio.no/formidling/artikler/LancetIDJan05JensPlahte1.htm.

(either directly or through various intermediaries) for access to life-saving AIDS drugs than consumers in poor countries. One would therefore expect distributors to charge more in the former than in the latter. Have they done so? The answer appears to be that, during the 1990s, price discrimination was common, but that it diminished over time. By 2000, there were surprisingly small variations in the prices of the major AIDS drugs in different countries. Since then, however, many manufacturers have sharply discounted prices in at least some developing countries. Unfortunately, this does not mean that persons in poor countries who are infected with HIV have ready access to cheap versions of the best drugs. With respect to some drugs, little or no discounting seems to be occurring. And the prices charged in different countries for access to other drugs vary radically in ways that cannot be explained by differences in the purchasing power of those countries' residents.

Even in the fashion industry, one finds price discrimination. As Kal Raustiala and Chris Sprigman have shown, major fashion houses often produce clothes in two (or more) forms—a premium line (Armani), and a cheaper, "bridge" line (Emporio Armani).²³ Once again, the substantial price difference between the two versions cannot be explained by differences in manufacturing costs. Rather, it enables the manufacturer to charge a great deal for the premium items without forfeiting less wealthy or eager customers.

^{19.} See F.M. Scherer & Jayashree Watal, Post-TRIPS Options for Access to Patented Medicines in Developing Nations, 5 J. INT'L ECON. L. 913, 930–33 (2002).

^{20.} See World Health Org. & World Trade Org. Secretariats, Report of the Workshop on Differential Pricing and Financing of Essential Drugs 12 (2001), http://whqlibdoc.who.int/hq/2001/a73725.pdf (relying on a presentation by F.M. Scherer).

^{21.} See id. at 7 (relying on a presentation by Jonathan Quick); Jeffery Atik & Hans Henrik Lidgard, Embracing Price Discrimination: TRIPS and the Suppression of Parallel Trade in Pharmaceuticals, 27 U. PA. J. INT'L ECON. L. 1043 (2006); Peter J. Hammer, Differential Pricing of Essential AIDS Drugs: Markets, Politics, and Public Health, 5 J. INT'L ECON. L. 883, 896 n.31 (2002); John S. James, Merck, Bristol-Myers Squibb Announce Major Price Reductions in Poorest Countries, AIDS TREATMENT NEWS, Feb. 26, 2001, available at http://www.aids.org/atn/a-361-03.html. Documentation of the resulting price differentials can be found in Outterson, supra note 16, at 252–55.

^{22.} See Richard Hornbeck, Price Discrimination and Smuggling of AIDS Drugs, 5 TOPICS ECON. ANALYSIS & POL'Y, art. 16 (2005).

^{23.} See Kal Raustiala & Chris Sprigman, The Piracy Paradox: Innovation and Intellectual Property in Fashion Design, 92 VA. L. REV. 1687, 1693–94 (2006).

II. POPULAR ATTITUDES

Consumers are often unaware of price-discrimination practices. When they become aware, they usually have strong reactions, but their responses are complex and sometimes contradictory.

One common reaction is anger. Seeking to extract maximum profit from each individual or each subset of customers is widely considered a form of "gouging"—charging whatever the market will bear—which in turn is generally thought to be exploitative and unfair. Manifestations of this attitude in popular culture are rife. For instance, in 1999, a report that the Coca-Cola Company was testing a vending machine that would increase the price of Coke when the outside temperature rose provoked strong resistance. One reader of the report asked: "Would [the system] enable the machine to distinguish between the sun's rays and a bucket of cold water thrown over it by thirsty Luddites outraged by such a blatant attempt to gouge the consumer on price?"²⁴ The company quickly abandoned the plan. Al Franken, in his book Lies and the Lying Liars Who Tell Them: A Fair and Balanced Look at the Right, 25 recounts how rental car companies sharply increased their prices in the immediate aftermath of the September 11 attack on the World Trade Center and the associated shutdown of the nation's air transportation system. His tone makes clear that he sees this practice not as a sensible way of allocating a temporarily scarce resource, but as immoral behavior. Taxi drivers in England are similarly critical of demand-based adjustments in rental-car rates, even though the rises increase their own business.

It is not merely soft drink consumers, humorists, and taxi drivers who respond this way. The same attitude apparently shapes the behavior of sophisticated traders of wholesale goods. For example, a survey of buyers and sellers of bulk electricity found that "[a] price increase under conditions of increased demand was perceived to be significantly less fair than one caused by a shortage in supply.... This is noteworthy because these conditions have traditionally been regarded as normatively equivalent, representing price increases that ration off relatively excess demand."²⁶

^{24.} See John Willman, Coca-Cola Warms to a New Style of Vending Machine, FIN. TIMES, Oct. 28, 1999, at 1; James Wilson, Letter to the Editor, Luddites May Dispense With This Price Effect, FIN. TIMES, Oct. 30, 1999, at 12.

^{25.} AL FRANKEN, LIES AND THE LYING LIARS WHO TELL THEM: A FAIR AND BALANCED LOOK AT THE RIGHT (2003).

^{26.} Peter R. Dickson & Rosemary Kalapurakal, The Use and Perceived Fairness of Price-Setting Rules in the Bulk Electricity Market, 15 J. ECON. PSYCHOL. 427, 439 (1994).

Surveys of the general population soliciting reactions to hypothetical scenarios typically reveal similar beliefs. Daniel Kahneman, Jack Knetsch, and Richard Thaler, for example, found widespread adherence to the following attitude:

It is unfair for a firm to exploit an increase in its market power to alter the terms of the reference transaction at the direct expense of a customer, tenant, or employee

... [A]n increase in demand unaccompanied by an increase in costs is not an acceptable reason to raise prices or rents. The opposition to exploitation of market power also entails strong rejection of excessive monopoly gains . . . and of price discrimination.²⁷

More specific factors can either amplify or offset this general hostility to differential pricing. Versioning seems to elicit especially strong hostility. Reducing the quality of a product solely in order to offer it cheaply to poor customers, while maintaining the demand on the part of wealthy customers for the original version is widely considered "cruel and mean." (The most infamous modern example was the IBM LaserPrinter Series E, which was identical to the standard LaserPrinter except that it contained an additional chip that reduced its output from ten pages a minute to five. ²⁹)

Another factor that seems to increase consumers' ire is secrecy. A good illustration is the popular reaction to Amazon.com's brief experiment with "dynamic pricing"—another term for first-degree price discrimination. In the fall of 2000, Amazon began to adjust the prices of a few DVDs, depending on the status of the purchasers. It seems—although most Amazon representatives denied this—that repeat customers (who could be identified by the Amazon cookies on their computers) were quoted higher prices for the films than were new customers. When this practice was revealed on an online DVD Talk Forum, the response of most participants

^{27.} Daniel Kahneman et al., Fairness and the Assumptions of Economics, 59 J. BUS. S285, S296 (1986). For similar findings, see Bruno S. Frey & Werner W. Pommerehne, On the Fairness of Pricing—An Empirical Survey Among the General Population, 20 J. ECON. BEHAV. & ORG. 295 (1993), and Robert J. Shiller et al., Popular Attitudes Toward Free Markets: The Soviet Union and the United States Compared, 81 AM. ECON. REV. 385 (1991).

^{28.} The phrase, "cruel and mean" is derived from James Boyle's condensation of Jules Depuit's denunciation of versioning by railroads: "[T]he companies, having proved almost cruel to third-class passengers and mean to the second-class ones, become lavish in dealing with first-class passengers. Having refused the poor what is necessary, they give the rich what is superfluous." See Boyle, supra note 1, at 2007 (quoting Jules Dupuit, On Tolls and Transport Charges 23 (International Economic Papers No. 11, Elizabeth Henderson trans., 1962)).

^{29.} See HAL R. VARIAN, VERSIONING INFORMATION GOODS 6 (1997), available at http://www.ischool.berkeley.edu/~hal/Papers/version.pdf. Many other examples of this general strategy are discussed on pages 6–7.

was fierce. "I will never buy another thing from those guys!!!," declared one. One. In part, consumers were upset that Amazon had engaged in price discrimination at all. Paul Krugman, for example, observed: "[D]ynamic pricing is . . . undeniably unfair: some people pay more just because of who they are." But the flames were plainly fanned by the fact that Amazon had instituted the system surreptitiously. Fumed one contributor: "I find this extremely sneaky and unethical That is really really dishonest Amazon." These responses are not idiosyncratic. In 2005, the Annenberg Center surveyed 1500 adult Internet users concerning their views of online marketing practices. Eighty-seven percent disagreed with the proposition that "it's OK if an online store I use charges different people different prices for the same products during the same hour," and 84 percent agreed that online stores should be required to notify their customers if they engaged in this behavior.

