

Essential Facilities

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Since United States v. Terminal Railroad Association, the essential facilities doctrine has been applied to a wide variety of business contexts—from football stadiums to the New York Stock Exchange. However, courts have also declined to extend the doctrine to a wide variety of situations. Despite academic criticism, courts have never provided a coherent rationale for the limitations of the doctrine. The essential facilities doctrine can be seen as an equivalent to the economic concept of a “natural monopoly,” implying that the wisdom of judicial regulation in this area requires an assessment of the administrative complexity involved. Three conclusions follow: First, diversification restraints on the owners of essential facilities are inefficacious. Second, the doctrine should not be applied to intellectual property. Third, the doctrine is most likely to be useful when the monopoly facility is shared by numerous competitors, has excess capacity, and where the applicants seek access on the same terms as the incumbents. Finally, an examination of the government litigation against the Microsoft Corporation reveals that an injunctive remedy providing mandatory access to the Windows platform could run into two sorts of constitutional difficulties. First, a court would be forced to deal with a complex pricing problem to avoid a violation of the Takings Clause of the Fifth Amendment. Second, to the extent the Windows platform may be regarded as a forum for communication, mandatory access may lead to compelled speech, potentially violating the First Amendment.

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INTRODUCTION

A recurring theme in William Baxter's schema of antitrust law, whether expressed in the classroom or the courtroom, was that, to be legitimate, a theory of antitrust liability must envision a remedy that is both feasible for a court to administer and conducive to enhancing consumer welfare. As Assistant Attorney General, for example, Baxter dropped the IBM monopolization case as unworkable,¹ settled the AT&T case by splitting up the Bell System,² and introduced merger guidelines that encouraged parties to "fix it first" in terms of necessary divestitures of competing businesses.³

1. "Mr. Baxter . . . stated that 'even assuming that the government could prove IBM's liability, there is no assurance that appropriate relief could be obtained.'" *In re International Bus. Mach. Corp.*, 687 F.2d 591, 594 (2d Cir. 1982).

2. See *Modification of Final Judgment*, reprinted in *United States v. American Tel. & Tel. Co.*, 552 F. Supp. 131, 226-34 (D.D.C. 1982), *aff'd sub nom. Maryland v. United States*, 460 U.S. 1001 (1983).

3. Antitrust Div., U.S. Dep't of Justice, *Merger Guidelines*, 47 Fed. Reg. 28,492 (1982), reprinted in 4 Trade Reg. Rep. (CCH) ¶ 13,102.

In the same spirit of emphasizing that liability rules and remedies must share a common economic logic, and that courts should not be conscripted to serve as de facto regulatory bodies, we examine here a strand of antitrust doctrine that has only grown in significance since Baxter's splitting of the Bell System. The call for mandatory access remedies in antitrust law, often but not always expressed under the rubric of the "essential facilities" doctrine, has grown steadily since Baxter's tenure at the Antitrust Division of the Department of Justice. The most dramatic manifestation of that trend today, though perhaps not its culmination, is the current litigation against Microsoft Corporation, which is widely regarded as the most consequential antitrust case prosecuted by the federal government since the IBM and AT&T cases on which Baxter left his mark seventeen years earlier. It is therefore a fitting tribute to William Baxter's contribution to the theory and practice of antitrust law to assess, with the Baxterian skepticism that he imparted to us as his students, the logic and limits of mandatory access remedies in antitrust law.

* * *

In 1889, the notorious financier Jay Gould organized a coalition to acquire railroad facilities in and around St. Louis, Missouri. The antitrust suit that resulted from Gould's escapade—*United States v. Terminal Railroad Association*⁴—involved three different means of crossing the Mississippi when the government finally sued the combination. After Gould had obtained control of each crossing, his acquisitive urge was still well short of its goal. At this dominant regional and transcontinental railroad junction, twenty-four independent lines terminated—half on the bluffs forming the St. Louis side of the Mississippi, and half on the plains stretching away from East St. Louis, Illinois, on the opposite bank. Gould's group, which included only fourteen of the twenty-four lines, acquired all of the railroad facilities of both cities: terminals and yards, and tunnels and tracks leading from the high bluffs on the Missouri side of the Mississippi down to the river crossing below.

In short, the acquisition gave Gould complete control of the facilities necessary to load or unload freight traffic or passengers anywhere within the area of St. Louis or East St. Louis, let alone carry anything or anyone across the Mississippi. Given that the assets under Gould's control were absolutely indispensable to the railroads of the region, and considering the importance of the railroad to both passenger and freight transportation in that era, it is

4. 224 U.S. 383 (1912). For an exhumation and incisive analysis of the facts of *Terminal Railroad*, see David Reiffen & Andrew N. Kleit, *Terminal Railroad Revisited: Foreclosure of an Essential Facility or Simple Horizontal Monopoly?*, 33 J.L. & ECON. 419 (1990) (analyzing the facts of *Terminal Railroad*, and concluding that the monopoly was a horizontal one which did not support a vertical theory of antitrust harm).

difficult to imagine an amalgamation today that could achieve a similar chokehold. Perhaps one might imagine the unification under common control of the highways, bridges, railroad facilities, airports, and city streets of St. Louis and East St. Louis.

The specific results of the combination's power were predictable: The combination was able to impose premium rates on traffic moving within and through the St. Louis area, constrained with respect to the latter by the presence of a railroad bridge at Memphis, Tennessee, roughly 285 miles to the south. These rates were imposed in the form of supplemental charges called "arbitrariness." The term suggests the likely attitude of the parties most obviously aggrieved by the situation—namely, the railroads relying on those facilities that were not included within Gould's ownership group.

The federal government brought suit in 1905, seeking, under sections 1 and 2 of the Sherman Act,⁵ to dissolve the Association and restore independent competition among the various entities united by Gould. But the Supreme Court, in 1912, found merit in the defendant's argument that the consolidation of terminal facilities within this enormous transportation complex would permit more efficient coordination of railroad operations. Accordingly, the Court held that dissolution would not be required unless the parties could not agree on a remedy short of divestiture.⁶ This remedy was to require the Association to admit any railroad to ownership on the same terms and conditions as the railroads already allied with Gould. Moreover, railroads that wished to use the Association's facilities without becoming owners would have to be charged usage fees that would "place every such [railroad] company upon as nearly an equal plane . . . as that occupied by the [member] companies."⁷ The Court gave no further guidance on the principles by which such rates could be calculated.

Thus, the competition that had existed before Gould's consolidation of the numerous independent terminal companies and other facilities operators could have been restored by a decree of divestiture. Rather than rekindle the competition extinguished by Gould, however, the Court permitted the entry of a decree that required regulation of (1) the terms and conditions of ownership in the monopoly established by the consolidation and (2) the relationship between the rates and terms of usage applied to owners and those applied to non-owner users of the monopoly facility.

The legal principle for which *Terminal Railroad* came to stand—the essential facilities doctrine—is now paraphrased in terms compelling in their simplicity: A monopolist in control of a facility essential to other competi-

5. Sherman Act of July 2, 1890, chap. 647, §§ 1, 2, 26 Stat. 209 (current version codified as amended at 15 U.S.C. §§ 1, 2 (1994 & Supp. 1997)).

6. See 224 U.S. at 412-13.

7. *Id.* at 411.

tors must provide reasonable access to that facility if it is feasible to do so. This principle has been applied to centralized market facilities such as the New York Stock Exchange,⁸ the Providence, Rhode Island wholesale produce market,⁹ the multiple listing services for residential real estate,¹⁰ the computerized airline reservation system,¹¹ modern rail networks,¹² regional electricity distribution networks,¹³ natural gas pipelines,¹⁴ oil pipelines and storage facilities,¹⁵ a municipal pier,¹⁶ an airport terminal,¹⁷ football and basketball stadiums,¹⁸ and the nationwide transmission and switching facilities that once comprised the local telephone network of the former Bell System.¹⁹ Creative antitrust lawyers have attempted to apply the doctrine to an even

8. See *Silver v. New York Stock Exch.*, 373 U.S. 341 (1963).

9. See *Gamco, Inc. v. Providence Fruit & Produce Bldg., Inc.*, 194 F.2d 484 (1st Cir. 1952), *cert. denied*, 344 U.S. 817 (1952).

10. See *Montgomery County Assoc. of Realtors, Inc. v. Realty Photo Master Corp.*, 878 F. Supp. 804 (D. Md. 1995); *Supermarket of Homes, Inc. v. San Fernando Valley Bd. of Realtors*, 1983-2 Trade Cas. (CCH) ¶ 65,718 (C.D. Cal. 1983).

11. See *Alaska Airlines, Inc. v. United Airlines, Inc.*, 948 F.2d 536 (9th Cir. 1991), *cert. denied*, 503 U.S. 977 (1992).

12. See *Delaware & Hudson Ry. Co. v. Consolidated Rail Corp.*, 902 F.2d 174 (2d Cir. 1990), *cert. denied*, 500 U.S. 928 (1991); *Laurel Sand & Gravel Inc. v. CSX Transp. Inc.*, 704 F. Supp. 1309 (D. Md. 1989), *aff'd*, 924 F.2d 539 (4th Cir. 1991).

13. See *Otter Tail Power Co. v. United States*, 410 U.S. 366 (1973); *City of Anaheim v. Southern Cal. Edison Co.*, 955 F.2d 1373 (9th Cir. 1992); *City of Vernon, Cal. v. Southern Cal. Edison Co.*, 955 F.2d 1361 (9th Cir. 1992), *cert. denied*, 506 U.S. 908 (1992); *City of Malden, Mo. v. Union Elec. Co.*, 887 F.2d 157 (8th Cir. 1989); *City of Mishawaka, Ind. v. American Elec. Power Co.*, 616 F.2d 976 (7th Cir. 1980), *cert. denied*, 449 U.S. 1096 (1981); *Alameda Mall, Inc. v. Houston Lighting & Power Co.*, 615 F.2d 343 (5th Cir. 1980), *cert. denied*, 449 U.S. 870 (1980); *TEC Cogeneration, Inc. v. Florida Power & Light Co.*, 1994-1 Trade Cas. (CCH) ¶ 70,564 (S.D. Fla. 1994); *Florida Cities v. Florida Power & Light Co.*, 525 F. Supp. 1000 (S.D. Fla. 1981); *Town of Massena v. Niagara Mohawk Corp.*, 1980-2 Trade Cas. (CCH) ¶ 63,526 (N.D.N.Y. 1980).

14. See *City of Chanute v. Williams Natural Gas Co.*, 955 F.2d 641 (10th Cir. 1992), *cert. denied*, 506 U.S. 831 (1992); *Illinois ex rel. Burriss v. Panhandle E. Pipeline Co.*, 935 F.2d 1469 (7th Cir. 1991), *cert. denied*, 502 U.S. 1094 (1992); *Garshman v. Universal Resources Holding, Inc.*, 824 F.2d 223 (3d Cir. 1987); *Consul Ltd. v. Transco Energy Co.*, 805 F.2d 490 (4th Cir. 1986), *cert. denied*, 481 U.S. 1050 (1987); *Consolidated Gas Co. v. City Gas Co.*, 665 F. Supp. 1493 (S.D. Fla. 1987), *aff'd*, 880 F.2d 297 (11th Cir. 1989), *vacated*, 889 F.2d 264 (11th Cir. 1989), *reinstated*, 912 F.2d 1262 (11th Cir. 1990), *remanded on other grounds with instructions to dismiss*, 499 U.S. 915 (1991).

15. See *Florida Fuels v. Belcher Oil Co.*, 717 F. Supp. 1528 (S.D. Fla. 1989).

16. See *Driscoll v. City of New York*, 650 F. Supp. 1522 (S.D.N.Y. 1987).

17. See *Interface Group, Inc. v. Massachusetts Port Auth.*, 816 F.2d 9 (1st Cir. 1987).

18. See *Ferguson v. Greater Pocatello Chamber of Commerce, Inc.*, 848 F.2d 976 (9th Cir. 1988); *Flip Side Productions, Inc. v. Jam Productions, Ltd.*, 843 F.2d 1024 (7th Cir.), *cert. denied*, 488 U.S. 909 (1988); *Fishman v. Wirtz*, 807 F.2d 520 (7th Cir. 1986); *Hecht v. Pro-Football, Inc.*, 570 F.2d 982 (D.C. Cir. 1977), *cert. denied*, 436 U.S. 956 (1978); *Elliott v. United Center, No. 95-C5440*, 1996 U.S. Dist. LEXIS 1177 (N.D. Ill. Feb. 2, 1996); *Hart Productions, Inc. v. Greater Cincinnati Convention and Visitors Bureau*, 1990-2 Trade Cas. (CCH) ¶ 69,233 (S.D. Ohio 1990); *United States Football League v. National Football League*, 634 F. Supp. 1155 (S.D.N.Y. 1986).

19. See *MCI Comm. Corp. v. American Tel. & Tel. Co.*, 708 F.2d 1081 (7th Cir. 1983), *cert. denied*, 464 U.S. 891 (1983); *Bell Atl. Corp. v. MFS Communications Co.*, 901 F. Supp. 835 (D. Del. 1995).

broader array of items: hospitals,²⁰ ski mountains,²¹ soft drinks,²² credit cards,²³ the milk industry,²⁴ cable television,²⁵ the apartment rental referral industry,²⁶ direct all-freight flights between New York City and San Juan, Puerto Rico,²⁷ the ownership of National Football League franchises,²⁸ publications and periodical distributors,²⁹ the list of vendors willing to provide teletype terminals compatible with the Western Union teletype service network,³⁰ electronic transmission of advertisements to newspapers,³¹ a list of the business classification in which each advertiser in the Miami, Florida *Yellow Pages* spends the greatest amount of money each year,³² a member-

20. See *Schueller v. Norman*, 1995-2 Trade Cas. (CCH) ¶ 71,065 (8th Cir. 1995); *Willman v. Heartland Hosp. E.*, 34 F.3d 605 (8th Cir. 1994); *McKenzie v. Mercy Hosp.*, 854 F.2d 365 (10th Cir. 1988); *Delaware Health Care, Inc. v. MCD Holding Co.*, 893 F. Supp. 1279 (D. Del. 1995); *Leak v. Grant Med. Ctr.*, 893 F. Supp. 757 (S.D. Ohio 1995); *Blue Cross & Blue Shield United v. Marshfield Clinic*, 881 F. Supp. 1309 (W.D. Wis. 1994), *modified*, 883 F. Supp. 1247 (W.D. Wis. 1995), *modified*, 65 F.3d 1406 (7th Cir. 1995); *Rea v. Hospital Corp. of Am.*, 892 F. Supp. 821 (N.D. Tex. 1993); *Castelli v. Meadville Med. Ctr.*, 702 F. Supp. 1201 (W.D. Pa. 1988), *aff'd*, 872 F.2d 411 (3d Cir. 1989); *Registered Physical Therapists, Inc. v. Intermountain Health Care, Inc.*, 1988-2 Trade Cas. (CCH) ¶ 68,233 (D. Utah 1988); *McMorris v. Williamsport Hosp.*, 1984-2 Trade Cas. (CCH) ¶ 66,252 (M.D. Pa. 1984); *Konik v. Champlain Valley Physicians Hosp. Med. Ctr.*, 561 F. Supp. 700 (N.D.N.Y. 1983), *aff'd*, 733 F.2d 1007 (2d Cir. 1984), *cert. denied*, 469 U.S. 884 (1984); *Pontius v. Children's Hosp.*, 552 F. Supp. 1352 (W.D. Pa. 1982).

21. See *Aspen Highlands Skiing Corp. v. Aspen Skiing Co.*, 738 F.2d 1509 (10th Cir. 1984), *aff'd on other grounds*, 472 U.S. 585 (1985).

22. See *Sun Dun v. Coca-Cola Co.*, 740 F. Supp. 381 (D. Md. 1990).

23. See *SCFC ILC, Inc. v. VISA USA, Inc.*, 36 F.3d 958 (10th Cir. 1994).

24. See *Ideal Dairy Farms, Inc. v. John Labatt Ltd.*, No. 92-2469, 1995 U.S. Dist. LEXIS 10310 (D.N.J. May 8, 1995).

25. See *Templin v. Times Mirror Cable Television, Inc.*, 1995-1 Trade Cas. (CCH) ¶ 71,040 (9th Cir. 1995).

26. See *Valet Apartment Servs., Inc. v. Atlanta J. & Const.*, 865 F. Supp. 828 (N.D. Ga. 1994).

27. See *Century Air Freight, Inc. v. American Airlines, Inc.*, 597 F. Supp. 564 (S.D.N.Y. 1984).

28. See *Mid-South Grizzlies v. National Football League*, 550 F. Supp. 558 (E.D. Pa. 1982), *aff'd*, 720 F.2d 772 (3d Cir. 1983), *cert. denied*, 467 U.S. 1215 (1984).