Third-degree price discrimination, by contrast, usually raises few hackles—so long as it is done openly and the criteria used to separate consumers into groups are seen as appropriate. No one protests, for example, when students or senior citizens are admitted to museums for less money than other visitors. And the practice, described above, of providing heavy discounts to academic consumers of software is not controversial.

Difficult to reconcile with the foregoing observations is the fact that many people, when assessing the fairness of various pricing schemes, emphasize choice. As long as all consumers have equal access to all variants of a product and, thus, the price they pay is determined by their own actions, they do not feel they are treated unfairly.³⁴ Plainly, this factor suggests they should be happy with versioning and unhappy

^{30.} David Streitfeld, On the Web, Price Tags Blur; What You Pay Could Depend on Who You Are, WASH. POST, Sept. 27, 2000, at A1 (quoting Patrckpiteo).

^{31.} Paul Krugman, What Price Fairness?, N.Y. TIMES, Oct. 4, 2000, at A35.

^{32.} Posting of Sindicate to http://www.dvdtalk.com/forum/archive/index.php/t-62219.html (Sept. 3, 2000, 16:50 EST). A few others have reacted in the same vein. See, e.g., Posting of Hal2000 to http://www.dvdtalk.com/forum/archive/index.php/t-62219.html (Sept. 4, 2000, 2:42 EST) ("[T]heir pricing practices qualify them as the shysters of the internet. These pricing practices are nothing less that opportunistic and deceitful."); Posting of Count Zero to http://www.dvdtalk.com/forum/archive/index.php/t-62219.html (Sept. 4, 2000, 13:14 EST) ("This makes me so !MAD! . . . They can't get away with this. Absolutely unforgivable!").

^{33.} JOSEPH TUROW ET AL., OPEN TO EXPLOITATION: AMERICAN SHOPPERS ONLINE AND OFFLINE 22, 28 (June 2005), available at http://www.annenbergpublicpolicycenter.org/Downloads/Information_And_Society/Turow_APPC_Report_WEB_FINAL.pdf. As the title of the report and the phrasing of the critical question suggest, the authors of the study seems to have shared the interviewees' hostility to this behavior. Accordingly, the numbers should probably be discounted a bit.

^{34.} See Dickson & Kalapurakal, supra note 26, at 436–42.

with third-degree price discrimination, which places them into unequally treated boxes from which they cannot escape.

Finally, popular reactions to price discrimination—like popular reactions to many phenomena—are heavily affected by the ways in which transactions are framed. In part, this involves the way in which unequal prices are described. For instance, a scheme that charges everyone a high standard price, but then gives some people a discount (which is the system employed by most colleges) is perceived as much less unfair than a functionally identical scheme that charges everyone a low standard price and then imposes on some people a surcharge. Framing effects are also evident in the impact upon consumers' reactions of the ways in which pricing schemes are justified. For good reason, manufacturers try hard to find reasons other than variations in demand for differential pricing. example, Doug Ivester, the CEO of the Coca-Cola Company, sought (unsuccessfully, as it turned out) to persuade consumers that making the price of a soda vary with the ambient temperature made sense because the benefit of the product to a consumer varied with temperature: "In a final summer championship game when people meet in a stadium to enjoy themselves, the utility of a chilled Coca-Cola is very high. So it is fair it should The machine will simply make this process be more expensive. automatic."35 The third and perhaps most interesting aspect of framing is that consumers' views concerning the fairness of prices often depend on the baseline against which those prices are assessed. For example, a price change that increases a firm's profits is often seen as unfair, while a price change that maintains a firm's profits is seen as fair. Underlying this attitude seems to be the assumption that consumers are entitled to buy goods or services on terms that are no more favorable to the seller than the existing pricing scheme.³⁶

III. THE LAW

Some aspects of the current legal system foster price discrimination; others discourage it. At the most general level, the laws of intellectual property and antitrust heavily affect whether firms enjoy market power, ordinarily one of the preconditions of price discrimination. To be sure, the grant of a copyright or a patent is not sufficient to confer market power on the recipient.

^{35.} See Willman, supra note 24, at 1.

^{36.} See Daniel Kahneman et al., Fairness as a Constraint on Profit-Seeking: Entitlements in the Market, 76 AM. ECON. REV. 728 (1986).

But if the public regards the copyrighted or patented work as both desirable and special, then it often has that effect. Indeed, as we will see, in the eyes of many commentators, that is precisely the purpose of a copyright or patent. Conversely, antitrust law operates sometimes (though surely not always) to inhibit the acquisition or exercise of market power.

Many more specific laws affect the ability of firms that do enjoy market power to engage in price discrimination. An important example is the firstsale doctrine in copyright law,³⁷ which limits a copyright owner's exclusive right, "to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending."38 In brief, the doctrine provides that, with certain exceptions, once a copyright owner has voluntarily distributed a copy or phonorecord to a member of the public, the recipient is free to resell, lease, or donate it to someone else without the copyright owner's permission and without paying the copyright owner a fee. The reason that this privilege is relevant to price discrimination is that it facilitates arbitrage. Suppose, for example, that a publisher sought to increase its profits by distributing copies of a book at a high price in New York and at a lower price in Mississippi. The firstsale doctrine would authorize arbitrageurs to purchase batches of the book cheaply in Mississippi and then resell them in New York—for more than the Mississippi price but for less than the publisher's New York price, thus diminishing the publisher's own New York sales. Awareness of this hazard will discourage the publisher from engaging in price discrimination in the first place.

The first-sale doctrine is narrower in some European countries than in the United States, which increases opportunities for price discrimination.³⁹ For instance, in Europe, DVDs are sold at substantially higher prices to video rental stores than to consumers; the studios need not fear that the latter will resell to the former. In the United States, DVD distributors have been able to implement a similarly discriminatory pricing system, but only through a much more circuitous route (to which I will return shortly).⁴⁰

In practice, application of the first-sale doctrine in the United States has proven less straightforward than I have suggested thus far. One economically

^{37. 17} U.S.C. § 109 (2000).

^{38.} Id. § 106(3).

^{39.} See Lothar Determann & Aaron Xavier Fellmeth, Don't Judge a Sale by Its License: Software Transfers Under the First Sale Doctrine in the United States and the European Community, 36 U.S.F. L. REV. 1, 70–98 (2001).

^{40.} See Julie Holland Mortimer, *Price Discrimination and Copyright Law: Evidence From the Introduction of DVDs* (Harvard Inst. of Econ. Research, Working Paper No. 2055, 2004), *available at* http://www.econ.yale.edu/seminars/apmicro/am03/mortimer-030508.pdf.

important setting in which it has been especially controversial involves computer software. Am I permitted to purchase a copy of a copyrighted program, repackage it, and resell it (for a higher price) to someone else? Nimmer on Copyright, the authoritative treatise in the field, says yes. To avail oneself of the first-sale defense, Nimmer on Copyright contends, you need to show only four things: (1) that "the subject physical product (the 'copy') [was] lawfully manufactured with authorization of the copyright owner'; (2) that the "particular copy [was] transferred under the copyright owner's authority"; (3) that you "qualify as the lawful owner of that particular copy"; and (4) that you "thereupon dispose[d] of that particular copy (as opposed to, for example, reproducing it)." The software distributor satisfies all four requirements; case closed.

The courts, it turns out, do not always agree. In Adobe Systems, Inc. v. One Stop Micro, Inc., 42 for example, the defendant purchased copies of Adobe software that had been lawfully sold (at a low price) in the educational market, removed the educational stickers, encased the packages in new shrinkwrap, and resold them at a higher price. 43 The California district court ruled that this conduct was not protected by the first-sale doctrine, because Adobe had never sold the software, but had merely licensed its use.44 Nimmer on Copyright points out that this reasoning conflates the legal relationship between Adobe and the first purchaser vis-à-vis the software with the relationship between Adobe and the first purchaser vis-à-vis the physical copy of that software. The former may well have been a license; but the latter, the only relationship that matters, was indisputably a sale. Thus, the defense should have been accepted. 45 Adobe Systems is not unique. Other opinions dealing with similar facts are likewise founded upon what Nimmer on Copyright calls a "misunderstanding" of the relevant statutory provisions. 46

In short, the law governing the permissibility of resales of software is, to an unusual degree, inconsistent and unpredictable. Why? One plausible explanation is that many judges react to price discrimination schemes (like that underlying the *Adobe Systems* dispute) with the same hostility shown

^{41. 2} MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 8.12[B][1][a] (2006).

^{42. 84} F. Supp. 2d 1086 (N.D. Cal. 2000).

^{43.} Id. at 1088.

^{44.} Id. at 1092.

^{45.} For criticism of the decision, see 2 NIMMER & NIMMER, supra note 41, § 8.12[B][1][d].

^{46.} See, e.g., Triad Sys. Corp. v. Se. Express Co., 64 F.3d 1330, 1333 (9th Cir. 1995), cert. denied, 516 U.S. 1145 (1996); Microsoft Corp. v. Harmony Computers & Elects. Inc., 846 F. Supp. 208 (E.D.N.Y. 1994).

by most members of the general public, and that hostility prompts them to wrench the doctrine to penalize the behavior.

Just as the first-sale doctrine powerfully affects opportunities for price discrimination within a given jurisdiction, the doctrine of "exhaustion" powerfully affects opportunities for price discrimination across national borders. In the typical exhaustion case, the plaintiff enjoys an intellectual property right (a copyright, patent, or trademark) with respect to a particular product in at least two countries: A and B. The plaintiff manufactures and sells (or authorizes the manufacture and sale of) the product in question in country A. The defendant purchases some of those products and resells them (typically at a higher price) in country B. The plaintiff seeks to stop this behavior. Why? Usually because the plaintiff wishes to sell the product in country B for a higher price than the price at which the defendant is selling it in country B, which in turn is higher than the price at which the plaintiff is selling the product in country A. In other words, the defendant's conduct—known, confusingly, as "parallel importation"—limits the plaintiff's ability to engage in differential pricing.

You might expect that the permissibility of parallel importation would be settled by an international agreement. But the issue has proven so nettlesome that treaty negotiators have generally avoided it. Article 6 of the TRIPS Agreement, for example, expressly provides that "nothing in this Agreement shall be used to address the issue of the exhaustion of intellectual property rights." The result is that the law governing exhaustion disputes varies radically by country and region.

In the United States, the primary pertinent doctrines are currently as follows: With respect to goods (or labels) subject to copyright protection, the U.S. Supreme Court in *Quality King Distributors, Inc. v. L'anza Research International, Inc.*⁴⁸ ruled that § 602(a) of the copyright statute, which appears to forbid unauthorized "[i]mportation into the United States" of copyrighted materials, is limited by § 109(a).⁴⁹ Thus, copyright owners may not prevent others from purchasing copyrighted products legally distributed in other countries, bringing them into this country, and reselling them. With respect to patented products, American courts until recently took the position that

^{47.} The Agreement on Trade-Related Aspects of Intellectual Property Rights, commonly known as the TRIPS Agreement, limits the flexibility of the member countries of the World Trade Organization in defining and enforcing intellectual property rights. See WTO, Intellectual Property (TRIPS), http://www.wto.org/english/tratop_e/trips_e/t_agmO_e.htm. For discussion of its avoidance of the exhaustion issue, see Alan O. Sykes, TRIPS, Pharmaceuticals, Developing Countries, and the Doha "Solution," 3 CHI. J. INT'L L. 47, 53 (2002).

^{48. 523} U.S. 135 (1998).

^{49.} *Id.* at 143 (quoting 17 U.S.C. § 602(a) (2000)).

patentees could prevent the reimportation of products lawfully distributed abroad if and only if they expressly forbade such reimportation when the products were first sold. In *Jazz Photo v. International Trade Commission*, however, the Federal Circuit appeared to repudiate the requirement of an express prohibition with respect to products sold in the first instance abroad, thus considerably strengthening patentees' rights against parallel importation. With respect to trademarked goods, the general rule is that parallel importation into the United States of genuine goods is forbidden unless they were originally manufactured by an entity under "common control"—in other words, by an entity that is either the parent of, a subsidiary of, or the same as the U.S. trademark holder. However, even in cases involving common control, parallel importation is proscribed if the goods sold by the U.S. trademark holder and the imported goods are materially different.

Each of the rules summarized in the preceding paragraph is, however, subject to some uncertainty or dispute. For example, Justice Ginsburg's concurring opinion in *Quality King* suggested that the force of the decision may be limited to situations in which the product at issue was originally lawfully manufactured in the United States, exported under the plaintiff's authority to another country, purchased there by the defendant, and reimported without the plaintiff's permission to the United States—in other words, it might not cover situations in which the product at issue was originally manufactured abroad.⁵⁵ What rule will govern cases of the latter sort has not yet been resolved. Similarly, it is not yet apparent whether the *Jazz Photo* doctrine will be applied to all patented products or only to products (like the disposable cameras at issue in the case itself) that have been used and then repaired prior to their importation into the United States.⁵⁶ With respect to trademarked goods, circuit courts disagree considerably concerning what constitutes a material difference between

^{50.} See Curtiss Aeroplane & Motor Corp. v. United Aircraft Eng'g Corp., 266 F. 71 (2d Cir. 1920).

^{51. 264} F.3d 1094 (Fed. Cir. 2001), cert. denied, 536 U.S. 950 (2002).

^{52.} See id.; Daniel Erlikhman, Note, Jazz Photo and the Doctrine of Patent Exhaustion: Implication to TRIPS and International Harmonization of Patent Protection, 25 HASTINGS COMM. & ENT. L.J. 307, 308 (2003).

^{53.} See K Mart Corp. v. Cartier, Inc., 486 U.S. 281 (1988).

^{54.} See Carl Baudenbacher, Trademark Law and Parallel Imports in a Globalized World-Recent Developments in Europe With Special Regard to the Legal Situation in the United States, 22 FORDHAM INT'L L.J. 645, 682 (1999).

^{55.} Quality King Distribs., Inc. v. L'anza Research Int'l, Inc., 523 U.S. 135, 154 (1998) (Ginsburg, J., concurring).

^{56.} See James B. Kobak, Jr., Exhaustion of Intellectual Property Rights and International Trade, 5 GLOBAL ECON. J., issue 1, art. 5, 4.

authorized and unauthorized goods.⁵⁷ The most pro-plaintiff of the rulings on this issue—the notorious decision of the Fifth Circuit in *Martin Herend Imports*, *Inc. v. Diamond & Gem Trading USA*, Co.⁵⁸—expresses and implements a general hostility to the practice of parallel importation very difficult to reconcile with the overarching doctrine.⁵⁹

Many other doctrines affect the ability of copyright owners to engage in domestic price discrimination—and most turn out to be similarly controversial or conflicted. For example, the scope of the derivative-work right in copyright law affects owners' capacity to charge different prices to users who wish to access their works for different purposes. To take the most famous illustration, if attaching a print, cut out of a coffee-table book, to a decorative tile constitutes the preparation of a derivative work, then the owner of the copyright in the print can charge tile manufacturers a premium; if not, she cannot. So what's the rule? The courts of appeals disagree. ⁶⁰

Another example: If owners of copyrights in books enjoy a public lending right, then they may, in effect, charge libraries more than individual purchasers. In most European countries, they have such a right, but not in the United States.

Yet another important doctrinal lever in the United States is the law of preemption. If copyright law preempts contracts by which copyright owners seek to limit the ways in which purchasers can make use of their works, then the ability of the owners to engage in differential pricing will be curtailed. In *ProCD*, *Inc. v. Zeidenberg*, Judge Easterbrook concluded that a contract of this general sort was not preempted, but his decision has been sharply criticized and has not yet been followed by other courts. ⁶²

When the anticircumvention provisions of the Digital Millennium Copyright Act⁶³ were adopted in 1998, the manufacturers of devices that incorporate copyrighted computer software saw in them potential tools for reinforcing price-discrimination schemes. For example, a manufacturer of

^{57.} See Baudenbacher, supra note 54, at 682–86; Lisa Harlander, Exhaustion of Trademark Rights Beyond the European Union in Light of Silhouette International Schmied v. Hartlauer Handelsgesellschaft: Toward Stronger Protection of Trademark Rights and Eliminating the Gray Market, 28 GA. J. INT'L & COMP. L. 267, 282–90 (2000); Seth Lipner, Trademarked Goods and Their Gray Market Equivalents: Should Product Differences Result in the Barring of Unauthorized Goods From the U.S. Markets?, 18 HOFSTRA L. REV. 1029, 1034 (1990).

^{58. 112} F.3d 1296 (5th Cir. 1997).

^{59.} See id

^{60.} Compare Mirage Editions, Inc. v. Albuquerque A.R.T. Co., 856 F.2d 1341 (9th Cir. 1988), cert. denied, 489 U.S. 1018 (1989), with Lee v. A.R.T. Co., 125 F.3d 580 (7th Cir. 1997).

^{61. 86} F.3d 1447 (7th Cir. 1996).