29. See *Twin Labs., Inc. v. Weider Health & Fitness*, 900 F.2d 566 (2d Cir. 1990); *Byars v. Bluff City News Co.*, 683 F.2d 981 (6th Cir. 1982); *Byars v. Bluff City News Co.*, 609 F.2d 843 (6th Cir. 1979); *Soap Opera Now, Inc. v. Network Publ'g Corp.*, 737 F. Supp. 1338 (S.D.N.Y. 1990); *Colonial Penn Group, Inc. v. American Ass'n of Retired Persons*, 698 F. Supp. 69 (E.D. Pa. 1988), *aff'd*, 948 F.2d 536 (9th Cir. 1991), *cert. denied*, 503 U.S. 977 (1992).

30. See *Olympia Equip. Leasing Co. v. Western Union Tel. Co.*, 797 F.2d 370 (7th Cir. 1986), *cert. denied*, 480 U.S. 934 (1987).

31. See *AD/SAT v. Associated Press*, 920 F. Supp. 1287 (S.D.N.Y. 1996); *Paddock Publications, Inc. v. Chicago Tribune*, 1995-2 Trade Cas. (CCH) ¶ 71,255 (N.D. Ill. 1995).

32. See *BellSouth Adver. & Pub. Corp. v. Donnelly Info. Pub., Inc.*, 719 F. Supp. 1551 (S.D. Fla. 1988), *aff'd*, 933 F.2d 952 (11th Cir. 1991), *vacated, on reh'g, en banc*, 977 F.2d 1435 (11th Cir. 1992), *rev'd*, 999 F.2d 1436 (11th Cir. 1993), *cert. denied*, 510 U.S. 1101 (1994). For other cases involving telephone directories, see *Illinois Bell Tel. Co. v. Haines & Co.*, 905 F.2d 1081 (7th Cir. 1990), *vacated*, 499 U.S. 944 (1991); *Directory Sales Management Corp. v. Ohio Bell Tel. Co.*, 833 F.2d 606 (6th Cir. 1987); *Rural Tel. Serv. Co. v. Feist Publications, Inc.*, 737 F. Supp. 610 (D.

ship in an appraiser's association,³³ payphone long distance carriers in Puerto Rico,³⁴ cellular long distance service,³⁵ microwave facilities for international communications,³⁶ the home health care market,³⁷ resistive bands and tubing for exercise equipment,³⁸ the lignite market,³⁹ and high performance Intel microprocessors.⁴⁰

Although the essential facilities doctrine has been the target of some distinguished critics,⁴¹ the remedy of mandatory access has enjoyed persistent, even growing, popularity despite being almost surely unworkable in most cases. In Part I of this article, we describe the evolution of the doctrine following *Terminal Railroad*. Although courts have declined to extend the essential facilities doctrine to a variety of facilities and situations, no court has stated the specific rationale for those limitations. We therefore attempt to define limits for the essential facilities doctrine by analyzing its historical roots, its judicial applications, and its relationship to the law of monopolization.

Part II relates the essential facilities doctrine to traditional concepts of monopolization and establishes the correspondence between the concept of an essential facility and that of a public utility or "natural monopoly." The equivalence of those concepts demonstrates that remedies in essential facilities cases necessarily require some form of regulation. In other words, by hypothesis no remedy of mandated access can eliminate the underlying monopoly. Once identified, the role of judicial regulation (through consent decree) in essential facilities cases may be judged by the same standards applied to other forms of public control of natural monopolies. The central thesis derived from this analysis is that the wisdom of judicial regulation of essential facilities requires an assessment of the administrative complexity of

Kan. 1990), *rev'd*, 957 F.2d 765 (10th Cir. 1992), *cert. denied*, 506 U.S. 984 (1992); *White Directory of Rochester, Inc. v. Rochester Tel. Corp.*, 714 F. Supp. 65 (W.D.N.Y. 1989).

33. *See National Ass'n of Review Appraisers & Mortgage Underwriters, Inc. v. Appraisal Found.*, 64 F.3d 1130 (8th Cir. 1995).

34. *See SAS of Puerto Rico, Inc. v. Puerto Rico Tel. Co.*, 48 F.3d 39 (1st Cir. 1995).

35. *See United States v. Western Elec. Co.*, 890 F. Supp. 1 (D.D.C. 1995).

36. *See Caribbean Broad. Sys., Ltd. v. Cable & Wireless PLC*, 148 F.3d 1080 (D.C. Cir. 1998).

37. *See American Health Sys., Inc. v. Visiting Nurse Ass'n*, 1994-1 Trade Cas. (CCH) ¶ 70,633 (E.D. Pa. 1994).

38. *See Fabrication Enters., Inc. v. Hygenic Corp.*, 848 F. Supp. 1156 (S.D.N.Y. 1994).

39. *See TCA Bldg. Co. v. Northwestern Resources Co.*, 861 F. Supp. 1366 (S.D. Tex. 1994).

40. *See Intergraph Corp. v. Intel Corp.*, 1998-1 Trade Cas. (CCH) ¶ 72,126 (N.D. Ala. 1998).

41. *See, e.g., Donald I. Baker, Compulsory Access to Network Joint Ventures Under the Sherman Act: Rules or Roulette?*, 1993 UTAH L. REV. 999 (arguing that the core conceptual problem with compulsory access orders is that mandating cooperation among businesses is futile); Philip E. Areeda, *Essential Facilities: An Epithet In Need of Limiting Principles*, 58 ANTITRUST L.J. 841 (1990) (arguing that no Supreme Court case has provided a consistent rationale for the doctrine or has explored either the social costs and benefits or the administrative costs of requiring the creator of an asset to share it with a rival).

the relief proposed. Three specific conclusions follow from this analysis. First, diversification restraints on the owners of essential facilities are an inefficacious judicial remedy. Second, the essential facilities doctrine has no proper application to intellectual property. Third, to the extent that the essential facilities doctrine is at all useful, it is most likely to be so when applied to a monopoly facility shared by numerous competitors, where claimants seek access to the facility on terms and conditions identical to those already being offered to existing users, but only in cases where such facilities have excess capacity.

In Part III, we examine the current government litigation against Microsoft Corporation. The Department of Justice and twenty state attorneys general filed antitrust cases against Microsoft on May 18, 1998.⁴² At their core, the lawsuits theorize that Microsoft's practices concerning its own Internet Explorer and competing internet browsers, particularly Netscape's Navigator, are intended to thwart the development of a new operating system for personal computers (PCs) that could challenge the preeminent position currently occupied by Microsoft's Windows. Broadly speaking, the Department of Justice and the state attorneys general seek two kinds of injunctive remedies against Microsoft. The first is the mandatory grant to Microsoft's competitors of access to Microsoft's Windows platform. The second is the mandatory unbundling of Microsoft's products, such that they would be offered for sale independently of one another on terms deemed acceptable to antitrust authorities.⁴³

We examine the first kind of injunctive remedy, mandatory access, which the government plaintiffs in the Microsoft case do not explicitly characterize as an application of the essential facilities doctrine. Indeed, the phrase "essential facility" does not appear in either complaint. We show that the mandatory access remedy raises two constitutional problems, as well as a subtle question in price theory. To avoid causing an uncompensated taking of property in violation of the Takings Clause of the Fifth Amendment, a court ordering such mandatory access would have to address a complex problem of access pricing. In this respect, the Microsoft case encapsulates the difficulty that has always dogged the essential facilities doctrine. In addition, because the Windows platform may be regarded as a forum for communication, court-mandated access to this platform resembles compelled speech. Thus, the First Amendment provides yet a second constitutional

42. *United States v. Microsoft Corp.*, No. 98-1232 (D.D.C. filed May 18, 1998); *New York ex rel. Vacco v. Microsoft Corp.*, No. 98-1233 (D.D.C. filed May 18, 1998).

43. State and federal antitrust authorities do, of course, seek other remedies against Microsoft, such as a prohibition on certain exclusive dealing practices. See Complaint, Prayer for Relief ¶ 2, *United States v. Microsoft Corp.*, No. 98-1232 (D.D.C. filed May 18, 1998) [hereinafter DOJ Prayer for Relief].

constraint on the application of mandatory access remedies when the form of commerce at issue involves speech.

We conclude that mandatory access remedies, such as the essential facilities doctrine, do not fit comfortably within antitrust law. They are the stuff of regulatory bodies, not courts. The courts and the Antitrust Division should not try to create through injunction or consent decree what Congress and the state legislatures have declined to create through a regulatory agency.

I. ORIGINS AND DEVELOPMENT OF THE ESSENTIAL FACILITIES DOCTRINE

The phrase “essential facility” does not appear in any reported judicial decision until 1977.⁴⁴ A few early cases, however, provide the foundation for the essential facilities doctrine and explain its evolution.

A. *Terminal Railroad*

The salient facts in *Terminal Railroad* were described earlier. After the government’s complaint had been dismissed without opinion by a divided circuit court, the Supreme Court reversed, holding that the combination had violated both sections 1 and 2 of the Sherman Act.⁴⁵ Once the nature of the facilities is understood, this conclusion appears to the present-day antitrust analyst as inescapable. The overt coordination among the numerous independent entities within the Gould group clearly provided the degree of concerted action necessary to a finding of conspiracy or agreement, and the obvious result was to create a combination with the collective power to exact substantial monopoly rents from those dependent on the facilities involved. The definition in section 2 of a conspiracy to monopolize also appears to have been satisfied: The combination seized monopoly power by its acquisition of facilities of comprehensive scope and importance to a variety of transportation services—services that were themselves vital to almost every facet of economic activity in the region at that time.

As suggested above, *Terminal Railroad* is particularly notable for the remedial path that the Court specifically declined to take. Independent competition previously had existed among the terminal companies and among the entities controlling the various means of crossing the Mississippi, and competition could have been restored by a decree of divestiture. If the competitive independence of the various terminal companies and bridge owners could have been restored, it seems obvious that it would have been preferable from the perspective of consumer welfare to have done so, rather than rely

44. The term appears to be first defined in the published judicial opinions in *Hecht v. Pro-Football, Inc.*, 570 F.2d 982, 992 (D.C. Cir. 1977), *cert. denied*, 436 U.S. 956 (1978).

45. *See* *United States v. Terminal R.R. Ass’n*, 224 U.S. 383, 410 (1912).

on a remedy that required the creation of a permanent mechanism for control of the combination's undisputed monopoly power by continuous monitoring and adjustment of the rates, terms, and conditions of ownership and use. A structural remedy would likely have obviated continuing judicial oversight of any kind.

There are few clues to the Court's view of this question. The Court apparently believed, however, that it was unnecessary to sacrifice the efficiencies attainable by joint operation of the various facilities. Its characterization of the violation strongly anticipates the remedy it mandated: "[w]hen, as here, the inherent conditions are such as to prohibit any other reasonable means of entering the city, the combination of every such facility under the exclusive ownership and control of less than all of the companies under compulsion to use them violates both the first and second sections of the [Sherman Act] . . ."⁴⁶ It is unclear, however, whether the Court perceived that, by requiring both compulsory open ownership and equality between rates for owners and non-owners, its mandate would require a degree of continuous monitoring of the terms and conditions of ownership and usage. The strongest evidence that it did not is the Court's instruction that any decree entered pursuant to its mandate contain a disclaimer of any intention to affect in any way the power of the Interstate Commerce Commission (ICC) to regulate railroad rates and services.⁴⁷

Thus, it seems that the Court did not consider the decree from the standpoint of the simplicity of judicial administration, because the Court did not see the task of regulation as a judicial responsibility. The Court reserved the power to review the decree actually entered, but it did not seem to regard the nature of the relief ordered as a significant challenge to effective administration. Rather, the Court seemed to assume that judicial and regulatory responsibilities could be clearly divided and adequately discharged—the former by entry of a decree consistent with the mandate, and the latter by the ICC. As it turned out, however, disputes regarding decree interpretation required the specific attention of the Court on at least *three* subsequent occasions, the last of which occurred in 1924—nineteen years after the government's initial complaint, and thirty-five years after the formation of the Association.⁴⁸

After a brief jurisdictional squabble occasioned by a reorganization of the lower federal courts, the Court faced in 1913 a government challenge to the fundamental structure of the decree.⁴⁹ The United States had insisted that the terminal company be forbidden from engaging in any business other than

46. *Id.* at 409.

47. *See id.* at 412.

48. The three cases are: *Ex parte* United States, 226 U.S. 420 (1913); Terminal R.R. Ass'n v. United States, 236 U.S. 194 (1915); and Terminal R.R. Ass'n v. United States, 266 U.S. 17 (1924).

49. *Ex parte* United States, 226 U.S. 420.

the provision of terminal services. Specifically, the decree prohibited the terminal company from providing railroad transportation. The premise for that prohibition apparently was the Court's belief that it would prevent exploitation of the Association's monopoly power by including exorbitant charges for terminal services as part of railroad transportation rates. Moreover, the government insisted on a provision that would have permitted the regulation of the terminal company's rates by the Court. Having failed to obtain the defendants' agreement to such terms, the government asked for the relief contemplated in the event of disagreement—namely, dissolution of the combination.⁵⁰

The Court rejected all of the government's contentions. Because the Court had found nothing illegal about the combination's effort to engage in the terminal business, it followed that the decree should permit the Association to provide railroad transportation that originated, moved, and terminated on its own lines.⁵¹ The Court resisted even more the suggestion for a provision regulating rates, finding that this would have caused the decree to be "plainly repugnant" to regulation of railroad rates by the ICC.⁵² As for the government's failure to agree with other parties, the Court read the term "parties" to include only the defendants.⁵³

In a subsequent appeal from a motion to adjudge certain railroads in contempt of the *Terminal Railroad* decree, the Supreme Court was called upon to settle a squabble between the members of the Association whose lines terminated on the west side of the Mississippi River and those with lines terminating on the east side.⁵⁴ A dispute emerged as to which railroad was required to pay transfer charges for westbound traffic. Again the Court refused to permit the decree to become an occasion for judicial ratemaking, characterizing any interference with rates as a legislative function entrusted to the ICC.⁵⁵ Finding no support in the decree for any particular requirement as to transfer charges, the Court held that no action would lie regarding the payment or non-payment of such charges.⁵⁶ The west-side lines would have to obtain relief, if any, from the Commission.

In sum, *Terminal Railroad* permitted a monopoly problem to be resolved not by structural relief that would have restored active competition, but by requiring that the existing combination be universal. At the time of its first decision in 1912, the Court did not seem to be enforcing a decree that provided a basis for continuing judicial intervention. Although the Court subse-

50. See *Terminal Railroad*, 236 U.S. at 202.

51. See *id.* at 205-07.

52. See *id.* at 207.

53. See *id.* at 202-03.

54. See *Terminal Railroad*, 266 U.S. at 27.

55. See *id.* at 30-31.

56. See *id.* at 31.

quently expressed concern about usurping legislative responsibilities,⁵⁷ it did not acknowledge, or even seem to recognize, that the decree had in effect made the judiciary responsible for the execution of law with respect to a significant problem in the American transportation industry of that era, much as the Modification of Final Judgment placed the judiciary in a regulatory role over the Bell System between the divestiture of AT&T⁵⁸ and the passage of the Telecommunications Act of 1996.⁵⁹ Perhaps such regulatory problems were not foreseen at all, though the evidence suggests that the Court expected regulation by the ICC to be adequate to the task. In any event, the Court steadfastly refused to permit itself or the decree court to be drawn into ratemaking disputes.

B. *Associated Press*

The second Supreme Court case that has been cited as belonging to the essential facility line is *Associated Press v. United States*.⁶⁰ AP was a joint venture among roughly 1,200 leading general-circulation daily newspapers in the United States and similar newsgathering organizations throughout the world. Members were obligated to share their original news stories with the association; in return they obtained access to the stories of the other members, and to news obtained directly by AP's own staff. The association's bylaws permitted any incumbent member to veto applications for membership by its competitors. Thus, for example, a metropolitan daily newspaper could prevent participation in AP by any other newspaper in the same metropolitan area. The provision assured that the incumbent would be the only outlet for AP news in that market.

The Department of Justice challenged this bylaw provision under the Sherman Act, arguing that it constituted a per se unlawful agreement under section 1, and an attempt to monopolize. The government's motion for summary judgment elicited an opinion from Judge Learned Hand (then a district judge) that created several complexities in the analysis of the basic antitrust issues. The court granted the government's motion on the section 1 claim, but did not rule for the government on any theory involving monopolization. Because other similar wire services existed (United Press International, for example), there was a factual dispute concerning whether AP possessed monopoly power.

Thus, *AP* reached the Supreme Court on direct appeal as a case involving an agreement among entities that did not compete, and whose collective

57. *See id.* at 30.

58. *United States v. American Tel. & Tel. Co.*, 552 F. Supp. 131, 225-34 (D.D.C. 1982), *aff'd sub nom.* *Maryland v. United States*, 460 U.S. 1001 (1983).