^{62.} Id

^{63.} See 17 U.S.C. § 1201 (2000).

printers sought to invoke the Act to block sales of cheap replacement printer cartridges. Selling the printers themselves for a low price, while selling authorized replacement cartridges at a substantial premium, enabled the manufacturer in effect to charge high-volume users more than low-volume users. Thus far, courts have refused to interpret the Act so as to facilitate such schemes, but the decisions have been idiosyncratic and have failed to decisively settle the question.⁶⁴

Patent law is likewise riddled with doctrines that powerfully influence opportunities for price discrimination—and that are similarly contested and unstable. One of the most important is the doctrine of patent misuse. The Federal Circuit has ruled that the scheme described above, ⁶⁵ in which purchasers of patented medical devices are forbidden to use them more than once, does not constitute patent misuse, breaking sharply from the prevailing interpretation of the analogous doctrine in copyright law. ⁶⁶ By contrast, courts have long taken the position that some patent licensing practices that are especially effective in achieving price discrimination—such as requiring licensees to purchase unpatented staple supplies or components from the patentee or his designee or insisting that licensees pay royalties based upon the licensees' total sales, rather than the magnitude of their use of the patented product or process—do constitute patent misuse. ⁶⁷

In sum, legislatures and courts, when adjusting and interpreting the rules of intellectual property law, have had (and will continue to have) many opportunities to increase or decrease the ability of copyright, patent, and trademark owners to engage in differential pricing of their products and services.

On occasion, lawmakers evince awareness of the impacts of their choices upon price discrimination. For example, in the *ProCD* case just mentioned, Judge Easterbrook argued that discriminatory pricing—specifically, a scheme for charging residential customers less for access to a nationwide telephone directory than business customers—was socially valuable, and the doctrine of preemption ought not be construed in a fashion that would

^{64.} See Thomas F. Cotter, The Procompetitive Interest in Intellectual Property Law, 48 WM. & MARY L. REV. 483 (2006).

^{65.} See supra note 10 and accompanying text.

^{66.} See B. Braun Med., Inc. v. Abbott Labs., 124 F.3d 1419 (Fed. Cir. 1997); Mallinckrodt v. Medipart, 976 F.2d 700 (Fed. Cir. 1992). The sharply different analogous doctrine in copyright law originated with Bobbs-Merrill Co. v. Straus, 210 U.S. 339 (1908).

^{67.} For a concise review of the evolution of the doctrine governing the permissibility of such arrangements, see 6 DONALD S. CHISUM, CHISUM ON PATENTS \$ 19.04[3][a], [e] (2000 & Supp. 2005).

frustrate it. By contrast, in NEC Electronics v. CAL Circuit Abco, ⁶⁸ the Court of Appeals for the Ninth Circuit made clear its distaste for price discrimination when adopting a generous interpretation of the doctrine of exhaustion: "[T]his country's trademark law does not offer [the plaintiff] a vehicle for establishing a worldwide discriminatory pricing scheme simply through the expedient of setting up an American subsidiary with nominal title to its mark."⁶⁹ Finally, in Quality King, the Supreme Court acknowledged that its decision would likely influence the ability of copyright owners to engage in discriminatory pricing, but refused to take that effect into account when rendering its ruling.⁷⁰ Much more often, however, lawmakers seem oblivious to the impacts of their edicts on opportunities for discriminatory pricing.

One of the purposes of this Article is to sensitize lawmakers to the existence and importance of this aspect of their decisionmaking. I hope, in this Part, to have accomplished that much. But a lawmaker, if persuaded, would legitimately ask: In which direction does recognition of the impact of my choice upon discriminatory pricing cut? Should I follow *Pro CD* in looking for interpretations that will increase the practice, or should I follow *NEC Electronics* in looking for interpretations that will decrease it? The balance of this Article seeks to provide at least partial answers to that question.

IV. THEORIES

A plausible place to look for guidance is the growing body of intellectual property theory. With increasingly intensity and sophistication, scholars of many stripes are trying to answer the broad question—What justifies the systems of copyright, patent, and trademark law?—and then derive from their answers inferences concerning the merits and demerits of specific rules. Some of those scholars have already begun to apply their general theories to the question of the legitimacy of differential pricing. This Part surveys and then tries to extend their inquiries.

The discussion is organized in four Subparts, corresponding to the four main branches of intellectual property theory. At the end of the Article, I briefly discuss the extent to which the four separate analyses converge or diverge.

^{68. 810} F.2d 1506 (9th Cir. 1987).

^{69.} Id. at 1511.

^{70.} See 523 U.S. 135, 153 (1998).

A. Welfare

The premise of the first and, currently, most influential approach is that intellectual property law should be shaped so as to maximize net social welfare. The key to making this guideline operational is the proposition that innovations are what economists refer to as "public goods"—meaning that, like navigational aids, roads, and environmental quality, they have two linked characteristics: (1) Enjoyment of them by one person does not materially curtail the ability of other people to enjoy them; and (2) once they have been made available to one person, it is difficult to prevent them from being made available, for free, to other people. Those two features, economists have long argued, create a danger: Unless the government intervenes in some way to stimulate the production of such goods, private parties will produce them at socially suboptimal levels.⁷¹

The creation and enforcement of copyrights and patents provide one means by which governments can help raise the rate at which innovations are generated. By protecting innovators against competition in the creation and distribution (or performance) of their innovations, enabling them to both recoup the initial costs of their innovations and, ideally, to make an attractive profit, such rights can induce potential innovators first to undertake projects they would otherwise avoid and then to commercialize their creations, thus making them available to consumers. To be sure, there are other strategies that governments might employ. For example, governments can, and sometimes do, engage in innovative activities themselves, subsidize private institutions (such as universities or individual faculty) that promise to engage in innovative activity, or offer prizes to successful innovators. Some of those alternative strategies may be superior to the creation of an intellectual property system with respect to particular kinds of innovation. ⁷² But, for better or worse, the primary strategy employed for many centuries by most governments to fulfill their responsibilities to foment innovation has been to create copyrights and patents.

^{71.} The principal works on which this approach is based are JEREMY BENTHAM, A MANUAL OF POLITICAL ECONOMY (1843), available at http://socserv.mcmaster.ca/econ/ugcm/3113/bentham/manualpoliticaleconomy.pdf; JOHN STUART MILL, PRINCIPLES OF POLITICAL ECONOMY 932–33 (5th ed. 1909); A.C. PIGOU, THE ECONOMICS OF WELFARE 151–81(2d ed. 1924). For a more detailed summary of this approach's sources and variants, see Fisher, Theories of Intellectual Property, supra note 1, at 177–84.

^{72.} See, e.g., FISHER, supra note 1, at ch. 6; Steve P. Calandrillo, An Economic Analysis of Property Rights: Justifications and Problems of Exclusive Rights, Incentives to Generate Information, and the Alternative of a Government-Run Reward System, 9 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 301 (1998); Neil Weinstock Netanel, Impose a Noncommercial Use Levy to Allow Free Peer-to-Peer File Sharing, 17 HARV. J.L. & TECH. 1 (2003); Steven Shavell & Tanguy Van Ypersele, Rewards Versus Intellectual Property Rights, 44 J.L. & ECON. 525 (2001); Michael Kremer, Patent Buy-Outs: A Mechanism for Encouraging Innovation (Nat'l Bureau of Econ. Research, Working Paper No. 6304, 1997), available at http://www.nber.org/papers/w6304.

Among the many implications of this way of thinking about and justifying an intellectual property regime is the proposition that the myriad rules that give shape to such a regime should be designed and then tuned so as to strike an optimal balance between two general considerations: the tendency of exclusive rights to stimulate socially beneficial innovative activity, and the hazard that such rights will curtail either second-generation innovative activity or public consumption of the fruits of innovation.

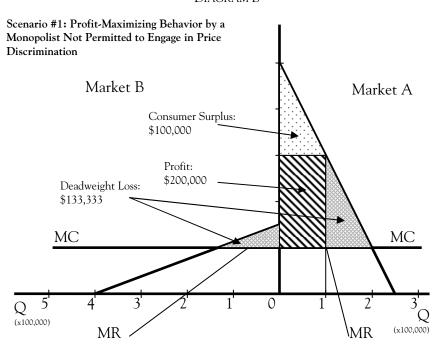
Before asking how this framework can inform our understanding of price discrimination with respect to intellectual products, we need to review quickly what economists have to say about price discrimination in general. Their primary claim—about which there is no longer significant controversy—is that it is impossible to say, in the abstract, whether price discrimination increases or decreases aggregate social welfare. whether it is beneficial from the standpoint of allocative efficiency depends upon the character of the markets that the discriminating firm seeks to keep separate—and that a ban on price discrimination would aggregate. Take the simplest case: Suppose that a seller could, if permitted, divide the universe of its customers into two autonomous groups and then charge a different profit-maximizing price to each. It turns out that, other things being equal, permitting this conduct would increase the size of the social pie if and only if the seller's total output would, as a result, increase. That, in turn, is more likely to occur where (1) the submarket with a higher reservation price is larger than the submarket with a smaller reservation price; (2) the difference between the profit margins possible in the two submarkets is large; and (3) the demand curves in the submarkets are concave rather than convex.⁷³

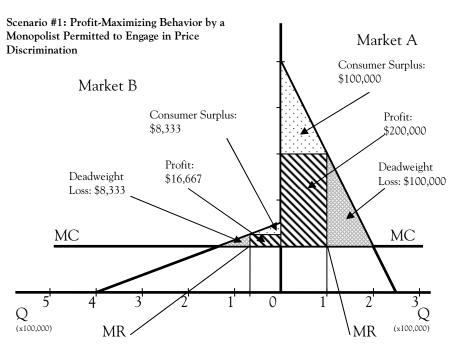
Diagram B, on the following pages, shows graphic illustrations of two scenarios, the juxtaposition of which substantiates this general claim of the indeterminacy of price discrimination in general, from the standpoint of net social welfare. In Scenario 1, permitting price discrimination, by increasing the total amount of profit and consumer surplus (and correspondingly decreasing the amount of deadweight loss), would be socially beneficial. In Scenario 2, permitting price discrimination would have the opposite effects and thus would be socially pernicious.