59. Pub. L. No. 104-104, 110 Stat. 56 (1996).

60. 326 U.S. 1 (1945).

market power (if any) had to be ignored in the usual procedural context of a successful plaintiff's motion for summary judgment on a different count. To the majority of the Court, it appeared that the restraint was an impermissible exercise of the collective power of the combination.⁶¹ Because the veto seemed to the Court to have no legitimate purpose other than to protect AP members from their local competitors, the restraint was held unlawful even though it had to be assumed that the members of AP could not collectively exercise monopoly power.⁶²

The dissenters focused on what they feared were several untenable but necessary implications of the decision. Exclusive contracts for the gathering of news were commonplace, and they seemed to be clearly permissible for parties without market power; thus, to condemn the exclusivity of a news-gathering arrangement among parties who, by assumption, lacked monopoly power seemed to threaten even the most innocent arrangements between publishers and reporters.⁶³ Moreover, once the veto power had been struck down, it was unclear how AP could exclude anyone applying for membership, or on what grounds such an exclusion lawfully might be made. Again, commonplace arrangements that were clearly dependent on exclusivity seemed to be endangered.⁶⁴

Like the Court in *Terminal Railroad*, the majority in *AP* did not find it necessary to contemplate further proceedings to supervise the implementation of competitive equality or terms of ownership by those within the joint enterprise. It simply required deletion of a provision of the agreement that discriminated against potential participants on the basis of their status as competitors of other members of the venture. The dissenters, however, recognized that elimination of the exclusivity provision would simply require its reformulation on some other basis. They resisted even this limited degree of judicial intervention, fearing that it would require arbitration of other admission criteria of more ambiguous purpose and effect. This prospect was an especially serious concern in light of the importance of AP to the newspaper industry, and the First Amendment interest in avoiding government interference with the press.

Because summary judgment was denied on the attempted monopolization claim, the holding of *AP* must be restricted to the conspiracy claim. The majority opinions stress that the bylaw was a manifestation of the collective

61. *See id.* at 26 (noting that "for practical purposes there remain effective barriers to admission to the Associated Press based solely on grounds of business competition.")

62. *See id.* at 12-13 (finding that "AP's By-Laws had hindered and restrained the sale of interstate news to non-members who competed with members").

63. *See id.* at 49-52 (Murphy, J., dissenting) (arguing that the majority was using the Sherman Act to outlaw a "reasonable competitive advantage").

64. *See id.* at 54-57 (Murphy, J., dissenting) (arguing the defendants did nothing more than exercise a trader's right arbitrarily to choose his own associates).

power of the membership of AP, rather than the individual and unilateral efforts of each member. The claim is an unusual one, however, in that the alleged co-conspirators were not in competition with each other; direct head-to-head competition among general circulation daily newspapers was becoming increasingly rare, and it was characteristic that the markets served by AP members did not directly overlap. Indeed, the competitor veto had worked to assure that this was the case.

Several other unstated rationales for the decision in *AP* can be advanced. *Terminal Railroad* certainly cannot supply the controlling basis for the decision, since the element of monopoly power—so overwhelming in that earlier case—had to be assumed not to exist in the procedural context of *AP*. Nevertheless, the fact remains that only three viable news services of comparable geographic scope existed at the time, and AP seemed to be the leader in size and prestige. Thus *AP* may be seen as a reaction to a degree of market power that seemed obvious to the Court even though such market power legally could not form the stated rationale for the decision.

AP might also be regarded as the forerunner of two later developments in antitrust—both now largely abandoned—in which market power considerations tend to be suppressed: (1) hostility toward unjustified unilateral conduct that inflicts harm on specific enterprises without threatening the survival of active competition within the affected market, and (2) application of rules presuming the illegality of agreements involving only partial integration of distinct business entities. The former is best illustrated by the minority view—now rejected by the Supreme Court⁶⁵—that unilateral anticompetitive conduct can be condemned as an attempt to monopolize, even without a showing that the party has sufficient market share to justify the reasonable fear that its conduct might permit it to obtain monopoly power.⁶⁶

The latter development, also in eclipse, is illustrated by decisions refusing to recognize various justifications (greater productive efficiency, enhanced ability to succeed against larger competitors, prevention of free-rider problems, and so forth) for collaborative efforts among otherwise independent firms, and refusing to impose market-power requirements for the condemnation of such partial integrations.⁶⁷ The authority of those cases is now

65. See *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 456 (1993) (noting that “the conduct of a single firm, governed by section 2 of the Sherman Act, ‘is unlawful only when it threatens actual monopolization.’” (quoting *Copperweld Corp. v. Independence Tube Corp.*, 467 U.S. 752, 767 (1984))).

66. Compare *United States v. Empire Gas Corp.*, 537 F.2d 296 (8th Cir. 1976), *cert. denied*, 429 U.S. 1122 (1977) (holding that, in a highly competitive market, predatory unilateral conduct is not actionable), with *William Inglis & Sons Baking Co. v. ITT Continental Baking Co.*, 668 F.2d 1014 (9th Cir. 1981), *cert. denied*, 459 U.S. 825 (1982) (finding that attempted monopolization can be proven by inferences based on evidence of predatory conduct alone).

67. See, e.g., *United States v. Topco Assocs.*, 405 U.S. 596 (1972) (holding that Topco’s territorial divisions amounted to horizontal integration and thus were per se illegal); *United States v.*

regarded as highly questionable, however, and one court has stated that they have been effectively overruled to the extent that they condemn such arrangements without regard to market power and actual competitive effect.⁶⁸

In short, *AP* fits uncomfortably—if at all—into the ordinary conception of the essential facilities doctrine. The starting point for the leading essential facilities case, *Terminal Railroad*, is overwhelming monopoly power held by a combination with “obvious advantages” of integration. The first element was necessarily lacking in *AP*. The case is difficult to understand from our present vantage point because its other doctrinal underpinnings have gone through a full cycle of growth and decay since the Court issued the decision in 1945.

C. *Gamco*

Gamco, Inc. v. Providence Fruit & Produce Building, Inc.,⁶⁹ decided in 1952, is another early case cited as a source of the essential facilities doctrine. The facility involved was a building, together with its appurtenant road and railroad approaches, that was built to serve as the centralized market for the wholesaling of fresh produce in Providence, Rhode Island. The building is described as having three stories and a length of about 1,000 feet. The plaintiff, a produce merchant expelled from further use of the centralized market, alleged that it had been excluded unjustifiably from using this facility, and that the exclusion had crippled its produce business. On appeal, the First Circuit held that the produce warehouse was required to provide facilities to the excluded plaintiff on the same terms and conditions as other users of the facility.⁷⁰

To the First Circuit, the defendants’ rationale for the expulsion—the plaintiff’s unsound credit—seemed pretextual,⁷¹ and it reversed the lower court’s judgment for the defendants. The *Gamco* court did opine on the type of justifications that would be reasonable for such a facility to adopt:

Admittedly the finite limitations of the building itself thrust monopoly power upon the defendants, and they are not required to do the impossible in accepting indiscriminately all who would apply. Reasonable criteria of selection, therefore, such as lack of available space, financial unsoundness, or possibly low

Sealy, Inc., 388 U.S. 350 (1967) (holding that *Sealy*’s exclusive territorial arrangements amounted to horizontal integration and thus were per se illegal).

68. *See Rothery Storage & Van Co. v. Atlas Van Lines, Inc.*, 792 F.2d 210, 226 (D.C. Cir. 1986) (Bork, J.) (“An examination of more recent Supreme Court decisions, however, demonstrate that, to the extent that *Topco* and *Sealy* stand for the proposition that all horizontal restraints are illegal per se, they must be regarded as effectively overruled.”), *cert. denied*, 479 U.S. 1033 (1987).

69. 194 F.2d 484 (1st Cir.), *cert. denied*, 344 U.S. 817 (1952).

70. *See id.* at 489.

71. *See id.* at 488 (finding that “defendants have failed to show that the basis for their action . . . was innocent of the economic consideration alleged.”).

business or ethical standards, would not violate the standards of the Sherman Antitrust Act.⁷²

The court, however, was not called upon to assess the reasonableness of the produce building's admissions criteria.

Both the element of monopoly power and that of the "obvious advantages of unification" seem clear in *Gamco*. Like other market facilities to which monopolization principles have been applied, the efficiencies of permitting collective operation of centralized markets—for securities, residential real estate, or fruits and vegetables—seem indisputable. Moreover, in *Gamco* the court saw no need to define the terms and conditions of ownership, to establish "equality" between owners and non-owner users, or to supervise requirements for shared use of the facility in question since the plaintiff was attempting to obtain access to the facility on the same terms and conditions as other users, according to the existing rules of the organization. It was seeking the enforcement of existing rules, not attempting to obtain a new right of access, or to change the rules, as in *AP* and *Terminal Railroad*.

It was also clear in *Gamco* that, unlike in *AP*, no legitimate basis existed for exclusivity among the facility users. It was the basic function of the warehouse to serve all produce dealers in Rhode Island. Economies of scale strongly favored a centralized market facility; open ownership was entirely consistent with the effective performance of that basic function, and the rules of the organization contemplated open ownership. By contrast, analogous assertions with respect to the Associated Press would have been incorrect: Requiring AP to grant membership to all would have destroyed the basic nature of that organization.

But more fundamentally, in *Gamco*, output would expand by permitting the plaintiff access to the facility. Retail purchasers of fresh produce in and around Providence would face a marginally greater supply and a marginally lower price by virtue of there being one more competing seller in the centralized market. Unlike *Terminal Railroad*, *Gamco* contains no indication that the facility was being used at full capacity. Unlike *AP*, which involved the production of intellectual property, and thus entailed free-rider problems within a given geographic market, *Gamco* involved a conventional good with mutually exclusive (rivalrous) consumption.

D. *Hecht*

The first authoritative statement of the essential facilities doctrine *in haec verba* occurs in 1977 in *Hecht v. Pro-Football, Inc.*⁷³ There, an unsuccessful applicant for an American Football League franchise for Washington,

72. *Id.* at 487.

73. 570 F.2d 982 (D.C. Cir. 1977), *cert. denied*, 436 U.S. 956 (1978).

D.C. alleged that the public authority controlling the only suitable football stadium in the area, Robert F. Kennedy Stadium, had blocked its attempted entry by means of an exclusivity provision in its contract with the resident National Football League franchise, the Washington Redskins. Following a jury verdict in favor of the defendants, the D.C. Circuit held that the plaintiff had been entitled to a jury instruction on the essential facility doctrine and therefore reversed. It described the relevant legal standard as follows:

Hecht requested an instruction that if the jury found (1) that use of RFK stadium was essential to the operation of a professional football team in Washington; (2) that such stadium facilities could not practicably be duplicated by potential competitors; (3) that another team could use RFK stadium in the Redskins' absence without interfering with the Redskins' use; and (4) that the [exclusivity provision] prevented equitable sharing of the stadium by potential competitors, then the jury must find the [provision] to constitute a contract in unreasonable restraint of trade⁷⁴

Later cases applying the essential facilities doctrine have adopted equivalent formulations of this same basic four-part test.⁷⁵

Hecht involves the application of the essential facilities doctrine to a facility not in competition with the user seeking access. Because the case involved a government-controlled facility, it is difficult to generalize the decision's result. It is worth observing, however, that the use of monopoly concepts is commonplace whenever a government authority confers exclusivity upon a user of a facility that the authority controls. Such decisions are often challenged by other competitors whom the governmental decision excludes. This aspect of *Hecht* may have special relevance to situations, more common outside the United States, where a public enterprise operates the bottleneck facility, as is the case with state-owned telephone companies, for example.

A further level of complexity is added whenever a court confronts a request for access to a facility not owned by its users, but which operates as a public utility, selling both the final product and the input necessary to produce that product.⁷⁶ Consider an airline that owns the only airport in a metropolitan area. The complexities may be of two different types. First, where there is no common ownership of the facility by its users, it may be unclear

74. 570 F.2d at 993.

75. In MCI's litigation against the former Bell System, the Seventh Circuit rephrased the *Hecht* test and required that the plaintiff show the following elements to establish liability: "(1) control of the essential facility by a monopolist; (2) a competitor's inability practically or reasonably to duplicate the essential facility; (3) the denial of the use of the facility to a competitor; and (4) the feasibility of providing the facility." *MCI Communications Corp. v. American Tel. & Tel. Co.*, 708 F.2d 1081, 1132-33 (7th Cir. 1982), *cert. denied*, 464 U.S. 891 (1983).

76. See generally WILLIAM J. BAUMOL & J. GREGORY SIDAK, TRANSMISSION PRICING AND STRANDED COSTS IN THE ELECTRIC POWER INDUSTRY (1995) (applying essential facilities analysis to the electricity transmission industry); William J. Baumol & J. Gregory Sidak, *The Pricing of Inputs Sold to Competitors*, 11 YALE J. ON REG. 171 (1994) (applying essential facilities analysis to the telecommunications industry).

whether the efficiencies of integration (economies of scope) between the two activities are great enough to justify the conclusion that integration is preferable to a requirement that the facility owner provide access to non-owners. This problem would arise if the airport owner received a request for access from a potentially competing airline. If the new entrant were willing to use the airport in a way that would not require any alteration in the operation of the facility—that is, if the marginal cost of permitting use were low and required no additional investments of capital into the facility—then it would be difficult to justify exclusion.

A different case would be presented, however, if the new entrant were to make additional or different demands on the facility. If the new entrant demanded to use aircraft that required different gate heights, maintenance facilities, and other accommodations, the cost of making these changes would have to be traded off against the possibility of improved market performance in the downstream (airline travel) market.⁷⁷ In the absence of adequate controls on the capacity of the facility, and on the prices, terms, and conditions charged to users of the facility, such benefits might be negligible.

If it is possible to make a judgment regarding the desirability of providing any non-owner access at all, then the second level of complexity arises in monitoring and regulating the terms and conditions of usage for such non-owner users. Where such access has already been granted, only this second regulatory problem arises.

Hecht posed these questions in relatively stark terms. It is plausible, although not absolutely clear, that a sports stadium in a major metropolitan area could accommodate two professional football team franchises. The court in *Hecht* incorporated that consideration by requiring a factual determination as to the feasibility of sharing RFK Stadium.⁷⁸ The court ignored the second level of complexity—namely, regulating the terms and conditions on which the users would be granted access. Although presumably the court could simply order RFK Stadium to offer equal terms and conditions to all prospective users, such a decree would not produce improved performance if the facility had been undersized and if adequate regulatory controls on the terms and conditions of usage were not in place.

77. Through its enactment of the Energy Policy Act in 1992, Congress amended section 211 of the Federal Power Act (FPA) to allow any generator of electricity to petition the Federal Energy Regulatory Commission (FERC) for mandated access to a utility's transmission grid—that is, wholesale wheeling. See 16 U.S.C. § 824j(a) (1994). Moreover, section 211 empowers the FERC to order “any enlargement of transmission capacity necessary to provide [wheeling] services.” *Id.* Congress also addressed the pricing of transmission by amending section 212 of the FPA to require that wheeling customers pay “all the costs incurred in connection with the transmission services and necessary associated services” *Id.* § 824k(a).

78. See 570 F.2d at 993.

What lends intuitive appeal to the result in *Hecht* is the inherent plausibility of the claim that a football stadium can be used by at least two teams. The capacity of a football stadium seems to be dictated by considerations beyond the control of the stadium users or the owner located in a single city. Relationships among audience size, the physical requirements of the game, and the economics of mass media coverage would seem to dictate some broad constraints on the size of the facility. If a stadium is constructed at all, it is usually built and used on a scale that does not obviously preclude shared use. This potential for sharing becomes more apparent if capacity is defined in terms of frequency of use. Football teams play only one game per week. Therefore, assuming that only one game can be played per day (due to maintenance and clean up), RFK Stadium would have idle capacity on six other days, including at least one other weekend day or evening. By contrast, the capacity of a pipeline, a railroad bridge, or a produce warehouse seems to be used more continuously in temporal terms than a sports stadium and thus seems variable over a broader range, depending on market size. In short, undersizing does not seem to be a serious problem at relevant levels of output for sports facilities, unlike other facilities that have been considered under the essential facilities doctrine.

Other aspects of sports stadium cases in general, and RFK Stadium in particular, suggest further avenues for exploration in line with this analysis. RFK Stadium apparently is operated by a public authority, presumably on a not-for-profit basis. If a public authority charges a rate for use of the facility that is equal to marginal cost, then an antitrust remedy such as compulsory sharing may be complementary in the case of a publicly owned facility having excess capacity. If the economics of sports exhibition or other exogenous circumstances dictate that a facility have a scale sufficient to support shared use, then judicial regulation of both stadium size and the terms and conditions of usage are unnecessary when compulsory sharing is imposed as a remedy. Thus full analysis of *Hecht* indicates that the essential facilities doctrine and the remedy of compulsory access may make particularly good sense in the rare circumstances of (1) a facility with clear excess capacity, and (2) public ownership of the facility permitting availability at marginal cost. The public authority, of course, will still need to recover the fixed costs of the facility through some other financing mechanism.

E. *Otter Tail*

Otter Tail Power Co. v. United States,⁷⁹ a case with all the complexities avoided by *Hecht*, may represent the high-water mark of the essential facilities doctrine. It illustrates many of the foregoing points concerning the rela-

79. 410 U.S. 366 (1973).

tionship between monopolization doctrine, essential facilities doctrine, and the costs and benefits of judicial regulation. Otter Tail was an electric utility operating an extensive power distribution grid in the upper Midwest, and it also generated and retailed electric power through a network of generating facilities and “subtransmission” lines (the lines extending from the main high-voltage power sources to the individual communities that consumed electric energy.) Over a period of time, Otter Tail engaged in extensive warfare, economic and legal, with several communities seeking to avoid the consequences of its transmission monopoly. Some of the communities sought to construct their own generation facilities, others sought to purchase or construct their own subtransmission lines and to obtain their power at wholesale rates from Otter Tail, and still others requested that Otter Tail agree to “wheel” wholesale power to them—that is, to transmit to them over its own lines power generated by facilities outside the territory covered by Otter Tail’s grid. Otter Tail sought to resist these efforts by a variety of tactics. The Department of Justice then sued Otter Tail, alleging monopolization of the retail power market by unlawful use of its monopoly power in electricity transmission.

The lower court relied on the essential facilities doctrine in condemning Otter Tail’s conduct under section 1 of the Sherman Act.⁸⁰ On direct appeal, however, the Supreme Court did not mention this specific approach. Rather, it condemned Otter Tail’s behavior on more general monopolization grounds. Nonetheless, *Otter Tail* is sometimes cited as an essential facilities case and is instructive if so analyzed.

Otter Tail involved an industry in which there had never before been a duty to sell power on the terms and conditions being requested by the municipalities. Admittedly, at the time of the case the Federal Power Commission (FPC) had the authority to order electric power utilities to establish physical interconnections among power companies, but there was no general common carrier obligation.⁸¹

Like *Terminal Railroad*, the majority in *Otter Tail* regarded the regulatory problems of enforcing a decree to wheel power as falling within the responsibilities of the regulatory agency.⁸² This time, however, the dissenters were acutely conscious of the problems of judicial administration that might arise, particularly in circumstances in which the Court seemed to require a remedy that the FPC lacked the authority to impose.⁸³ The Court could order

80. See *United States v. Otter Tail Power Co.*, 331 F. Supp. 54, 61 (D. Minn. 1971), *modified*, 410 U.S. 366 (1973) (citing the “bottleneck” theory).

81. See MICHAEL E. SMALL, A GUIDE TO FERC REGULATION AND RATEMAKING OF ELECTRIC UTILITIES AND OTHER POWER SUPPLIERS 19 & n.36 (3d ed. 1994).

82. See 410 U.S. at 381-82.

83. See *id.* at 395 (Stewart, J., Burger, C.J., and Rehnquist, J., dissenting).

wheeling, but it was unclear whether the FPC could do anything more than try to regulate the rates at which the power was sold.

Finally, *Otter Tail* posed the problem of capacity utilization, also recognized by the dissent as a potential judicial morass.⁸⁴ How was *Otter Tail* to establish priorities among the various competing demands for the use of its grid? The majority's opinion gave no clue.

F. *Aspen Highlands*

The Supreme Court's 1985 decision in *Aspen Skiing Company v. Aspen Highlands Skiing Corporation*⁸⁵ casts a long and unfortunate shadow over the essential facilities doctrine cases. Although the Court did not reach the essential facilities doctrine in *Aspen Highlands*, the lower courts did. Moreover, the Court's reasoning on a firm's occasional duty under section 2 of the Sherman Act to assist a competitor through joint marketing has the strong aroma of the cases that invoke the essential facilities doctrine by name.

The Supreme Court's *Aspen Highlands* decision builds on a factual record that raises important questions regarding the monopoly power of the defendant. Despite the existence of numerous ski resorts in the Rocky Mountains, Sierra Nevada, and elsewhere, the allegedly essential facility in *Aspen Highlands* was, implausibly enough, a trio of mountains. The issue was whether the owner of three of the four major downhill skiing facilities at Aspen, Colorado committed monopolization under section 2 of the Sherman Act when it terminated a cooperative marketing venture with its smaller rival, which owned the remaining facility.⁸⁶ In 1962, three independently owned skiing facilities—Ajax, Buttermilk, and Highlands—operating in the Aspen area introduced a multi-day, interchangeable lift ticket at a discounted price, known as the all-Aspen ticket.⁸⁷ The all-Aspen ticket provided convenience to many skiers who visited the resort for weekly periods but preferred to remain flexible about which mountain they wanted to ski each day.⁸⁸

By 1967, Aspen Skiing, the original owner of Ajax, had purchased Buttermilk and opened the nearby Snowmass ski area. Aspen Skiing and Aspen Highlands agreed to expand the all-Aspen ticket to a four-area pass. Over the years, various procedures were put in place to calculate the number of all-Aspen tickets redeemed at each mountain, and ticket revenues were di-

84. *See id.* at 391-92.

85. 472 U.S. 585 (1985).

86. *See id.* at 587.

87. *See id.* at 589.

88. *See id.* at 588.

vided based on those calculations.⁸⁹ In the 1970s, Aspen Skiing's management became increasingly disenchanted with the all-Aspen ticket and introduced another multi-area lift ticket featuring its facilities alone. The four-area all-Aspen ticket, however, consistently outsold the three-area Aspen Skiing ticket in all the seasons that both were offered.⁹⁰

In 1977, Aspen Skiing demanded that Aspen Highlands accept a fixed-percentage division of all-Aspen ticket revenues. Fearing discontinuation of the interchangeable tickets, Aspen Highlands eventually acquiesced to a fixed percentage of 15 percent for the 1977-78 season. In the following season, however, Aspen Highlands rejected a proposal under which it would receive only 12.5 percent of all-Aspen ticket revenues, a percentage that was significantly below its historical average based on usage. Soon after Aspen Highland's refusal, Aspen Skiing terminated the all-Aspen ticket⁹¹ and took actions that allegedly made it difficult or economically impractical for Aspen Highlands independently to offer a multi-area ski package in lieu of the all-Aspen ticket.⁹² Moreover, Aspen Skiing launched a national advertising and marketing campaign that strongly suggested that Ajax, Buttermilk, and Snowmass were the only skiing facilities in Aspen.⁹³ Without the revenues from the all-Aspen ticket, and under direct competition from Aspen Skiing, Aspen Highlands' share of the Aspen-area downhill skiing market fell steadily from 20.5 percent in the 1976-77 season to 11 percent in the 1980-81 season.⁹⁴ The development of any additional skiing facilities at Aspen was not feasible because of governmental barriers and the difficulty of obtaining substantial financing.⁹⁵

In 1979, Aspen Highlands brought action against Aspen Skiing, and a jury ultimately found that Aspen Skiing had monopolized the market for downhill skiing services at Aspen in violation of section 2 of the Sherman Act.⁹⁶ The Tenth Circuit affirmed on two grounds: (1) the all-Aspen ticket

89. *See id.* at 589. Initially, the all-Aspen ticket was a booklet containing six coupons, each redeemable for a daily lift ticket at each skiing facility; the revenues from the sale of the all-Aspen ticket were distributed in accordance with the number of coupons at each mountain. After the all-Aspen ticket was expanded to a four-area pass, a random sample survey was used to allocate the revenues from the all-Aspen ticket. *See id.* at 590.

90. *See id.* at 590.

91. *See id.* at 591-93.

92. *See id.* at 593-94. For instance, Aspen Highlands attempted, to no avail, to purchase tickets from Aspen Skiing at wholesale and retail rates, as well as to create vouchers which its customers could redeem at Aspen Skiing's mountains.

93. *See id.* at 593.

94. *See id.* at 594-95.

95. *See id.* at 589.

96. *See id.* at 595. The jury instructions explained that a finding of monopolization under section 2 of the Sherman Act requires: "(1) the possession of monopoly power in a relevant market, and (2) the willful acquisition, maintenance, or use of that power by anticompetitive or exclusionary means or for anticompetitive or exclusionary purposes." *Id.* at 595-96. As to the first element, "the

could be characterized as an essential facility; and (2) sufficient evidence supported a finding that Aspen Skiing's intent was to create or maintain a monopoly.⁹⁷

In its appeal to the Supreme Court, Aspen Skiing did not challenge the district court's conclusion that it possessed monopoly power in Aspen's downhill skiing market. Yet, the first page of the Court's opinion indicated why such a conclusion about monopoly power was preposterous as an economic matter: "Aspen is a *destination* ski resort . . . with a reputation for 'super powder,' 'a wide range of runs,' and an 'active night life,' including 'some of the best restaurants in *North America*.'"⁹⁸ In other words, the ski slopes of Aspen were filled not with local residents, but with vacationers who traveled to Aspen after choosing it over alternative ski resorts. By definition, therefore, producer substitutability should have made the relevant market not Aspen, Colorado but rather a larger universe of ski resorts in the United States, Canada, and perhaps even Europe. It follows that, if Aspen itself had to compete against ski resorts from around the world, then so also did each ski operator in Aspen. The Court, of course, is not responsible for pointing out the best legal arguments available to a petitioner. Thus, the unanimous opinion in *Aspen Highlands* begins with a factual predicate that a moment's reflection reveals to be patently specious on economic grounds.⁹⁹

Instead, Aspen Skiing insisted that it had not "monopolized" the market in violation of section 2 because "even a firm with monopoly power has no general duty to engage in a joint marketing program with a competitor."¹⁰⁰ The Court conceded Aspen Skiing's premise that even a monopolist has no general duty to cooperate with its rivals. The absence of a duty to cooperate, however, does not mean that the right is "unqualified[,] . . . absolute []or exempt from regulation."¹⁰¹ Quoting extensively from *Lorain Journal v.*

jury found that the relevant product market was '[d]ownhill skiing at destination ski resorts,' that the 'Aspen area' was a relevant geographic submarket, and that during the years 1977-81, [Aspen Skiing] possessed monopoly power." *Id.* at 596 n.20. In relevant part, the jury instructions explained the second element in the context of the matter at hand as follows: "if there were legitimate business reasons for the [monopolist's] refusal [to deal with his competitor], then the defendant, even if he is found to possess monopoly power in a relevant market, has not violated the law." *Id.* at 597.

97. *Id.* at 599 (citing *Aspen Highlands Skiing Corp. v. Aspen Skiing Co.*, 738 F.2d 1509, 1520-22 (10th Cir. 1984)).

98. *Id.* at 587 (emphasis added).

99. Justice Byron White did not participate in the decision.

100. *Id.* at 600. Aspen Skiing further maintained that it could not be found to have violated section 2 of the Sherman Act because it did not engage in any exclusionary conduct, since the all-Aspen ticket could not be properly considered an "essential facility," and because "an 'anticompetitive intent' does not transform nonexclusionary conduct into monopolization." *Id.*

101. *Id.* at 601-02 (citations omitted).

United States,¹⁰² the Court explained that a monopolist's proclaimed right "to exercise his own independent discretion as to the parties with whom he will deal" comports with the Sherman Act "[i]n the absence of any purpose to create or maintain a monopoly."¹⁰³

As a matter of law, therefore, a refusal to deal that stems from an anticompetitive purpose or intent may be evidence of monopolization.¹⁰⁴ The Court noted that Aspen Skiing

did not merely reject a novel offer to participate in a cooperative venture Rather, [Aspen Skiing] elected to make an important change in a pattern of distribution that . . . originated in a competitive market[,] . . . persisted for several years[,] . . . [and] continued to provide a desirable option for skiers . . . when the character of the market was changed by [Aspen Skiing's] acquisition of monopoly power. . . . [Aspen Skiing's] decision to terminate the all-Aspen ticket was thus a decision by a monopolist to make an important change in the character of the market.¹⁰⁵

Thus, the Court assumed that although Aspen Skiing did not necessarily act in an anticompetitive or exclusionary manner in deciding to terminate the all-Aspen ticket, a jury might nevertheless conclude that no valid business reason existed for Aspen Skiing's refusal to continue its joint offering with Aspen Highlands.¹⁰⁶

Finally, the Court found that the record, construed most favorably in support of Aspen Highlands' position, provided adequate evidence to uphold the monopolization verdict.¹⁰⁷ In reaching its conclusion, the Court noted that (1) consumers' strong demand for the all-Aspen ticket illustrated that consumers were adversely affected by the elimination of the superior quality of the all-Aspen ticket;¹⁰⁸ (2) Aspen Highlands suffered a steady decline of market share as a result of the termination of the all-Aspen ticket, and Aspen Highlands continued to suffer when Aspen Skiing refused to deal or cooperate with Aspen Highlands' independent efforts to offer an alternative all-area package;¹⁰⁹ and (3) Aspen Skiing failed to persuade a jury that it had some

102. 342 U.S. 143 (1951). In *Lorain Journal*, the Court held that a local newspaper, the town's only enterprise engaged in the business of disseminating news and information to that community, violated section 2 of the Sherman Act when it refused to print the advertisements of those who bought advertising time on a nascent local radio station. See *Aspen Highlands*, 472 U.S. at 601 (discussing *Lorain Journal*).

103. *Aspen Highlands*, 472 U.S. at 602 (quoting *Lorain Journal*, 342 U.S. at 155) (emphasis and citations omitted).

104. See *id.* at 602.

105. *Id.* at 603-04.

106. See *id.* at 604-05.

107. See *id.* at 611.

108. See *id.* at 605-07.

109. See *id.* at 607-08.

valid business justification for discontinuing the all-Aspen ticket.¹¹⁰ As a result, the evidence supported the inferences that Aspen Skiing “made a deliberate effort to discourage its customers from doing business with [Aspen Highlands,] . . . that [it] was not motivated by efficiency concerns[,] and that it was willing to sacrifice short-run benefits and consumer goodwill in exchange for a perceived long-run impact on its smaller rival.”¹¹¹ Having affirmed the Tenth Circuit on these grounds, the Court found it “unnecessary to consider the possible relevance of the ‘essential facilities’ doctrine, or the somewhat hypothetical question whether nonexclusionary conduct could ever constitute an abuse of monopoly power if motivated by an anticompetitive purpose.”¹¹²

The Court’s decision in *Aspen Highlands* is remarkable because it does not once mention whether there was any price competition between the two ski operators in Aspen. That indifference to the consumer welfare effects of the joint marketing arrangement is surprising, for the Court noted in a footnote that the Colorado Attorney General had sued the two operators on the grounds that their revenue sharing arrangement for the all-Aspen ticket facilitated price fixing in violation of section 1 of the Sherman Act.¹¹³ The Court, in other words, seemed not to focus on the price effects of rivalry among competing suppliers of downhill ski resorts in a given geographic market.

II. THE RELATIONSHIP BETWEEN REGULATION OF MONOPOLY AND THE ESSENTIAL FACILITIES DOCTRINE

A. *Essentiality, Duplication, and Monopoly Power*

Inherent in the concept of an “essential facility” is the premise that the owner of that facility possesses monopoly power. The first two elements of the doctrine, as articulated in *Hecht*, incorporate this recognition in a variety of ways. First, some degree of uniqueness and market control is inherent in the term “essential.” Second, the inquiry regarding the impracticability of duplication assures that the doctrine will apply only to facilities for which no feasible alternative exists, or which cannot be reproduced. Finally, the term “facility” itself connotes an integrated physical structure or large capital asset with the degree of cost advantage or unique character that usually confers

110. *See id.* at 608-11. For instance, Aspen Skiing could not distinguish the administrative burdens of the all-Aspen ticket program from those of interchangeable ticket programs in which it continued to participate in two other markets. *See id.* at 609.

111. *Id.* at 610-11.

112. *Id.* at 611 n.44.

113. *See id.* at 591 n.9.

monopoly power and market control by virtue of its superiority for its intended purposes.

Terminal Railroad had implied that the standard for an essential facilities case might be the physical impossibility of duplicating the facility. This implication is demonstrated by the Court's references to the topography of the St. Louis side of the Mississippi, where there existed only one feasible railroad route into the city.¹¹⁴ More recent cases, however, have abandoned the idea that access to the facility must be an absolute prerequisite for participation in the market at issue. It must be "impracticable" to duplicate the facility in question, but impossibility is not required. Like the question of monopoly power itself, "essentiality" and the "practicability of duplication" are issues that can depend on matters of degree.

It is inappropriate to apply the essential facilities doctrine to circumstances in which the owner of the "facility" lacks monopoly power, because without monopoly power there can be no basis for applying antitrust principles and remedies.¹¹⁵ If the facility must compete for users with other products or services that are effective substitutes for access to the facility, the discipline imposed by such competition will suffice to control the conduct of the facility owner. Suppose, for example, that an essential facilities claim is made by a retail shop against the owner of a shopping mall that has refused to make rental space available. If it can be shown as a factual matter that other available space is equally suitable for the retailer's purposes, then there is no basis for bringing to bear what Chief Judge Richard A. Posner has called "the great machinery of antitrust enforcement."¹¹⁶ In that situation, by hypothesis, the retailer has equally good alternative locations available.