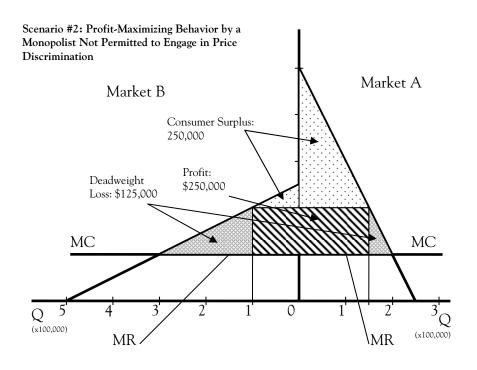
^{73.} See, e.g., VARIAN, supra note 29, at 7–10; Yong He & Guang-Zhen Sun, Income Dispersion and Price Discrimination, 11 PAC. ECON. REV. 59, 60 (2006); Hal R. Varian, Price Discrimination and Social Welfare, 75 AM. ECON. REV. 870 (1985); F.M. Scherer, The Economics of Parallel Trade in Pharmaceutical Products (Apr. 2001), available at http://www.wto.org/english/tratop_e/trips_e/hosbjor_presentations_e/13scherer_e.doc.

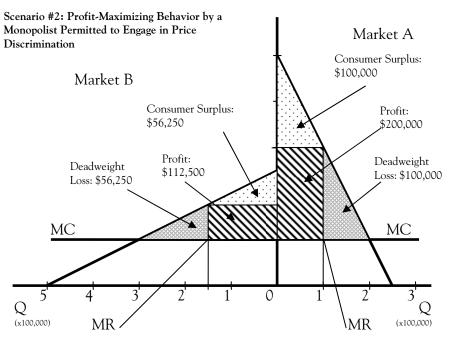
^{74.} These scenarios have been adapted from examples developed by Hal Varian and F.M. Scherer. *See* sources cited *supra* note 73.

DIAGRAM B









The foregoing generalizations, which are now familiar in the economics literature, must be tempered with several qualifications with special relevance to the problem of intellectual property rights. First, as Michael Meurer has shown in his pioneering article on price discrimination, the "dynamic effects"—meaning the stimulus to innovative activity that results from the increase in monopoly profits caused by price discrimination—may be sufficient to offset the welfare losses that are usually associated with diminished output. Note, for example, that even in Scenario 2, the seller earns more through price discrimination than it could through uniform pricing. (Otherwise, the seller would not engage in the practice.) If the lure of such enhanced profits attracts a sufficiently large number of potential innovators, the social surplus associated with their innovations may be larger than the welfare losses caused by permitting sellers to engage in this behavior.

The second complication arises from the fact that price discrimination often, though not invariably, results in a progressive redistribution of wealth. The reason: because the occupants of the lower-margin submarket are often poorer than the occupants of the higher-margin market. If we can assume (1) that the general principle of the diminishing marginal utility of wealth holds for most persons, and (2) that utility curves are randomly distributed within the population of pertinent consumers, then redistribution of wealth "downward" will increase social welfare.⁷⁶

A third complication: If consumption of the good in question results in positive externalities in the weaker of the two submarkets, then price discrimination may result in an increase in net social welfare even if it does not lead to an increase in total output.⁷⁷ Suppose, for example, that the good at issue in Scenario 2 is Photoshop (a powerful graphics editing software program), and that submarket A consists of nonstudent potential consumers, while submarket B consists of student potential consumers. It is possible that the positive externalities associated with students' use of the program—for example, the pleasure reaped by their friends when edited photos are shared with them, or the benefits reaped by their future

^{75.} See Michael J. Meurer, Copyright Law and Price Discrimination, 23 CARDOZO L. REV. 55 (2001).

^{76.} This is an old—and very important—topic in utilitarian theory. The text contains only the barest of outlines of my views on the subject. For a more detailed examination of the issue and substantiation of the generalizations offered here, see William W. Fisher & Talha Syed, Global Justice in Health Care: Developing Drugs for the Developing World, 40 U.C. DAVIS L. REV. 581, 602–18 (2007).

^{77.} See Takanori Adachi, Third-Degree Price Discrimination, Consumption Externalities and Social Welfare, 72 ECONOMICA 171 (2005).

employers as a result of their enhanced skills—exceed the positive externalities associated with nonstudents' use. If so, then permitting the seller (in this case, Adobe) to engage in price discrimination might advance social welfare.

The fourth complication pertains to the likely impact of legal prohibitions on price discrimination. Whether such bans are socially beneficial depends upon what else is permitted—for example, on the pricing practices that sellers will employ otherwise. Suppose, for instance, that movie studios, if forbidden to engage in overt third-degree price discrimination in the distribution of their movies, would continue to rely on the windowing system described above. That system has substantial and well-known disadvantages from the standpoint of social welfare. Most importantly, it forces many consumers to wait long periods of time before they can watch films. Those harms may well be worse than the welfare losses caused by permitting more overt forms of discrimination. So

A final complication involves what are sometimes called "psychic externalities." If a social or economic practice makes people unhappy or angry, the resultant disutilities must be considered in determining whether the practice on balance promotes social welfare. For example, as Frank Michelman showed long ago, an interpretation of the takings doctrine that aspires to maximize allocative efficiency must take into account the "demoralization costs" arising out of the dismay experienced by persons who witness uncompensated governmental regulations of private property and believe them to be unjust.81 Analogously, in determining whether a particular form of price discrimination advances social welfare, one must take into account the extent to which members of the society (and not just potential purchasers of the good or service in question) believe that the practice is exploitative or unfair. As shown above in Part II, many people have very strong reactions to price discrimination, so this factor is likely to be significant. Part II also showed, however, that those reactions are not uniform; differential pricing in certain forms or in certain contexts is regarded as much more acceptable than in others. The experiments by Amazon.com and Coca-Cola provoked rage, while the financial aid policies of most American colleges are relatively uncontroversial. Consequently, consideration of this variable requires close attention to

^{78.} See VARIAN, supra note 29; Sherwin Rosen & Andrew M. Rosenfield, Ticket Pricing, 40 J.L. & ECON. 351, 367–69 (1997).

^{79.} See supra text accompanying note 9.

^{80.} See FISHER, supra note 1, at ch. 4.

^{81.} See Frank I. Michelman, Property, Utility, and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law, 80 HARV. L. REV. 1165 (1967).

the particular circumstances in which a given discriminatory scheme is implemented—and to the set of people who would likely be made aware of it.

As should by now be apparent, the five complications just reviewed exacerbate, rather than reduce, the indeterminacy of the social welfare implications of price discrimination in general. The first and second factors (dynamic effect of increased profits and the benefits of a progressive redistribution of wealth) will usually, but not always, tilt in favor of discrimination; the fourth (what firms will do if forbidden to engage in specific forms of discrimination) will sometimes tilt in favor of discrimination; the third (positive externalities in submarkets) could tilt either way; and the fifth (psychic externalities) will usually, but not always, tilt against discrimination. More importantly, the magnitude of these effects will vary entirely by context.

This is not to suggest that welfare-based analysis proves useless when trying to assess price discrimination—only that application of the analysis must be highly particularized. In some specific settings, it will turn out that differential pricing is benign. For example, a careful study by Philip Leslie of discriminatory practices by Broadway theatres revealed that they resulted in a 5 percent increase in the theatres' profit and no significant offsetting adverse impact on consumer welfare. Similarly, Julie Mortimer's analysis of the evolving efforts of movie studios to differentiate consumer purchasers of DVDs from video stores that buy DVDs in order to rent them to individuals, showed that the adoption of overt discriminatory practices by European studios (unhampered by a first-sale doctrine) resulted in substantial net welfare benefits, but that the subsequent development in the United States of a system of revenue-sharing contracts (that did not run afoul of the first-sale doctrine) proved even better from a welfare standpoint. In other settings, discrimination will turn out to be malign.