There will, of course, be instances in which the facility in question will be somewhat better than the alternatives, but not so much better as to preclude totally the continued survival of excluded parties. The present case law recognizes this distinction, and permits application of the doctrine where the competitive disadvantage is severe, rather than fatal. In the shopping mall example, the retailer might complain that the mall is so far superior to alternative locations—in terms of utility services, access to potential customers, parking, and so forth—that competitive survival is impossible unless he gains admission. It may be difficult indeed to determine whether exclusion

114. *United States v. Terminal R.R. Ass'n*, 224 U.S. 383, 395-98 (1912).

115. *Accord, e.g., AT&T Corp. v. Iowa Util. Bd.*, 119 S. Ct. 721 (1999) (Breyer, J., concurring in part and dissenting in part) ("And although the provision describing which elements must be unbundled does not explicitly refer to the analogous essential facilities doctrine (an antitrust doctrine that this Court has never adopted), the [Telecommunications] Act [of 1996], in my view, does impose related limits upon the FCC's power to compel unbundling. In particular, I believe that, given the Act's basic purpose, it requires a convincing explanation of why facilities should be shared (or unbundled) where a new entrant could compete effectively without the facility, or where practical alternatives to that facility are available.").

116. *Valley Liquors, Inc. v. Renfield Importers, Ltd.*, 678 F.2d 742, 745 (7th Cir. 1982).

from the use of a particular facility will mean inconvenience, extinction, or some intermediate degree of harm to the excluded competitor. The point is not that the judgment as to the magnitude of the competitive disadvantage of exclusion is simpler in principle with one test instead of another. Rather, the point is that this question of “essentiality” and ease of duplication—measured by either the potential harm of exclusion or the potential benefit of inclusion—is no different from, and ought legally to be the same as, the issue of whether monopoly power is present in the market for the service that the facility provides. If the excluded competitor has reasonable alternatives, the antitrust inquiry should end.

This relationship between the definition of an essential facility and the analysis of monopoly power is well established in the case law, but courts still occasionally react to essential facility claims with unnecessary confusion regarding this element. In *Fishman v. Wirtz*,¹¹⁷ for example, a claim was made that an aspiring professional basketball franchise was unjustifiably excluded from the use of a Chicago arena having an exclusive-use arrangement with another aspirant for the franchise. The defendant claimed that numerous arenas were available in Chicago for the same purpose. The court rejected the argument in light of considerable evidence that the National Basketball Association itself regarded the alternatives as unacceptable, and the court correctly discussed this issue in terms of the monopoly power of the facility in the market for “indoor sports arenas suitable for professional indoor team sports in Chicago.”¹¹⁸

Courts occasionally react to the monopoly power aspect of an essential facility case without consciously recognizing the importance of such an element. One court, for example, considered a claim by a doctor that a hospital had excluded him from practicing there, and that the exclusion was prohibited because the hospital was an essential facility with a duty to provide reasonable access.¹¹⁹ The court simply asserted that “the essential facilities doctrine is inapplicable to hospital staff privileges decisions.”¹²⁰ It is apparent from the facts recited in the opinion that the hospital in question simply did not enjoy the degree of uniqueness warranting a finding of monopoly power, as there were adequate substitutes for the hospital facilities in that locale. Had the court recognized this fundamental but implicit underpinning of the essential facilities doctrine, it could have reached its conclusion with greater clarity and speed.

117. 1981-2 Trade Cas. (CCH) ¶ 64,378 (N.D. Ill. 1981).

118. *Id.* ¶ 74,755.

119. See *Pontius v. Children's Hosp.*, 552 F. Supp. 1352 (W.D. Pa. 1982).

120. *Id.* at 1370.

B. *Which Market is "Relevant"?*

There is a corollary to the observation that an essential facility cannot be found to exist unless monopoly power is present: The market in which the facility is a monopolist must be the market for the service that the excluded claimant is seeking.

1. *Case law.*

In *Lansdale v. Philadelphia Electric Co.*,¹²¹ for example, a town sought to obtain wholesale electric power so that it could enter the business of distributing electricity to its residents. The potential source of power was the electric utility serving the surrounding geographic region. In attempting to prove its claim of monopolization, the town relied on evidence of the utility's monopoly power in the *retail* power market, but the court held that the only market relevant to the claim was the *wholesale* power market.¹²² The town was seeking access to wholesale electricity, and if the utility did not have the ability to deny wholesale energy to the town, there could be no basis for applying monopolization principles to its conduct. If the utility lacked monopoly power at the wholesale level, it could not foreclose the town's options, regardless of the presence or absence of monopoly power at the retail stage.

Similar judicial recognition to this element is illustrated by *Drinkwine v. Federated Publications, Inc.*¹²³ There the publisher of a "shopper"—a weekly advertising tabloid—had sought and been denied the right to distribute its publication as a weekly insert to the local general-circulation daily newspaper. The trial court had assumed that the newspaper had monopoly power in the market for newspaper advertising "because it was essentially the only daily paper in Ada County."¹²⁴ The court nevertheless held that the relevant market was that for distribution services.¹²⁵ The publisher of the "shopper" was seeking neither the right to subscribe to the defendant's newspaper, nor the ability to place advertising in it; rather, it needed distribution services to deliver its publication to readers. Since direct mail and other alternative distribution methods were available, monopolization principles could not apply. The possibility that the newspaper had monopoly power with respect to one of several alternative distribution channels was immaterial.¹²⁶

121. 692 F.2d 307 (3d Cir. 1982).

122. *See id.* at 312.

123. 780 F.2d 735 (9th Cir. 1985), *cert. denied*, 475 U.S. 1087 (1986).

124. *See id.* at 738 n.3.

125. *See id.*

126. *See id.* at 740 ("The effect on consumers, the merchants, is not detrimental because the merchants have competitive alternate distribution channels.").

2. *Derived demand and the misidentification of essential facilities.*

If indeed there are no alternatives to the alleged essential facility, it may be proper to apply monopolization principles: perhaps the conduct of the facility's owner can be regulated to improve the economic performance of the market in question by expanding output. This inquiry into available alternatives is simply another name for market power analysis.¹²⁷ The only difference is labeling, not substance. In sum, there should be no test of "essentiality" or "practicability of duplication" that is less stringent in any way than the established tests for the existence of monopoly power.¹²⁸

Because a finding of monopoly power should be a prerequisite to any further inquiry, any market characteristic that prevents the exercise of market power should preclude the application of the essential facilities doctrine. Suppose, for example, that a pipeline is the only means of transporting oil from the field where it is produced to the city where it is consumed. Suppose further that some local topographical feature precludes construction of an alternative pipeline. At first it might appear that the refusal of the pipeline owner to permit competing oil distributors to ship their oil through the pipeline is an act of monopolization by virtue of the essential facilities doctrine. If oil is readily available to the region from another source, however, no monopoly constraint on pipeline output (or enhancement in price) would be rational or, in equilibrium, even possible. Alternatively, there may be an energy source that is a reasonable alternative for consumers of oil. In either case, the consequence would be that no method of transporting oil—regardless of the "facility" by which transport is supplied—could exercise monopoly power. The demand for use of the facility is a derived demand based on the underlying demand for the end product—in this case, consumers' use of energy.¹²⁹ The derived demand for the facility cannot confer greater market power on its owner than exists for the end product for

127. See William M. Landes & Richard A. Posner, *Market Power in Antitrust Cases*, 94 HARV. L. REV. 937 (1981) (offering a formal economic analysis of market power that demonstrates the dependence of market power on the elasticities of demand and supply in the relevant market). For a similar analytical framework for assessing market power, see Franklin Fisher, *Diagnosing Monopoly*, Q. REV. ECON. & BUS., Summer 1979, at 7.

128. Indeed, some decisions require an especially stringent threshold showing of monopoly power where the essential facilities doctrine is invoked. "To be an essential facility . . . a facility must be essential." *Blue Cross & Blue Shield United v. Marshfield Clinic*, 65 F.3d 1406, 1413 (7th Cir. 1995), cert. denied, 516 U.S. 1184 (1996). Plaintiff must show that "control of the facility carries with it power to eliminate competition in the downstream market." *Alaska Airlines v. United Airlines*, 948 F.2d 536, 544 (9th Cir. 1991) (emphasis in original); accord *Twin Lab. v. Weider Health & Fitness*, 900 F.2d 566, 569-70 (2d Cir. 1990).

129. See *Hartigan v. Panhandle E. Pipe Line Co.*, 730 F. Supp. 826, 866 (C.D. Ill. 1990) (defining the concept of "derived demand"); *United States v. Standard Oil Co.*, 155 F. Supp. 121, 146 (S.D.N.Y. 1957) ("The demand for ocean tankers is a derived demand reflecting changes in the demand for petroleum and its products. An increase in the demand for crude and its products would ordinarily bring an increased demand for ocean tankers and an increase in ocean tanker rates.").

which that facility would be an input. Under these circumstances there is no basis to apply antitrust enforcement mechanisms because no change in the conduct of the facility owner would increase consumer welfare or improve resource allocation. Devoting judicial resources to the task of imposing some kind of sharing obligation would constitute a pure waste of resources.

C. *Practical Implications of the Monopoly Power Analysis*

The preceding analysis has shown that there is an equivalence between the monopoly power element of monopolization doctrine and the corresponding elements of the essential facility doctrine. That equivalence highlights two principles necessary to the sensible application of Sherman Act standards to large-scale facilities.

First, a facility cannot be regarded as essential unless there are no reasonable alternatives from any source for the service provided by the facility. If the retailer can do well enough outside a shopping mall, then the shopping mall owner lacks monopoly power over real estate and the other services associated with retail shopping convenience. Any Sherman Act claim should end there. Second, the existence of other equivalent facilities can preclude the characterization of one such facility as “essential.” Even if admission to a shopping mall is an absolute prerequisite to commercial success for a retailer, there is no warrant for condemning the exclusion of a retailer from one shopping mall if there are other facilities with equivalent characteristics available to the retailer.

This analysis leads directly to the recognition that facilities with otherwise identical characteristics may have different antitrust obligations, depending on available substitutes for the output of the facility. The only shopping mall in a geographically isolated locality may have antitrust obligations that are not shared by an identical facility in the suburbs of a metropolis. Equally significant, the same facility may have different antitrust obligations depending on the time of the suit. The first shopping mall in a newly developed area may be found to have monopoly power—that is, the facility may be regarded as “essential”—and exclusion of competing retailers may well create liabilities under section 2 of the Sherman Act. The identical shopping mall, however, may lose such antitrust obligations once competing commercial real estate developments have emerged in the natural course of growth and the development of increased commercial real estate capacity. The same may be said of railroad bridges, football stadiums, and produce warehouses. Thus, the owner of a facility is free to expel a user—free at least under antitrust principles—once a rival provider of the same kind of facility enters the geographic market. In short, the essential facilities doctrine must be *temporally bounded*, although courts have failed to recognize this requirement.

D. *Essential Facilities and Economies of Scale*

The preceding section established the standard of monopoly power under monopolization law as the minimum threshold, at best, for the “essentiality” and “impracticability of duplication” elements of the essential facilities doctrine. It also explained why the essential facilities doctrine is not applied to facilities that do not possess monopoly power in the relevant market. What problems of antitrust analysis arise when a facility passes this fundamental monopoly power test?

The first important recognition is that true essential facilities—that is, facilities with market power in a defined and relevant geographic and product market—are inherently impervious to the fundamental solutions usually offered by antitrust enforcement. Antitrust law prohibits and deters behavior that reduces competition in markets where rivalry among independent suppliers of substitutes can exist. If a facility is essential—if its owner can exercise monopoly power in the relevant market—then competition in the market for the service provided by the facility can only be restored under one narrow condition: when the “facility” is actually a collection of competitors if placed under separate control. In the typical essential facilities doctrine case this remedy is impossible, because the facility in question consists of a single, integrated functional unit, like a stadium or a pipeline, whose cost characteristics give it overwhelming advantages over competitors.

Terminal Railroad, in which numerous facilities previously in competition with one another were combined under common control, appears to be a case in which the exception may have been applicable. Indeed, the Supreme Court noted that, before the combination that formed the Terminal Railroad Association, there had in fact existed several terminal companies, each of which had grown around one of the three competing means of crossing the Mississippi.¹³⁰ The government had requested divestiture as a remedy, seeking to reestablish the competition that had existed before the combination.¹³¹ The Court devoted almost no discussion to this remedy, noting simply that the relief it mandated would preserve the “obvious advantages” of integrated operation.¹³²

This question was raised again during the course of enforcing the Court’s original mandate. The Court had preserved the option of divestiture by ordering that, if the parties failed to agree on a basis for open ownership in the facility and for the other matters requiring resolution, it would enter a decree to dissolve the combination. Apparently the government was dissatisfied with the agreement that evolved, and it again sought to have the combination

130. See *United States v. Terminal R.R. Ass’n*, 224 U.S. 383, 392-93 (1912).

131. See *id.* at 409.

132. See *id.* at 410.

dissolved.¹³³ Again, as explained earlier, a second chance at divestiture was missed.

Terminal Railroad seems unique in this respect among the early cases that are usually identified as containing the source of the essential facilities doctrine. In *Gamco*, *Hecht*, and the legion of other more recent cases discussing and applying the doctrine, the problem of indivisibility seems obvious. The facilities involved in those cases were single, integrated physical units that could not be broken up without destroying their fundamental utility.

E. *Special Problems Regarding Intellectual Property*

If one focuses on the integrated nature of essential facilities, *AP* appears to be even more distinguishable from *Terminal Railroad* and the other seminal cases. Although *AP* had been formed by numerous independent newspapers, each competing generally in different markets, the government never sought to establish that the combination should be dissolved. *AP* was a single integrated unit whose dissolution, or reduction in geographic coverage, would unquestionably have destroyed one of its fundamental functional characteristics—namely, the provision of a worldwide comprehensive source of information about current events. There is a superficial similarity to *Terminal Railroad* in that the remedy tended to relax the conditions of membership in the association. However, it would have destroyed the Associated Press for the Supreme Court to have compelled the organization to accept all competitors in an open ownership regime, and neither the government nor the Court sought this result. Indeed, the unacceptability of an open ownership regime for *AP* seems to have been one of the few points of agreement among the five opinions issued by the eight Justices participating in the decision.

Justice William O. Douglas was particularly forceful on this point. He concurred in *AP* to emphasize that *Terminal Railroad* was not an applicable precedent, precisely because the element of monopoly power had not been shown with respect to the Associated Press.¹³⁴ This analysis seems to suggest that if only one worldwide comprehensive information source on current events existed, and if that organization possessed monopoly power over news and information, then open ownership might be required if the news could not practicably be duplicated. None of the five opinions shows the slightest willingness to accept this implication, however.

133. See *Terminal R.R. Ass'n v. United States*, 236 U.S. 194, 202 (1915) (“The contention of the United States . . . is that the court below should have directly proceeded to apply the sanction stated in the mandate . . . because the combination had so failed to comply with such other requirements . . . and therefore had subjected itself to immediate dissolution.”).

134. 326 U.S. 1, 25 (1945) (Douglas, J., concurring).

Thus, *AP* suggests that there must be careful attention in an essential facilities case to whether exclusivity might be serving a valuable function of the alleged “facility.” Indeed, any case in which the fundamental output of the facility consists of information or any other form of intellectual property seems a poor candidate for application of the doctrine. Unlike physical property, intellectual property cannot be used without disclosure or the significant possibility of disclosure. Once disclosed it is easily misappropriated, and thus its value is easily destroyed. The owner of a football stadium can lock the gates to keep out those who will not pay for access, but the protections for news stories, the design of a machine, or any other form of intellectual property are far less effective and rarely self-enforcing. Thus, to preserve the incentives for creation of new knowledge, the legal system gives to the creator or inventor the ability to preserve the exclusivity of that knowledge, or the exclusivity of its use.

An important and desirable characteristic of legal systems that protect intellectual property is that the rewards for creativity are correlated with the value of the creation: an invention that makes enormous cost savings possible, or which generates new products strongly preferred by consumers, will permit the inventor to obtain large financial rewards, while insignificant creations receive fewer rewards. This relationship tends to steer inventive effort in useful directions. This desirable feature of patent, copyright, and other intellectual property systems requires tolerance of monopoly power in those rare cases where a single creation is sufficient to bestow such power on the owner of the exclusive rights to the creation. It also raises the question whether the owner of the creation truly is earning economic rent or merely is earning, on an actuarial basis, a return of the quasi-rents associated with investment in innovative activities.¹³⁵

The foregoing analysis illustrates why the application of essential facilities doctrine to intellectual property is antithetical to the policies of patent, copyright, and other kindred legal systems. The essential facilities doctrine is, above all, a legal rule of mandatory sharing and compulsory dealings. This characteristic alone is inconsistent with the exclusivity that is necessary to preserve incentives to create, the core operative device of intellectual property law in a market economy. The essential facilities doctrine, moreover, is most likely to condemn intellectual property in precisely those circumstances in which this result is least defensible: Under the essential facilities doctrine, the more an invention is unique, valuable, and difficult to

135. See J. GREGORY SIDAK & DANIEL F. SPULBER, DEREGULATORY TAKINGS AND THE REGULATORY CONTRACT: THE COMPETITIVE TRANSFORMATION OF NETWORK INDUSTRIES IN THE UNITED STATES 423-25 (1998) (explaining that investment decisions will be based on economic rents, while ongoing operating decisions, after investments have been sunk, will be based on quasi-rents).

duplicate, the greater is the obligation to share it. In short, essential facilities principles are inherently inconsistent with intellectual property protection.