The context in which a particularized inquiry of this sort is perhaps most important—and generates the most unequivocal results—is geographic discrimination with respect to vaccines and drugs directed at HIV/AIDS and other contagious diseases that are concentrated in developing countries. Should pharmaceutical firms be permitted—or even encouraged—to price their patented products differently in developing and developed countries? Several considerations strongly suggest that the answer is yes. If prevented from doing so, the firms almost certainly would adopt a uniform price that maximizes their revenues in the United States, Western Europe, and

^{82.} Phillip Leslie, *Price Discrimination in Broadway Theatre*, 35 RAND J. ECON. 520 (2004), *available at* http://www.stanford.edu/~pleslie/broadway.pdf.

^{83.} See Mortimer, supra note 40.

Japan—areas from which they currently receive over 90 percent of their revenues. The resultant prices would place the drugs out of the reach of the overwhelming majority of the residents of developing countries; sales in those areas would thus be negligible. In short, the situation confronting the firms more closely resembles Scenario 1 than Scenario 2. In addition, four of the five complicating factors discussed above appear to reinforce the welfare benefits of differential pricing in this setting. By increasing the firms' profits, geographic price discrimination will increase incentives to engage in research on developing-country diseases—incentives that all observers agree are woefully suboptimal. Differential pricing would redistribute wealth from richer to poorer patients, with associated improvements in social welfare. The positive externalities (decreased financial burdens and emotional trauma for patients' families and communities) that would result from preventing or curing the diseases in question are huge. And most observers applaud, rather than denounce, systems for providing the poor residents of developing countries life-saving drugs at low prices. The remaining factor seems neutral: If forbidden to engage in overt, third-degree geographic price discrimination, pharmaceutical firms are unlikely to revert to second-degree discriminatory strategies that are worse from a welfare standpoint. In view of this convergence of considerations, it is unsurprising that the scholars who have considered the issue have concluded that price discrimination in this setting would be economically efficient.84

B. Fairness

The members of a different group of commentators regard the approach outlined and applied in the previous Subpart as misguided. The purpose of intellectual property laws, they contend, is not to increase social welfare, but to give people what they are due—in other words, to treat people fairly. The challenge, of course, is to determine what fairness entails in this context.

For many years, the most popular variant of this general approach has been an adaptation of the labor-desert theory of property rights first advanced by John Locke. The heart of Locke's argument was the proposition that labor upon a resource held in common gives rise to a natural property right in the thing labored upon (as well as in the fruits of the labor) and that the state has an obligation to respect and enforce such a natural right. To this

^{84.} See Richard A. Hornbeck, *Price Discrimination and Smuggling of AIDS Drugs*, 5 TOPICS ECON. ANALYSIS & POL'Y, art. 16 (2005); Outterson, *supra* note 16.

general principle, there are some well-known qualifications—for example, that the acquisition of natural property rights in this manner is possible only if the laborer leaves "as much and as good" for others and does not allow the fruits of the effort to spoil. Many, though by no means all, political theorists contend that this general argument has at least as much traction in the context of intellectual property as it does in the context of property in land. Specifically, they argue that it provides authors and inventors with a strong claim to the fruits of their creative efforts.⁸⁵

A large body of literature explores the details of this argument and questions each of its assumptions. I will not pause to explore that literature here, but will focus instead on a single question: Assuming that this general framework is illuminating, what insight does it provide us into the defensibility of the practice of price discrimination with respect to intellectual products? The answer, unfortunately, is not much. The principal reason is that the theory has little to say about the set of entitlements encompassed by a natural property right. It has sometimes been taken to support an absolutist conception of property rights—of the sort (wrongly) associated with Blackstone—under which an owner would be able to do whatever she wished with things she owned. Such an approach, applied to the problem before us, would seem to justify all forms of price discrimination. Among the entitlements encompassed by an absolute right would seem to be the authority to charge whatever one pleased for access to it. At the opposite extreme, the theory has sometimes been thought to be compatible with the conception of property familiar to most modern lawyers—under which an owner enjoys a bundle of entitlements, but the public at large also enjoys various entitlements. Whether the authority to charge different people different prices lies within the owner's bundle is far from clear. In truth, Locke himself had nothing to say on this score, and the many glosses on his argument contain little of value to us.

A second variant—related to but distinct from the Lockean argument—proves much more fertile. It turns out that most people, or at least most Westerners, subscribe to a conception of distributive justice that social psychologists refer to as "equity theory." The centerpiece of this vision is the principle that each participant in a collective enterprise deserves a share of its fruits proportionate to the magnitude of his or her

^{85.} See Fisher, Theories of Intellectual Property, supra note 1, at 170, 184–89; Seana Valentine Shiffrin, Intellectual Property Theory, in A COMPANION TO CONTEMPORARY POLITICAL PHILOSOPHY (Robert E. Goodin et al., forthcoming 2007) (manuscript at 4–6, copy on file with the UCLA Law Review).

contribution to the venture. ⁸⁶ J. Stacey Adams, a pioneer in the study of equity theory, describes one of its implications for popular conceptions of fairness in commercial relations: "Inequity exists for Person whenever his perceived job inputs and/or outcomes stand psychologically in an obverse relation to what he perceives are the inputs and/or outcomes of Other."

Viewed through this lens, most forms of price discrimination look bad. In the typical price discrimination practice, the prices that buyers pay vary independently of their inputs—what they contribute to the transaction. Consequently, the practice will appear inequitable. To this generalization, however, there is one important exception: Buyers who have in the past contributed more to the seller (or who can be expected to do so in the future) could be provided discounts without violating this principle.

These inferences align remarkably well with the majority of the popular attitudes toward price discrimination surveyed in Part II. Whereas price discrimination in general typically elicits hostility, merit scholarships and systems for rewarding loyal customers—practices that treat more favorably buyers who have brought or will bring more to the table—raise few hackles. By contrast, one of the things that seems most to have infuriated Amazon.com customers is that its experiment in differential pricing penalized repeat customers. Similarly, existing users of the Word software program reacted with rage when Microsoft adopted a pricing schedule for an upgrade to the program that was more favorable to new users. The alignment between the theory and observed attitudes has two implications: It lends further credibility to the contention that equity theory is indeed a widely shared conception of distributive justice, and it lends some normative weight to the public's responses.

The third variant of the fairness approach focuses on a particular dimension of some marketing schemes: the nature of the criteria employed to differentiate submarkets in either first-degree or third-degree price discrimination. It will probably come as no surprise that the use of criteria that penalize "discrete and insular minorities" or groups traditionally subject to invidious discrimination in other contexts is widely

^{86.} See Elizabeth Hoffman & Matthew L. Spitzer, Entitlements, Rights, and Fairness: An Experimental Examination of Subjects' Concepts of Distributive Justice, 14 J. LEGAL STUD. 259 (1985); Reinhard Selten, The Equity Principle in Economic Behavior, in DECISION THEORY AND SOCIAL ETHICS (Hans Gottinger & Werner Leinfellner eds., 1978).

^{87.} See J. Stacy Adams, Toward an Understanding of Inequity, 67 J. ABNORMAL & SOC. PSYCHOL. 422, 424 (1963).

^{88.} See Jennifer Lyn Cox, Can Differential Prices Be Fair?, 10 J. PRODUCT & BRAND MGMT. 264, 270 (2001) (describing customers' anger at Microsoft's pricing strategy for upgrades to Word 2.0, which had the effect of penalizing current users of the program).

regarded as unfair. There seems little dispute, for example, concerning the noxiousness of the practice, revealed by Ian Ayres, by which black car buyers are routinely charged more than white car buyers, or the racially discriminatory behavior of a Benetton clerk chronicled in Patricia Williams's famous story. Gender-based price discrimination is frowned upon, but not so universally. A few states have adopted statutes forbidding discrimination based on gender in the pricing of services; however, even where they exist, such proscriptions are largely unenforced (for example, dry cleaners routinely charge more for women's suits than for men's). It seems that not all people agree with California Assemblywoman Hannah-Beth Jackson, who denounced the practice as "morally wrong." As one gets farther away from these traditionally suspect criteria, public hostility quickly diminishes. There appears to be little opposition, for instance, to the use of age (as in senior discounts) or wealth (as in the pricing practices of universities and private schools).