F. *Essential Facilities and Natural Monopoly*

The analysis thus far has isolated several circumstances in which it is inappropriate to apply the essential facilities doctrine. First, where the owner of the facility has no monopoly power, there is no basis for antitrust intervention of any kind. The standard for identification of an "essential facility" should be at least as stringent as the standard for proof of monopoly power.

Second, cases in which the "facility" is not a single, indivisible unit, but a collection of potentially independent and viable competitive units should not be considered candidates for mandatory sharing. Rather, they should be the subject of structural remedies, like divestiture, that restore competitive market conditions by restoring independent competition itself. There is no need for a regulatory surrogate for competition when a different and more direct remedy can provide the real thing.

Finally, the essential facilities doctrine cannot be applied to intellectual property. To do so would threaten the basic objective of the legal systems that create incentives for the production of information, and would thus threaten technical progress.

Having identified what the essential facilities doctrine is not, let us now analyze what it is. If a case can be found in which the owner of a single, integrated facility possesses monopoly power in a defined geographic and product market, what problems are posed from the standpoint of competition policy and antitrust analysis? All the classic problems of monopoly are likely to arise: enhanced prices and reductions in quantity and other output dimensions.

Under those circumstances, no quantity of antitrust enforcement will change the structural characteristics that give rise to the essential facility problem. Such a facility is equivalent to a so-called "natural monopoly," and to control the use of monopoly power by the owner of the facility, society is faced with the same unappetizing alternatives available in any public utility context: public ownership, regulation in the classic "rate-base/rate-of-return" mold, incentive regulation, and various in-between solutions familiar to policy makers and students of this problem. Given the existence of the essential facility, antitrust intervention must confront the fact that any solution to the problems of economic inefficiency is inherently regulatory. Structural solutions can change the competitive dynamics of cartelized markets or unlawful mergers and consolidations, but, by hypothesis, those alternatives are unavailable in an essential facilities case. Thus, the proper treatment of such a case must depend on the costs and benefits of specific conduct remedies:

Under what circumstances is judicial intervention in the conduct of the business of a natural monopoly likely to do more good than harm?

The meaning of these observations becomes clear when one examines the remedial phase of past essential facilities cases. In *Gamco*, for example, the inclusion or exclusion of only one produce company among the hundreds of produce dealers employing the facilities of the Providence market could not plausibly have made any difference in any significant economic variable. On the other hand, it is not obvious that inclusion of the plaintiff harmed anyone. Thus, from the standpoint of competition policy, the best one can say of *Gamco* is that relief required by the decision had no obvious ill effects.

Gamco illustrates the type of essential facilities case least likely to pose difficult problems of judicial administration. The excluded competitor sought to share the facility on the same terms and conditions as the other user-owners, not to change the rules of admission. It bears emphasis, nonetheless, that the judicial intervention produced no obvious benefit from the standpoint of competition or consumer welfare. If there is a mechanism by which monopoly rents can be extracted by the user-owners of an essential facility like the one in *Gamco*, it is difficult to see how changing the number of competitors would alter the distortion.

Analysis suggests several mechanisms by which monopoly distortions may arise from common ownership of essential facilities by competitors in the markets that are dependent on the services provided by such facilities. In the oil pipeline industry, for example, it has been argued that, by “undersizing” the pipeline supplying a distinct geographic market, the supply of petroleum within that market can be limited, and the price of petroleum products can be raised above competitive costs. None of the participants can “cheat” by undercutting a supracompetitive price if the pipeline is full—there is simply no possible expansion of output available to satisfy the enhanced demand. In that respect, common ownership of an essential facility might accomplish what independent competitors might otherwise be incapable of producing: a foolproof output constraint. If output cannot expand, prices and profits cannot drop.¹³⁶

There is, evidently, no American judicial decision in which a litigant has requested the court to expand the capacity of an essential facility as part of its requested remedy.¹³⁷ Indeed, one might expect such a course of action to be inconsistent with the incentives of litigants who challenge the admissions

136. Of course, there may exist other costly forms of rent-seeking behavior that will reduce profits to the competitive level for participating firms. Antitrust litigation aimed at obtaining access to the pipeline might be characterized in this way.

137. In contrast, as noted earlier, the FERC possesses the regulatory authority to order an electric utility to expand its transmission capacity to accommodate wholesale wheeling. See note 77 *supra*.

policies of such facilities. Enhanced throughput can only lower prices and increase output in the downstream market. It is far preferable from the point of view of both outsiders and insiders that, if a new owner must be admitted, the outsider simply be given a share of the ownership. Any effort to expand throughput capacity would simply reduce total available profits.¹³⁸

As explained earlier, the essential facilities doctrine does not apply where it is necessary to expand the capacity of the facility to include a new user. No detailed rationale has ever been stated for this limitation, although a court inclined to consider the issue might state as one of its reasons the need to avoid detailed judicial oversight of economic decisions that cannot possibly be made in the processes of litigation. Admission of a new entrant to an undersized facility (even one charging rates that are no higher than necessary to cover all costs of operation) cannot improve the downstream equilibrium without capacity expansion. Thus, so long as courts avoid imposing such requirements, the essential facilities doctrine is defined in such a way that the remedy it offers is useless as a means of improving consumer welfare.

Regulatory problems become even worse as the range of application of the doctrine is broadened to include facilities other than those shared by their users. In the monopolization area, for example, courts have usually declined to examine the conduct of monopolists when the harm asserted to arise from such conduct occurs in a market in which that monopolist does *not* compete. In *Official Airline Guides, Inc. v. Federal Trade Commission*, the Second Circuit rebuffed an attempt to impose on the publisher of the leading source of airline schedule information an obligation to conduct itself in a way that would not distort competition between scheduled air carriers and “commuter” air carriers.¹³⁹ Here the court’s rationale focused explicitly on the need to avoid detailed regulatory intervention in the management decisions of business enterprises.¹⁴⁰ Of course, the Second Circuit was not speaking of judicial intervention, but of the possibility of intervention by the FTC. However, because of the inevitability of appeal from a final administrative order if the FTC imposed an onerous remedy, the point can be turned around to where the court would have to formulate and impose a remedy.

In sum, endorsement of the essential facilities doctrine must be based on acceptance of the concept of full judicial regulation of natural monopolies if it is to be capable of improving consumer welfare *even in theory*. Courts must be prepared (1) to command that access be provided to others, (2) to

138. Since the original cartel maximizes total profits, keeping production constant and admitting a new partner is preferable, from the point of view of the original owners, to dividing a “smaller pie” by an enlarged number of producers. This is because, by definition, the original cartel produced the biggest possible pie. Note that this analysis ignores any signaling benefits that might accrue to the original cartel from being “difficult” with new potential entrants.

139. 630 F.2d 920, 925-27 (2d Cir. 1980), *cert. denied*, 450 U.S. 917 (1981).

140. *See id.* at 927.

regulate the prices, terms, and conditions for the provision of such access, (3) to command the capacity expansion required to make such access feasible, and (4) to command that the service of the facility—as expanded to make access feasible—actually be provided to those who demand it. There is no “free lunch” in natural monopoly regulation. If there is to be an authoritative endorsement of the essential facilities doctrine, judicial failure to confront these unavoidable constraints on public control of natural monopolies will help to assure regulatory failure.

Recognition that the essential facilities doctrine, where properly applicable, *requires* extensive judicial regulation of monopoly conduct raises important policy and even constitutional questions. The salient policy question is whether courts, operating within the province of adversarial proceedings triggered by government or private antitrust complaints, are competent to identify natural monopolies and to formulate and administer regulatory schemes capable of enhancing welfare—a most difficult task even for the best of tailor-made regulatory institutions. The most obvious constitutional question is whether the assumption of this role by the judiciary is consistent with the separation of powers. Antitrust enforcement is addressed to essential facilities, if at all, under the Article I power of Congress to regulate interstate and foreign commerce—the power behind the Sherman Act and other federal antitrust laws. Recognition of market failure and the fashioning of specific regulatory approaches to reduce the social impact of such failure have always been viewed as uniquely legislative functions. Perhaps the prescribed role of antitrust enforcement is inherently inconsistent with the essential facilities doctrine, even in those limited circumstances where judicial regulation is potentially welfare-enhancing in theory. Whether viewed as an issue of governmental discretion or constitutional command, this position bears serious consideration.

III. TAKINGS, COMPELLED SPEECH, AND MANDATORY ACCESS TO THE WINDOWS OPERATING SYSTEM

Through pathbreaking interpretation of antitrust law, the Department of Justice and the state attorneys general may redefine the nature of Microsoft's private property in its Windows operating system. Those antitrust authorities seek to use injunctive remedies (or, presumably, a consent decree) to transform Microsoft's Windows platform into a species of public utility whose every strategic move may be regulated by a court. By mid-1998, that goal was evident to the business press;¹⁴¹ it was noted more than a year earlier in

141. See David Bank, *Is Microsoft a New 'Public Utility'?*, WALL ST. J., May 19, 1998, at B1 (“The U.S. government's long-range strategy against Microsoft Corp. is finally coming into view, and it is audacious: Treat the software giant like a regulated utility.”).

connection with the federal government's previous antitrust prosecutions against Microsoft.¹⁴²

At the Microsoft trial in January 1999, one government witness, the chief executive officer of Intuit Inc., called Windows a "'choke point' . . . to gain access to customers" and said that "[t]he Windows operating system is to most computer users and providers of software applications or Internet services what the dial tone is to businesses and customers using the telephone: it's the thing you must have access to if you are going to communicate with each other."¹⁴³ This witness testified that "access to the Windows operating-system capabilities is essential for computing," and he advocated as a remedy that Microsoft be subjected to a "principle of operating system neutrality" that would "insure that the operating system does not favor one competitive product over another."¹⁴⁴ Computing, he concluded, had become "like electricity and telephone service."¹⁴⁵

The court's issuance of an injunction turning the Windows platform into a public utility would break new ground. In American law, the consequences of unilateral action by a firm can be assessed in polar terms, depending on the legal nature of the firm. As a general rule in antitrust law, a firm may unilaterally refuse to deal with any prospective customer.¹⁴⁶ That rule even extends to a monopolist's unilateral refusal to deal, so long as the firm by doing so does not intend to create or maintain a monopoly.¹⁴⁷ That rule does not apply to utilities, however. As Justice Benjamin N. Cardozo observed in 1920, "the duty to serve . . . results from the acceptance of the franchise of a public service corporation."¹⁴⁸ Along the continuum between those two poles, the state and federal antitrust authorities seek through the current litigation to place Microsoft at a point decidedly closer to the public utility than the unregulated firm.¹⁴⁹ To do so would open a Pandora's box.

142. See J. Gregory Sidak, *Antitrust and the Federal Software Commission*, JOBS & CAPITAL, Winter 1997, at 18.

143. Direct testimony of William H. Harris ¶ 2, at 1-2, *United States v. Microsoft Corp.* (Dec. 30, 1998) (visited Apr. 12, 1999) <<http://www.usdoj.gov/atr/cases/f2000/2055.htm>>; see also Andrew J. Glass, *Microsoft Critic Wants Windows Treated as Utility*, ATLANTA J.-CONST., Jan. 4, 1999, at A3.

144. Direct Testimony of William H. Harris, *supra* note 143, ¶¶ 104-105, at 42.

145. *Id.* at ¶ 116, at 46.

146. See, e.g., *United States v. Colgate & Co.*, 250 U.S. 300, 307 (1919).

147. See *id.*

148. *Tisner v. New York Edison Co.*, 126 N.E. 729, 731 (N.Y. 1920) (citing *People ex rel. Cayuga Power Corp. v. Public Serv. Comm'n*, 124 N.E. 105, 106 (N.Y. 1919) (Cardozo, J.)); see also IRSTON R. BARNES, *THE ECONOMICS OF PUBLIC UTILITY REGULATION* 42, 740-42 (1942) (arguing that public utility companies have an obligation to serve the consuming public and discussing that obligation).

149. In contrast to this polarity in American antitrust and regulatory law, Australia has moved, as a general rule, to an interior point along the continuum. It has adopted, in Part IIIA of the Trade Practices Act, an "access regime" in which the nation's antitrust authority, the Australian

As Parts I and II suggest, a court's determination that Windows is an essential facility or some kind of public utility or common carrier would bring to the fore a set of far more complex questions concerning the pricing, terms, and conditions of mandatory access to the Windows platform. In particular, what access price would be necessary to promote economic efficiency *and* sufficient to compensate Microsoft for the government-directed use of private property that Microsoft (in contrast to a regulated public utility) never dedicated to a public purpose?

The Department of Justice seeks a permanent injunction mandating two kinds of competitor access to the Windows platform. The first form of mandatory access that the Department of Justice seeks to impose on Microsoft would be a specialized "must-carry" obligation to insert into the Windows platform Netscape's competing web browser, Navigator. The second form of desired mandatory access would be the right (presumably exercised by original equipment manufacturers (OEMs), acting in conjunction with the product offerings of competing software companies) to modify the appearance and operation of Windows.

Mandatory competitor access to the Windows platform would crisply present the question whether, under existing precedent, the government's desired form of injunctive remedy—which would seem to be the necessary result of *any* successful antitrust claim expressly predicated on the essential facilities doctrine—would constitute a permanent physical invasion of Microsoft's property that would be a *per se* taking under the Takings Clause of the Fifth Amendment.¹⁵⁰ We show in this Part that correct legal and economic reasoning indicates that, to avoid confiscating Microsoft's property without just compensation, an injunction would have to allow Microsoft to receive a price for providing its competitors mandatory access to the Windows platform that would compensate Microsoft for the sum of its direct incremental cost *and* opportunity cost of doing so.¹⁵¹

In addition, the government's desired remedy invites the novel but potentially powerful argument that Microsoft's forced inclusion of another company's software within Microsoft's own product offerings would subject Microsoft to compelled speech, in violation of established First Amendment

Competition and Consumer Commission (ACCC), may "declare" any product. Declaration means in essence that the product is akin to an essential facility, access to which the ACCC will order at an arbitrated price if the access provider and access seeker cannot negotiate a mutually acceptable access price on their own. See AUSTRALIAN COMPETITION & CONSUMER COMM'N, A DRAFT GUIDE TO ACCESS UNDERTAKINGS (visited Apr. 12, 1999) <<http://www.accc.gov.au/docs/access/httoc.htm>>.

150. U.S. CONST. amend. V.

151. Even under the Supreme Court's less protective line of "regulatory takings" decisions, mandatory competitor access to Microsoft's Windows platform at the zero price evidently sought in the Justice Department's prayer for relief would be uncompensatory within the meaning of the Takings Clause. See *SIDAK & SPULBER*, *supra* note 135, at 216-26, 240-55.

jurisprudence. That argument is essentially the same one that Assistant Attorney General Joel Klein, while still in private practice, made unsuccessfully to the Supreme Court on behalf of regulated cable television monopolies¹⁵² challenging the “must-carry” provisions of the Cable Television Consumer Protection and Competition Act of 1992.¹⁵³ Judge Stephen F. Williams accepted those arguments in his dissenting opinion from the decision of the special three-judge panel created by statute to judge the constitutionality of those provisions.¹⁵⁴ Given Judge Williams’ views on the matter and his prior opinion for the U.S. Court of Appeals for the D.C. Circuit in the Microsoft contempt proceeding,¹⁵⁵ a subsequent court might consider seriously the compelled speech issue posed by the Windows 98 litigation against Microsoft. Compared to the regulated cable television monopolies subject to a statutorily imposed must-carry obligation, Microsoft would have a more persuasive basis for making the compelled speech argument.¹⁵⁶

A. *Microsoft’s Mandatory Inclusion of Netscape’s Internet Browser in the Windows Platform*

The Department of Justice and the state attorneys general request the court to impose on Microsoft the obligation to insert into the Windows platform Netscape’s competing web browser. The Department of Justice would have the court enjoin Microsoft from doing the following:

152. Appellant National Cable Television Ass’n, Inc.’s Brief, *Turner Broad. Sys., Inc. v. FCC*, 819 F. Supp. 32 (D.D.C. 1993) (No. 93-44) [hereinafter Appellant’s Brief, *Turner*].

153. Cable Television Consumer Protection and Competition Act of 1992, Pub. L. No. 102-385, §§ 4-5, 106 Stat. 1460, 1471-78 (codified as amended at 47 U.S.C. §§ 534-535 (1994 & Supp. 1996)).

154. See *Turner Broad. Sys., Inc. v. FCC*, 819 F. Supp. 32, 57 (D.D.C. 1993) (Williams, J., dissenting). Judge Williams wrote:

The must-carry regulations in the 1992 Cable Act clearly burden the protected speech of cable operators, in favor of local broadcasters whose programming content is in material part specified by law. In requiring cable systems to carry a special group of competing speakers, Congress directly, not incidentally, restricts the cable operators’ exercise of editorial discretion. None of the interests advanced by Congress supports such a burden. . . . I respectfully dissent, and would declare the must-carry provisions to be unconstitutional abridgments of the First Amendment rights of cable operators and unaffiliated programmers.

Id. at 67 (Williams, J., dissenting).

155. See *United States v. Microsoft Corp.*, 147 F.3d 935 (D.C. Cir. 1998) (reversing the lower court’s granting of a preliminary injunction prohibiting Microsoft from requiring licensing of its browser along with its operating system).

156. Conversely, the injunction forcing Microsoft to permit another company (presumably, an OEM) to delete Internet Explorer from the Windows platform is analogous to a law requiring an author to consent to a bookseller’s ripping from the author’s book certain pages with which the bookseller, for whatever reason, disapproves. Again, the First Amendment does not permit the government to condition the dissemination of speech on censorial approval or abridgment. Of course, this mandatory option for OEM deletion of Internet Explorer is not, strictly speaking, a form of mandatory access to the Windows platform. Its constitutional infirmity is not difficult to recognize as a matter of First Amendment law, however.

For a period of three years (or such other period as the parties may agree or the Court may order), distributing a single version of its operating system which includes Microsoft's browser software, unless

- i. Microsoft also includes with such operating system the most current version of the Netscape Internet browser, and
- ii. each OEM is permitted at its option to delete the software that provides the Internet Explorer icon and the other means by which users may readily use IE to browse the web, the software that provides the icon and the other means by which users may readily use the Netscape Internet browser, or both¹⁵⁷

The state attorneys general seek a permanent injunction ordering similar relief.¹⁵⁸

In actuality, this form of mandatory access would *not* be analogous to common carriage, as it would impose on Microsoft no similar duty to carry the Internet browser software of other companies besides Netscape. (The state attorneys general would expand this duty by only the slightest degree, by requiring Microsoft to include on the Windows platform "the most current version of Netscape's internet browser and one other commercially available internet browser."¹⁵⁹) Stated differently, Microsoft would not be obliged to provide every requesting supplier of Internet browser software nondiscriminatory access to the Windows platform. Indeed, Microsoft would not even be permitted to ensure that the OEM would afford Microsoft's *own* Internet Explorer nondiscriminatory carriage over the Windows operating system installed on the PC built by the OEM. Because their requested relief does not address the question of access pricing, it would appear that the Department of Justice and the state attorneys general implicitly seek this form of mandatory access to the Windows platform without the payment of any compensation to Microsoft.

157. DOJ Prayer for Relief, *supra* note 43, ¶ 2(e).

158. The state attorneys general similarly request that the court issue an injunction mandating, among other things, that Microsoft:

1. Shall, in addition to offering Windows 98 as currently constituted, immediately untie its internet browser from and separately offer Windows 98.
2. In the alternative, unless and until Microsoft unties or enables OEMs to untie its internet browser from Windows 98, as indicated in No. 1 above, Microsoft shall be required to distribute a version of its operating system which includes the most current version of Netscape's internet browser and one other commercially available internet browser and provide to OEMs and the end user the ability to remove the visible and other means by which end-users may readily use Microsoft's, Netscape's and/or other browser provider's bundled browsers.

Proposed Order ¶¶ 1-2, New York *ex rel.* Vacco v. Microsoft Corp., No. 98-1233 (D.D.C. filed May 18, 1998) [hereinafter State Attorneys General Proposed Order].

159. *Id.* ¶ 2.

B. *Per Se Taking for Physical Invasion of Microsoft's Property*

Microsoft would have a powerful argument that a *per se* taking of its property would result from any injunction by the court mandating Microsoft to give Netscape access to the Windows platform. Such mandatory access would constitute a physical invasion of Microsoft's Windows platform. Would that *per se* taking of Microsoft's property receive a "just" level of explicit or implicit compensation, such that the government would be subject to no claim for damages? Clearly not, as the Department of Justice's prayer for relief evidently envisions the mandatory access being priced at zero. To avoid constituting a taking of property, the mandatory access would have to produce an access price that would compensate Microsoft fully for its direct incremental cost and its opportunity cost of granting such access.

Government policies that effect physical invasions of property elicit the greatest judicial protection of private property. The leading decision on takings arising from physical invasion of property is the Supreme Court's 1982 decision in *Loretto v. Teleprompter Manhattan CATV Corp.*,¹⁶⁰ which defended that rule even in the case of "a minor but permanent physical occupation of an owner's property authorized by government."¹⁶¹ The Court announced that "when the 'character of the governmental action,' is a permanent physical occupation of property, our cases uniformly have found a taking to the extent of the occupation, without regard to whether the action achieves an important public benefit or has only minimal economic impact on the owner."¹⁶²

At issue in *Loretto* was a New York statute that required a landlord to permit a cable television (CATV) company to install its CATV facilities upon her property, subject to payment of no greater than "reasonable" compensation set by a state commission. Exclusively franchised to build the CATV system within certain parts of Manhattan, Teleprompter wired Ms. Loretto's five-story apartment building, for which the commission deemed her to be entitled to a one-time payment of one dollar. Teleprompter's physical invasion of Ms. Loretto's building was minor and consisted of the installation of a cable "slightly less than one-half inch in diameter and of approximately 30 feet in length along . . . the roof top," plus some other, relatively unobtrusive paraphernalia.¹⁶³

160. 458 U.S. 419 (1982).

161. *Id.* at 421 (1982). The discussion of *Loretto* is an abbreviated version of the analysis contained in SIDAK & SPULBER, *supra* note 135, at 226-40.

162. *Loretto*, 458 U.S. at 434-35 (quoting *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 124 (1978)) (citation omitted).

163. *Id.* at 422.

Although *Loretto* was in practical terms a simple case of access pricing, the Court chose to make the fact of physical invasion dispositive.¹⁶⁴ Justice Thurgood Marshall wrote for the majority that “when the physical intrusion reaches the extreme form of a permanent physical occupation, . . . ‘the character of the government action’ not only is an important factor in resolving whether the action works a taking but also is determinative.”¹⁶⁵ Unlike the balancing analysis in a regulatory takings case, “a permanent physical occupation is a government action of such a unique character that it is a taking without regard to other factors that a court might ordinarily examine.”¹⁶⁶ The Court likened its rule on permanent physical invasion to a per se rule in antitrust law.¹⁶⁷

Under *Loretto*, the physical magnitude of the invasion of property does not matter. The Court said that “constitutional protection for the rights of private property cannot be made to depend on the size of the area permanently occupied.”¹⁶⁸ The Court made light of the factual disagreement between the majority and the dissenters over the volume of the cable equipment attached to Ms. Loretto’s building: “The displaced volume . . . [is] not critical: whether the installation is a taking does not depend on whether the volume of space it occupies is bigger than a breadbox.”¹⁶⁹ The Court noted in particular that “the owner has no right to possess the occupied space himself, and also has no power to exclude the occupier from possession and use of the space. The power to exclude has traditionally been considered one of the most treasured strands in an owner’s bundle of property rights.”¹⁷⁰

Five years after *Loretto*, the Court considered a similar case. The Pole Attachments Act authorized the FCC to regulate the rates, terms, and conditions of the attachment of cable television wires to utility poles if the state did not engage in such regulation, but the statute (at that time) did not mandate access.¹⁷¹ An electric utility challenged the statute as a permanent physical invasion of private property, but the Court ruled in *FCC v. Florida Power Corp.*¹⁷² that *Loretto* did not apply. The Court reasoned, again in an opinion by Justice Marshall, that the statute merely regulated prices in consensual transactions. Unlike the New York statute in *Loretto*, which con-

164. See *id.* at 426 (stating that “a permanent physical occupation authorized by government is a taking without regard to the public interests that it may serve”).

165. *Id.*

166. *Id.* at 432.

167. See *id.* at 435 n.12.

168. *Id.* at 436-37.

169. *Id.* at 438 n.16.

170. *Id.* at 435-36 (citing *Kaiser Aetna v. United States*, 444 U.S. 164, 179-80 (1979); RESTATEMENT OF PROPERTY § 7 (1936)).

171. Communications Act Amendments of 1978, Pub. L. No. 95-234, § 6, 92 Stat. 33, 35-36 (codified as amended at 47 U.S.C. § 224 (1994 & Supp. 1996)).

172. 480 U.S. 245 (1987).

tained the “element of required acquiescence . . . at the heart of the concept of occupation,” the Pole Attachments Act did not compel the property owner to submit to an involuntary transaction.¹⁷³ In 1992 the Court reinforced that rationale: Property owners who “voluntarily open their property to occupation by others . . . cannot assert a per se right to compensation based on their inability to exclude particular individuals.”¹⁷⁴

Florida Power has itself become a curio because the Telecommunications Act of 1996 made it *mandatory* for utilities to provide access to their poles, ducts, conduits, and rights of way; furthermore, the statute specified the formula for computing compensation for such mandatory access.¹⁷⁵ Thus, in the latest wave of pole attachment cases, *Florida Power* is no longer dispositive. In *Gulf Power Co. v. United States*,¹⁷⁶ a federal district court held in March 1998 that the pole attachment provisions of the Telecommunications Act of 1996 were an unconstitutional taking per se under *Loretto*. The court stated that “the facts that an industry is heavily regulated, and that a property owner acquired the property knowing that it is heavily regulated, do not diminish a physical taking to something less than a taking.”¹⁷⁷ The court emphasized that the Supreme Court’s result in *Florida Power* was “based on one significant factor which distinguished it from *Loretto*—in *Florida Power* the element of ‘required acquiescence’ was entirely absent from the statute.”¹⁷⁸ That difference, the court found, supported the finding of a per se taking:

Unlike the landlord in *Loretto*, by contracting with the cable company to provide access, the utility voluntarily relinquished its exclusion rights, effectively inviting the cable company to occupy space on its poles. However, in making this distinction, the Court signaled that it might have reached a different result had a mandatory access provision been implemented by the FCC.

That day is upon the Court, and it now finds that the per se rule of *Loretto* is applicable to the instant case. A utility as defined by the Act is required to provide any cable television system or telecommunications carrier with nondiscriminatory access to its poles and conduits. Such access is a permanent physical occupation of property, effectively divesting a utility of its right to exclude. Furthermore, because the element of “required acquiescence” is present in the nondiscriminatory provision, distinguishing the case at bar from *Florida Power*,

173. *See id.* at 252-53.

174. *Yee v. City of Escondido*, 503 U.S. 519, 531 (1992).

175. Telecommunications Act of 1996, Pub. L. No. 104-104, § 703, 110 Stat. 56, 150 (codified as amended at 47 U.S.C. § 224(e) (Supp. 1996)).

176. 998 F. Supp. 1386 (N.D. Fla. 1998).

177. *Id.* at 1394 (quoting *GTE Northwest Inc. v. Public Util. Comm’n*, 900 P.2d 495, 504 (Or. 1995), and citing J. Gregory Sidak & Daniel F. Spulber, *Deregulatory Takings and Breach of the Regulatory Contract*, 71 N.Y.U. L. REV. 851, 951-52 (1996)).

178. *Id.* at 1395 (citing *Florida Communications Comm’n v. Florida Power Corp.*, 480 U.S. 245, 252 & n.6 (1987); Sidak & Spulber, *supra* note 177, at 946-54).

the permanent occupation of a utility's poles and conduits amounts to a per se taking of property under *Loretto* and the Fifth Amendment.¹⁷⁹

Local exchange carriers and electric utilities have refined the economic and legal presentation of the physical invasion argument in the context of mandatory unbundling and retail wheeling proceedings. In those cases, the competitor may occupy physical capacity not only in the sense of volume or square footage, but also in the sense of electronic or photonic capacity, which may or may not manifest itself in congestion on the network. As indicated by lines of code, Netscape's browser similarly would seem permanently to occupy space within Microsoft's property if Microsoft were ordered to include that software in every copy of Windows. Moreover, the Department of Justice itself tellingly refers to the attractive "real estate" of the Windows desktop, to which the government's requested injunction would compel Microsoft to grant Netscape access.¹⁸⁰ In short, if the court were to order mandatory competitor access to the Windows platform, *Loretto* would apply, the federal government would be per se liable for a taking, and the question of measuring the sufficiency of damages for just compensation would present itself.

C. *The Measure of Just Compensation for Mandatory Access to the Windows Platform*

The central economic and legal difficulty with mandatory access regimes is that they rest upon involuntary exchange rather than the voluntary exchange that is more familiar to a capitalist economy. In takings law, compensation for government confiscation of property is deemed to be constitutionally "just" if it equals the price to which a willing buyer and a willing seller would agree. Just compensation mimics the outcome of voluntary exchange. As an economic matter, just compensation thus requires that the property owner be fully compensated for his opportunity cost. In contrast, in proceedings to set prices, terms, and conditions of mandatory access to local telecommunications networks under the Telecommunications Act of 1996, entrants and regulators (including the Department of Justice and the Federal Communications Commission) advocated regulated prices set at total element long-run incremental cost (TELRIC) plus a reasonable share of forward-looking common costs. In practice, considerable disagreement has

179. *Id.* at 1395 (citations omitted).

180. "Microsoft recognizes and intends that these restrictions consolidate its strategic power over the valuable real estate that the desktop screen represents for the provision of software, advertising and promotion." Complaint ¶ 100, at 34, *United States v. Microsoft Corp.*, No. 98-1232 (D.D.C. filed May 18, 1998); *see also* Memorandum of the United States in Support of Motion for Preliminary Injunction 36, 38, *United States v. Microsoft Corp.*, No. 98-1232 (D.D.C. filed May 18, 1998) (describing the Windows desktop as attractive real estate); Direct Testimony of William H. Harris, *supra* note 143, ¶ 7, at 3.

arisen over the correct measurement of TELRIC, the correct measurement of and time horizon for forward-looking common costs, and the correct method for determining the share of such common costs that “reasonably” may be recovered in the price for a particular unbundled network element. Consequently, the bargaining range between the network owner’s compensatory price and the entrant’s (and regulator’s) desired price is huge, and regulators respond by imposing arbitrated prices.¹⁸¹

The mandating of access to a network only begins the regulator’s task. In Microsoft’s case, the regulator would be a federal district judge, who would attempt to perform, within the framework of antitrust law, tasks akin to those undertaken by an entire public utility commission. The difficulty of that task is suggested by the fact that virtually none of the one hundred or more reported judicial decisions concerning the essential facilities doctrine in antitrust law ever discusses, in precise economic terms, *how* a judge should price access to the bottleneck facility. If a court were to address that question with respect to Microsoft’s Windows operating system, the proceeding would surely be as complicated and consequential as the one that came before the FCC in 1996 and that led to the pricing of unbundled elements of the local telecommunications network.¹⁸² That exercise revealed that the FCC (with the endorsement of the Department of Justice) was determined to set prices for mandatory network access at levels that erred on the side of subsidizing downstream competitors—which, in this case, would be Netscape and other suppliers of Internet browsers. It is not realistic to expect that the Department of Justice, on its own initiative, would now endorse a more compensatory approach to the pricing of mandatory access by competitors to the Windows platform. Indeed, the Department evidently seeks Netscape’s mandatory access to the Windows platform at a price of zero, which would fail to compensate Microsoft for *any* of its cost of providing such access, including its direct incremental costs.

181. See SIDAK & SPULBER, *supra* note 135, at 307-42 (describing the Market-determined Efficient Component Pricing Rule and how it differs from other compensation rules, and suggesting that regulators should use this rule to determine compensation instead of resorting to arbitration); J. Gregory Sidak & Daniel F. Spulber, *The Tragedy of the Telecommons: Government Pricing of Unbundled Network Elements Under the Telecommunications Act of 1996*, 97 COLUM. L. REV. 1081, 1107-10 (1997) (discussing the effects of imposing arbitrated access prices); J. Gregory Sidak & Daniel F. Spulber, *Givings, Takings, and the Fallacy of Forward-Looking Costs*, 72 N.Y.U. L. REV. 1068, 1139-47 (1997) (discussing the “fallacy of forward-looking costs” used in calculating arbitrated access prices); Sidak & Spulber, *Deregulatory Takings and Breach of the Regulatory Contract*, *supra* note 177, at 951-53 (discussing the effects of government-ordered mandatory interconnection or unbundling).

182. For the FCC’s decision, see *In re* Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 and Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers, First Report and Order, 11 F.C.C.R. 15,499 (1996). For the appeal of the FCC’s First Report and Order, see *Iowa Utils. Bd. v. FCC*, 120 F.3d 753 (8th Cir. 1997), *rev’d in part, affirmed in part sub nom. AT&T Corp. v. Iowa Utils. Bd.*, 118 S. Ct. 879 (1998).