This third aspect of fairness in price discrimination is plainly important, but on this front, intellectual property theory seems to have nothing to contribute. For guidance in applying and refining this perspective, one would look not to scholarship about copyright, patent, or trademark law, but to the broad and deep literature concerning racial and gender discrimination in public schools, zoning, and employment.

C. Personhood

The third branch of intellectual property theory is commonly known as the "personality" or "personhood" approach. Long powerful in continental Europe, it seems to be gaining strength in common law countries. At its core is the proposition that intellectual products are manifestations or extensions of the identities of their creators. The individual artist (the central figure in this theory) is said to define herself in and through her art. Consequently, the law ought to provide her considerable continuing control over that art. The principal doctrinal precipitates of this perspective are moral rights, which are widely adopted

^{89.} See PATRICIA J. WILLIAMS, THE ALCHEMY OF RACE AND RIGHTS: DIARY OF A LAW PROFESSOR (1991); Ian Ayres, Further Evidence of Discrimination in New Car Negotiations and Estimates of Its Cause, 94 MICH. L. REV. 109 (1995); Ian Ayres, Fair Driving: Gender and Race Discrimination in Retail Car Negotiations, 104 HARV. L. REV. 817 (1991).

^{90.} See Christl Dabu, For Canadian Women, That Haircut May Soon Get Cheaper, CHRISTIAN SCI. MONITOR, Aug. 10, 2005, at 12, available at http://www.csmonitor.com/2005/0810/p12s02-woam.html.

^{91.} Id.

and seriously enforced in Europe and given more partial protection in the United States through the federal Visual Artists Rights Act and some state art-preservation statutes.

As several scholars have observed, if personality theory is to provide effective guidance to contemporary lawmakers, it must be updated in two ways. First, it must be applied comprehensively. All persons, not just traditional graphic artists, must be afforded meaningful opportunities to express and define themselves artistically. Second, it must be adjusted to take into account the fact that, in modern societies, most people express themselves artistically not through the manipulation of primary, raw materials (paint, canvass, stone, paper, ink), but by manipulating and recombining extant intellectual products. 92

The implication of personality theory, modified along these lines, for price discrimination is simple but very important: Price discrimination is bad and should be curtailed if it has the effect of impeding creative modifications of intellectual products. The hazard of this effect could be much mitigated by making a few prophylactic adjustments of intellectual property doctrines.

First and perhaps most importantly, the fair use doctrine in copyright law can and should be defined expansively with respect to transformative works. In other words, courts should give more latitude to defendants who make creative or critical uses of copyrighted materials than to defendants who make merely consumptive uses.⁹³ The result would be that, if, as some scholars suggest, copyright owners are inclined to charge transformative users more than nontransformative users, they would be prevented (or at least discouraged) from doing so by the prospect that the transformative users might be able to engage in their activities for free. For similar reasons, courts should be more generous toward defendants who create and distribute parodies of famous trademarks.⁹⁴

^{92.} See Lawrence Lessig, Free Culture (2004); Neil Netanel, Copyright's Paradox: Property in Expression/Freedom of Expression (forthcoming 2008); Dan Hunter & F. Gregory Lastowka, Amateur-to-Amateur, 46 Wm. & Mary L. Rev. 951 (2004).

^{93.} This has been one of my hobbyhorses for some time. See, e.g., Fisher, Property and Contract on the Internet, supra note 1, at 1246–47; Fisher, Reconstructing the Fair Use Doctrine, supra note 1, at 1743. During the past twenty years, American courts have moved slowly in this direction. See, e.g., Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569 (1994); Suntrust Bank v. Houghton Mifflin Co., 268 F.3d 1257 (11th Cir. 2001). For criticism of the scholarly and judicial trend, see Amy Kapczynski, The Emerging Access to Knowledge Movement and the New Politics of Intellectual Property Law, 116 YALE L.J. (forthcoming 2007).

^{94.} One way of achieving this would be through adoption of Rochelle Dreyfuss's proposal for a doctrine of "expressive genericity." See Rochelle Cooper Dreyfuss, Expressive Genericity: Trademarks as Language in the Pepsi Generation, 65 NOTRE DAME L. REV. 397 (1990).

Second, American lawmakers, when deciding whether—or how much—to increase their recognition and protection of moral rights, should give more play to the right of attribution, which poses no barriers to creative uses of copyrighted materials and shields an important personhood interest, than they should the right of integrity, which is much more problematic from this standpoint.⁹⁵

Third, copyright owners' exclusive right to prepare derivative works, shielded by § 106(3), % should be construed narrowly. So, for example, Mirage Editions, Inc. v. Albuquerque A.R.T. Co. ⁹⁷ was rightly decided, whereas Lee v. A.R.T. Co. ⁹⁸ was wrongly decided. The result would be to prevent copyright owners from demanding an extra fee from persons who wish to make creative uses of their works.

Fourth, lawmakers should more frequently insert into the copyright statute provisions like § 115, which creates a compulsory license (in effect, forcing copyright owners to adopt a price-discrimination scheme) in *favor* of creative users of copyrighted material—specifically, musicians who make "covers" of songs which have already been distributed to the public.⁹⁹

D. Culture

The fourth and last branch of intellectual property theory is less well established than the other three. My own view, however, is that it is potentially the most powerful. Set forth below is a quick sketch of the approach, followed by an analysis of its implications for price discrimination.

The premises upon which the approach is built are that "there exists such a thing as human nature, which is mysterious and complex but nevertheless stable and discoverable, that people's nature causes them to flourish more under some conditions than others, and that social and political institutions should be organized to facilitate that flourishing." Like the personality theory just surveyed, this approach seeks to identify conditions or "functionings" necessary for the full realization of personhood,

^{95.} Viewed from this angle, the Supreme Court's recent decision in *Dastar Corp. v. Twentieth Century Fox Film Corp.*, 539 U.S. 23 (2003), by needlessly curtailing the attribution right, moved in the wrong direction.

^{96. 17} U.S.C. § 106(3) (2000).

^{97. 856} F.2d 1341 (9th Cir. 1988), cert. denied, 489 U.S. 1018 (1989).

^{98. 125} F.3d 580 (7th Cir. 1997).

^{99.} But cf. Robert P. Merges, Contracting Into Liability Rules: Intellectual Property Rights and Collective Rights Organizations, 84 CAL. L. REV. 1293 (1996) (sharply criticizing § 115).

^{100.} For example, Seana Shiffrin's recent survey of intellectual property theory, see Shiffrin, supra note 85, makes no mention of it.

^{101.} See Fisher, Reconstructing the Fair Use Doctrine, supra note 1, at 1746.

but offers a more capacious conception of what those conditions are. Specifically, it contends that to achieve full self-realization, a person needs: health, 102 autonomy, 103 meaningful work, 104 civic engagement, 105 and privacy. 106 Making widely available 107 a life of this sort would require many things, but among them are cultural diversity, 108 a culture embodying a rich artistic tradition, 109 free, empowering education, political democracy, 110 and semiotic democracy. 111

- 102. See, e.g., Martha C. Nussbaum, Capabilities as Fundamental Entitlements: Sen and Social Justice, 9 FEMINIST ECON. 33, 41 (2003) (including in the list of central human capabilities "[b]eing able to have good health, including reproductive health; to be adequately nourished; to have adequate shelter").
- 103. See, e.g., George Kateb, Democratic Individuality and the Claims of Politics, 12 POL. THEORY 331, 343 (1984) ("One's dignity resides in being, to some important degree, a person of one's own creating, making, choosing, rather than in being merely a creature or a socially manufactured, conditioned, manipulated, thing: half-animal and half-mechanical and therefore wholly socialized."). For other versions of this fundamental value, see, for example, JOEL FEINBERG, HARM TO SELF 31–47 (1986), and Yochai Benkler, Siren Songs and Amish Children: Autonomy, Information, and the Law, 76 N.Y.U. L. REV. 23 (2001).
- 104. Meaningful work may be defined as work that requires skill and concentration, presents the laborer with challenges and problems he can overcome only through the exercise of initiative and creativity, and is part of a larger project he considers socially valuable and must take into account in making his decisions. The concept originated in the early writings of Marx. See KARL MARX, THE GRUNDRISSE 124 (D. McLellan ed., trans., 1971); KARL MARX, ECONOMIC AND PHILOSOPHIC MANUSCRIPTS OF 1844, at 110–11, 137 (Dirk J. Struick ed., 1964). For subsequent elaborations of the idea, see, for example, JON ELSTER, MAKING SENSE OF MARX 521 (1985); BERTEL OLLMAN, ALIENATION: MARX'S CONCEPT OF MAN IN A CAPITALIST SOCIETY 97–103 (1971). One form of meaningful work is artistic creativity. Another is inventive activity connected to a project one considers socially meritorious. But there are many others. The concept of meaningful work may thus be thought of as an umbrella that encompasses the kind of creativity that occupies the attention of personality theorists.
- 105. See, e.g., Frank Michelman, Law's Republic, 97 YALE L.J. 1493 (1988); Cass Sunstein, Interest Groups in American Public Law, 38 STAN. L. REV. 29 (1985).
- 106. See, e.g., JEFFREY ROSEN, THE UNWANTED GAZE (2000); Jerry Kang, Privacy in Atlantis: A Dialogue of Form and Substance, 18 HARV. J.L. & TECH. 1 (2004).
- 107. The question of the scope of the responsibility of the government to make available to all of its citizens a life of this sort is extraordinarily complex. Among the efforts to answer it are Harry Frankfurt's theory of "sufficientism" and Elizabeth Anderson's theory of "democratic equality." Those theories—and some responses to them—are discussed in Fisher & Syed, *supra* note 76, at 585–647. For the purposes of this Article, I evade the issue by adopting the vague phrase, "widely available."
- 108. See, e.g., MILL, supra note 71, at 252–57 (arguing that the greater the diversity of the lifestyles and ideas on public display, the more each person must decide for herself what to think and how to act, thereby developing her own "mental and moral faculties" and rendering the culture as a whole even more "rich, diversified, and animating").
- 109. See, e.g., Ronald Dworkin, Art as a Public Good, 9 COLUM. J. ART & L. 143, 153–57 (1985) (contending that the more "resonant" the "shared language" of a culture—the richer it is in representation, metaphor, and allusion—the more opportunities for creativity and subtlety in communication and thought it affords all persons).
 - 110. See NETANEL, supra note 92.
 - 111. See FISHER, supra note 1, at ch. 1.

This general approach to political and moral philosophy has myriad implications for the design of intellectual property systems. Here are a few: We should modify copyright law so as to remove the impediments it sometimes poses to educational activities. 112 For reasons similar to those discussed in the preceding Subpart, we should liberalize copyright and trademark law to increase opportunities for critical or transformative uses of intellectual products. We should refuse to extend intellectual property protection to things (such as facts and historical theories) essential to political conversation and deliberation. 113 We should replace the increasingly cumbersome and ineffectual copyright regime as applied to the online distribution of recorded entertainment with an alternative compensation system of the sort recently considered—but not ultimately adopted—in France. We should adopt what Oren Bracha describes as an "opt-out," rather than an "opt-in," rule with respect to authors and publishers who wish not to participate in comprehensive scanning and indexing ventures like the Google Library Project. 114 Finally, we should adjust patent law so as both (1) to increase incentives for the development of the drugs that address communicable diseases common in developing countries; and (2) to make those drugs affordable for all persons. 115

Focusing, finally, on the question presented in this Article, here is what adoption of the culture framework would entail with respect to the facilitation of price discrimination:

Price discrimination is good to the extent that it facilitates education. So, for example, lawmakers should look with favor upon student discounts for software and other schemes for getting essential resources into students' hands. Analogously, Google should be encouraged

^{112.} Examples of aspects of copyright law that merit reform from this standpoint are the anticircumvention provisions of the Digital Millennium Copyright Act, to the extent that they frustrate teaching, studying, and scholarship, and the Technology, Education, and Copyright Harmonization (TEACH) Act, which, though well intentioned, has failed to achieve its purpose of facilitating distance education. See DIGITAL MEDIA PROJECT, THE DIGITAL LEARNING CHALLENGE: OBSTACLES TO EDUCATIONAL USES OF COPYRIGHTED MATERIALS IN THE DIGITAL AGE (2006), available at http://cyber.law.harvard.edu/media/files/copyrightandeducation.html.

^{113.} This principle would set a limit on the development of database protection statutes of the sort now in force in Europe and being considered in the United States.

^{114.} See Oren Bracha, Standing Copyright Law on Its Head? The Googleization of Everything and the Many Faces of Property, 85 TEX. L. REV. 1799 (2007).

^{115.} Determining what combination of reforms would have such an effect is far from easy. That is the aspiration of Part II of the book on which Talha Syed and I are currently at work: WILLIAM FISHER & TALHA SYED, DRUGS, LAW, AND THE GLOBAL HEALTH CRISIS (forthcoming 2008).

to make its forthcoming catalogue of digitized books available more cheaply to schools (primary, secondary, and university) than to other institutions.

Price discrimination is good if it increases access to essential medicines. For the reasons explained above, ¹¹⁶ international geographic price discrimination in pharmaceutical products, specifically for the purpose of differentiating developed and developing countries, is likely to have that effect. ¹¹⁷

Price discrimination is bad if it corrodes the spirit of altruistic sharing of ideas and innovations. How might it have such an effect? It is reasonably common for intellectual property owners to charge uniform prices for access to their works but then either to provide access for free to (or tacitly to tolerate unauthorized usage by) persons who cannot afford the flat price. Software companies, for example, have long tolerated piracy rates in excess of 25 percent in North America. Universities that own patents on inventions by their faculty members commonly demand substantial license fees from private firms who wish to make use of the innovations, but look the other way when other academic researchers employ them without permission. For many years, record companies tolerated home taping of their products on analog cassette recorders. The Creative Commons licensing system, pioneered by Larry Lessig, has enabled millions of creators to authorize members of the public to make noncommercial uses of their works for free, even while they continue to charge commercial users. Some of these practices rest upon and help to sustain an ethic of sharing, a popular commitment to the notion that not all people who want access to one's intellectual products should have to pay for them. That ethic is attractive, something we should seek to sustain.¹¹⁸ The availability of price discrimination, by enabling creators to charge (at low rates, to be sure) persons to whom they would otherwise be inclined to donate their materials, in some contexts might damage that ethic. Where such a danger exists, we should be loathe to permit differential pricing.

Finally, price discrimination is bad if it fosters invasions of privacy. This is an especially serious worry with respect to first-degree price discrimination. In order to charge each customer close to the

DEMOCRATIZING INNOVATION (2005).

^{116.} See supra pp. 27-28.

^{117.} Note that, while this is an argument for adjusting (or enforcing) the law so as to facilitate price discrimination as between, for example, the United States and Malawi, it is not an argument for sustaining different prices as between, for example, the United States and Canada.

118. See YOCHAI BENKLER, THE WEALTH OF NETWORKS (2006); ERIC VON HIPPEL,

maximum amount that he or she would be willing and able to spend, sellers need to know a good deal about individual buyers. Useful information includes their incomes, wealth, tastes, purchasing habits, and credit histories. The value of that information to discriminating sellers may induce them to create and then exploit channels for gathering and then aggregating data about their potential customers. That, in turn, may exacerbate the extent to which the information-technology revolution is already encroaching upon traditional conceptions of privacy. 119

CONCLUSION

What can we learn from this safari? First, at the most general level, each of the perspectives we have considered suggests that price discrimination is good in some setting and bad in others. Somewhat more specifically, the merits of the practice are affected by myriad variables, including the shape of the submarkets that it permits separating, the character of the criteria used to divide those groups, its transparency, and public attitudes toward specific forms of the practice. If we hope, when tuning intellectual property law, to accommodate those variations—to forbid or discourage bad forms of price discrimination while acquiescing in or encouraging good ones—we will need to disaggregate radically the doctrines at issue, formulating specific rules to deal with specific situations.

Second, the four analyses we have conducted may help lawmakers of different political or philosophic persuasions to decide whether specific forms of price discrimination merit favor or disfavor. The normative force of those analyses is, of course, strongest when they converge. We have seen, for example, that charging the residents of developing countries less for drugs than the residents of developed countries is benign from every angle. Secretly charging returning customers more than newcomers, by contrast, is hard to defend from any of the perspectives. In such contexts, the implications of this Article for law reform are clear cut. When the analyses diverge, lawmakers will have to decide for themselves which of the approaches they find most congenial.

^{119.} See, e.g., JONATHAN ZITTRAIN, THE FUTURE OF THE INTERNET AND HOW TO STOP IT (forthcoming 2008).

Finally, although the principal focus of the Article has been intellectual property law, the analysis has revealed, perhaps inadvertently, that sensitive management of price discrimination with respect to intellectual products may well require reliance upon other legal doctrines as well. For instance, proscribing the use of race or other invidious criteria to practice third-degree price discrimination might well be achieved more effectively through an extension of the Civil Rights Acts than through adjustments to copyright, patent, or trademark law. And the threat posed to privacy by increased opportunities for price discrimination might be handled more effectively by regulating how sellers can gather personal information and what they can do with it, than by reducing those opportunities.¹²⁰

^{120.} See Matthew A. Edwards, Price and Prejudice: The Case Against Consumer Equality in the Information Age, 10 LEWIS & CLARK L. REV. 559, 592–95 (2006).