1. *Microsoft's cost of providing mandatory access to the Windows platform.*

If the court were to grant the request of the Department of Justice and the state attorneys general to enjoin Microsoft to insert Netscape's Navigator into the Windows platform, what price would be efficient and compensatory for Microsoft to charge Netscape for that access? Economic analysis provides the answer.

Compensating Microsoft for its opportunity cost. Consumers and businesses voluntarily participate in a market transaction only if they receive gains from trade—that is, only if the transaction yields benefits exceeding its costs. Armen A. Alchian has provided the classic definition of cost: “In economics, the cost of an event is the highest-valued opportunity necessarily forsaken.”¹⁸³ The supplier's costs of investing in the transaction include the highest net benefit of all opportunities forgone, known as the *opportunity cost*. This understanding of cost finds wide, if not universal, acceptance in economic thought. For example, Joseph E. Stiglitz, the former chairman of the Council of Economic Advisers, writes in his textbook that “when rational firms and individuals make decisions—whether to undertake one investment project rather than another, whether to buy one product rather than another—they take into account *all* of the costs, the full opportunity costs, not just the direct expenditures.”¹⁸⁴

Economically sophisticated jurists also recognize that opportunity cost is the proper economic definition of cost. Chief Judge Richard A. Posner has observed in his treatise, “Cost to the economist is ‘opportunity cost’—the benefit forgone by employing a resource in a way that denies its use to someone else.”¹⁸⁵ The D.C. Circuit has recognized that definition of cost as well. In a unanimous 1997 opinion by Judge Douglas H. Ginsburg in a rate case involving landing fees at airports, the court chided a regulator, the Secretary of Transportation, for interpreting “cost” in a way that ignored opportunity cost.¹⁸⁶ The court noted that when the Supreme Court, in *Federal Power Commission v. Natural Gas Pipeline Co. of Am.*,¹⁸⁷ overruled *Smyth v.*

183. Armen A. Alchian, *Cost*, in 3 INTERNATIONAL ENCYCLOPEDIA OF THE SOCIAL SCIENCES 404, 404 (David L. Sills ed., 1968).

184. JOSEPH E. STIGLITZ, ECONOMICS 44 (1993) (emphasis in original); accord DAVID L. KASERMAN & JOHN W. MAYO, GOVERNMENT AND BUSINESS: THE ECONOMICS OF ANTITRUST AND REGULATION 32 (1995) (“[E]conomic costs include both implicit and explicit costs, while accounting costs incorporate only explicit costs. Implicit costs are defined as the opportunity cost of owned resources, where the term *opportunity cost*, in turn, is defined as the value of a resource in its best alternative use.”).

185. RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 6 (4th ed. 1992).

186. See *City of Los Angeles Dep't of Airports v. United States Dep't of Transp.*, 103 F.3d 1027, 1032 (D.C. Cir. 1997). Judge Ginsburg formerly served as Assistant Attorney General in the Antitrust Division.

187. 315 U.S. 575 (1942).

Ames,¹⁸⁸ it “did not rule fair market value out of cost-of-service rate making; it held only that ‘[t]he Constitution does not bind rate-making bodies to the service of any single formula or combination of formulas.’”¹⁸⁹ That subtlety has direct relevance to the use of opportunity cost to approximate the fair market value of the regulated firm’s assets:

Nor has the Court ever held that historic cost represents the only true measure of cost and the Secretary points to no law, regulation, or agency decision to that effect. On the contrary, agencies that regulate utility rates have recognized “opportunity cost” as a factor to be considered when setting rates designed to cover the actual costs incurred to provide a particular service. . . . Economists, too, have argued that opportunity costs should be considered in ratemaking.¹⁹⁰

The court rejected “the view that an opportunity cost is not an ‘actual cost,’ in law or in economics, because it does not appear as a cash expenditure in the account books of the [regulated firm].”¹⁹¹ The court remanded the case to the Secretary of Transportation to “confront[] the question of how properly to measure cost under a compensatory fee regime.”¹⁹² In particular, the court directed the Secretary to give “express consideration” to

the testimonial evidence of Professor Kenneth Arrow, a Nobel laureate in economics, to the effect that the methodology [that the City of Los Angeles] adopted for [Los Angeles International Airport] would cause the landing fees paid by the airlines to reflect the true cost of the airfield land; namely, “the value [the City] could have obtained in the best alternative use.”¹⁹³

The court stated: “This would, the City maintained, ensure that the actual costs of the airfield are borne by those receiving the benefits of the airfield and would create the proper incentive for the City to allocate land to airport use.”¹⁹⁴

Recovering the opportunity cost of mandatory access through the market-determined efficient-component pricing rule. How do companies determine the economic costs of their inputs in practice? Some inputs are purchased on the market. For those inputs, the determination of opportunity costs is straightforward because they equal the purchase cost of each input. The market price of the product or service provides the best guide to the economic value of that service because the price results from fundamental sup-

188. 169 U.S. 466 (1898).

189. *City of Los Angeles Dep’t of Airports*, 103 F.3d at 1032 (quoting *Natural Gas Pipeline*, 315 U.S. at 586).

190. *Id.* (citing *Pennsylvania Elec. Co.*, 60 F.E.R.C. ¶¶ 61,034, 61,120 & n.1 (1992), *aff’d sub nom.* *Pennsylvania Elec. Co. v. FERC*, 11 F.3d 207 (D.C. Cir. 1993); BAUMOL & SIDAK, TRANSMISSION PRICING AND STRANDED COSTS IN THE ELECTRIC POWER INDUSTRY, *supra* note 76, at 139 *et seq.*).

191. *Id.*

192. *Id.* at 1033.

193. *Id.* at 1033-34 (quoting Declaration of Kenneth J. Arrow (Mar. 13, 1995)).

194. *Id.* at 1034.

ply and demand forces. Consumers' willingness to pay and suppliers' costs are reflected in the price that clears the market.

But not all inputs that a company uses are easily purchased in the marketplace. For inputs not purchased it is necessary to "impute" their cost—that is, to attribute to each such input the value in its best alternative use. When an input is unique to the company or is produced by the company itself, the economically correct price is the best alternative use of that input. Thus, if an owner-manager of a small business puts in time operating the business, the economic cost of his time to the business is the best return that he could obtain elsewhere. Similarly, the price that Microsoft implicitly charges itself for placing Internet Explorer on the Windows platform should not be less than the price that Microsoft charges other suppliers of applications software, such as Netscape, for the placement of their applications on the Windows platform.

The market-determined efficient-component pricing rule (M-ECPR) calculates a price for access that reflects opportunity cost in the presence of competitive alternatives. The M-ECPR is a public interest approach to the problem of how a regulated firm should price an input that it sells to a competitor. If a company produces an input and sells that input to another company, the economic cost of that input would equal the direct cost of making that input plus the earnings forgone elsewhere by making the sale. In other words, the economic cost of the space to be leased by the firm to another company is the firm's direct cost of providing the space *plus* the opportunity forgone by the firm from making the sale. That economic reasoning underlies the M-ECPR formula:

"access" price = the access provider's incremental cost of "access" per unit plus
the access provider's opportunity cost of providing access to the input.

That definition is consistent with the earlier explication of the efficient-component pricing rule (ECPR).¹⁹⁵ The M-ECPR, however, imposes a constraint on the magnitude of opportunity costs that the creators of the ECPR

195. For examples of uses of the ECPR, see William J. Baumol & Robert D. Willig, Brief of Evidence: Economic Principles for Evaluation of the Issues Raised by Clear Communications, Ltd. on Interconnection with Telecom Corporation of New Zealand, Ltd. (undated), *submitted in* Clear Communications, Ltd. v. Telecom Corp. of New Zealand, Ltd., slip op. (H.C. Dec. 22, 1992), *rev'd*, slip op. (C.A. Dec. 28, 1993), *rev'd*, [1995] 1 N.Z.L.R. 385 (Oct. 19, 1994, Judgment of the Lords of the Judicial Committee of the Privy Council). See also WILLIAM J. BAUMOL & J. GREGORY SIDAK, TOWARD COMPETITION IN LOCAL TELEPHONY 94-95 (1994); BAUMOL & SIDAK, TRANSMISSION PRICING AND STRANDED COSTS IN THE ELECTRIC POWER INDUSTRY, *supra* note 76, at 115-38; William J. Baumol, *Some Subtle Issues in Railroad Regulation*, 10 INT'L J. TRANSP. ECON. 341, 353-54 (1983); Baumol & Sidak, *The Pricing of Inputs Sold to Competitors*, *supra* note 76, at 178-79. Additional uses of the ECPR are discussed in William J. Baumol & Thomas W. Merrill, *Does the Constitution Require that We Kill the Competitive Goose? Pricing Local Phone Service to Rivals*, 73 N.Y.U. L. REV. 1122 (1998); William J. Baumol, Janusz A. Ordover & Robert D. Willig, *Parity Pricing and Its Critics: A Necessary Condition for Efficiency in the Provision of Bottleneck Services to Competitors*, 14 YALE J. ON REG. 145, 147-54 (1997).

evidently overlooked. When market alternatives (both actual and potential) are present for the input, the prices of those alternatives determine the opportunity cost of the input. The earlier literature on the ECPR did not recognize that constraint on the magnitude of opportunity costs. The opportunity cost of an input equals its value in its best alternative use, which will change over time. Opportunity costs are therefore, by definition, forward-looking and are subject to the competitive constraint of not exceeding an efficient firm's stand-alone cost of entry.¹⁹⁶

A substantial body of academic literature has endorsed efficient component pricing and refined its theory and practice. In addition to the writings and testimony of William J. Baumol, that literature includes books, articles, and working papers by such American academic economists as Michael A. Crew,¹⁹⁷ Jerry A. Hausman,¹⁹⁸ Alfred E. Kahn,¹⁹⁹ Paul R. Kleindorfer,²⁰⁰ Paul W. MacAvoy,²⁰¹ Janusz A. Ordover,²⁰² John C. Panzar,²⁰³ David S. Sibley,²⁰⁴ Daniel F. Spulber,²⁰⁵ William Taylor,²⁰⁶ and Robert D. Willig,²⁰⁷ and Ameri-

196. See SIDAK & SPULBER, *supra* note 135, at 319 (arguing that the M-ECPR includes direct economic costs and opportunity costs); Sidak & Spulber, *Givings, Takings, and the Fallacy of Forward-Looking Costs*, *supra* note 181, at 1139-47 (discussing forward-looking costs); Sidak & Spulber, *The Tragedy of the Telecommons*, *supra* note 181, at 1087-90 (discussing the M-ECPR).

197. See, e.g., MICHAEL A. CREW & PAUL R. KLEINDORFER, *THE ECONOMICS OF POSTAL SERVICE* 32-33 (1992); Michael A. Crew & Paul R. Kleindorfer, *Pricing in Postal Service Under Competitive Entry*, in *COMMERCIALIZATION OF POSTAL AND DELIVERY SERVICES: NATIONAL AND INTERNATIONAL PERSPECTIVES* 117, 122-27 (Michael A. Crew & Paul R. Kleindorfer eds., 1995).

198. See Jerry A. Hausman & Timothy J. Tardiff, *Efficient Local Exchange Competition*, 40 *ANTITRUST BULL.* 529, 552-54 (1995).

199. See Alfred E. Kahn & William Taylor, *The Pricing of Inputs Sold to Competitors: A Comment*, 11 *YALE J. ON REG.* 225, 226 (1994).

200. See CREW & KLEINDORFER, *supra* note 197, at 33; Crew & Kleindorfer, *supra* note 197, at 122-27.

201. See PAUL W. MACAVOY, *THE FAILURE OF ANTITRUST AND REGULATION TO ESTABLISH COMPETITION IN LONG-DISTANCE TELEPHONE SERVICES* 209 (1996).

202. See Baumol et al., *supra* note 195, 147-54; Janusz A. Ordover & Robert D. Willig, *Notes on the Efficient Component Pricing Rule*, Paper presented at The Transition Towards Competition in Network Industries, First Annual Conference, Montreal (Oct. 13-14, 1995).

203. See John C. Panzar, *The Economics of Mail Delivery*, in *GOVERNING THE POSTAL SERVICE* 1, 6-10 (J. Gregory Sidak ed., 1994); John C. Panzar, *Competition, Efficiency, and the Vertical Structure of Postal Services*, in *REGULATION AND THE NATURE OF POSTAL DELIVERY SERVICES* 91, 96-98 (Michael A. Crew & Paul R. Kleindorfer eds., 1993).

204. See MICHAEL J. DOANE, DAVID S. SIBLEY, J. GREGORY SIDAK, DANIEL F. SPULBER & MICHAEL A. WILLIAMS, *AN ECONOMIC FRAMEWORK FOR IMPLEMENTING THE PRICING PROVISIONS OF THE TELECOMMUNICATIONS ACT OF 1996*, at III-1 to III-15 (report filed on behalf of GTE Corporation in numerous state public utilities commission proceedings in 1996 and 1997); see generally David S. Sibley, Michael J. Doane & Michael Williams, *Pricing Access to a Monopoly Input*, Paper Delivered at the American Enterprise Institute Conference (Nov. 4, 1997).

205. See SIDAK & SPULBER, *supra* note 135, at 283-392; Sidak & Spulber, *Deregulatory Takings and Breach of the Regulatory Contract*, *supra* note 177; Sidak & Spulber, *The Tragedy of the Telecommons*, *supra* note 181; Daniel F. Spulber & J. Gregory Sidak, *Network Access Pricing and Deregulation*, 6 *INDUS. & CORP. CHANGE* 757, 759-60 (1997).

206. See Kahn & Taylor, *supra* note 199, at 226.

207. Baumol et al., *supra* note 195, at 147-54; Ordover & Willig, *supra* note 202, at 2-8.

can legal scholar Thomas W. Merrill.²⁰⁸ Efficient component pricing has captured the attention of European economists as well. The eminent French economists, Jean-Jacques Laffont and Jean Tirole, also endorse efficient component pricing subject to several caveats that they characterize as academic “quibbles.”²⁰⁹

2. *The measure of just compensation.*

The compensation paid for a taking of private property is “just” when it is equivalent to the compensation that could be derived from voluntary exchange.²¹⁰ The economic reasoning that just compensation should replicate the outcome of voluntary exchange corresponds to the general principle in both American constitutional law²¹¹ and English common law for determining fair compensation for a taking.²¹² What, then, is the price that the property owner would demand before he would voluntarily part with his asset? Another way of phrasing the question is to ask what the full cost would be to the property owner of parting with the asset. The critical insight to answering that question comes once again from Professor Alchian’s definition that “the cost of an event is the highest-valued opportunity necessarily forsaken.”²¹³ The property owner, therefore, would demand the asset’s opportunity cost—which, in the absence of regulatory distortions, will usually equal the asset’s market value.²¹⁴

Thus, if the court were to set a regulated rate (including a rate of zero) for Microsoft’s mandatory provision of capacity on the Windows platform to Netscape, that price would not be “just” for purposes of takings jurisprudence unless it fully compensated Microsoft for its opportunity cost, in addition to compensating Microsoft for its direct incremental costs of inserting Netscape’s Navigator into the Windows platform. Granting the mandatory

208. Baumol & Merrill, *supra* note 195.

209. See Jean-Jacques Laffont & Jean Tirole, *Access Pricing and Competition*, 38 EUR. ECON. REV. 1673, 1693-98 (1994); Jean-Jacques Laffont & Jean Tirole, *Creating Competition Through Interconnection: Theory and Practice*, 10 J. REG. ECON. 227, 230, 237-42 (1996).

210. See SIDAK & SPULBER, *supra* note 135, at 273-81; see also RICHARD A. EPSTEIN, TAKINGS: PRIVATE PROPERTY AND THE POWER OF EMINENT DOMAIN 182 (1985).

211. See, e.g., *Kimball Laundry Co. v. United States*, 338 U.S. 1, 6 (1948) (Frankfurter, J.); see also *Olson v. United States*, 292 U.S. 246, 255 (1934); *United States v. Reynolds*, 397 U.S. 14, 16 (1970).

212. English jurists have emphasized that the purpose of compensation is to “give[] to the owner compelled to sell . . . the right to be put, so far as money can do it, in the same position as if his land had not been taken from him.” *Horn v. Sunderland Corp.*, 1 All E.R. 480, 491 (C.A. 1941); accord *Maidstone Borough Council v. Secretary of State for the Env’t*, 3 P.L.R. 66 (C.A. 1995).

213. Alchian, *supra* note 183, at 404.

214. See, e.g., RICHARD A. BREALEY & STEWART C. MYERS, PRINCIPLES OF CORPORATE FINANCE 98 (4th ed. 1991) (noting that “[w]here the resource can be freely traded its opportunity cost is simply equal to the market price”).

access remedy requested by the Department of Justice would trigger the federal government's liability for the uncompensated portion of a correctly calculated access price for the insertion of Netscape's Navigator into the Windows platform.

3. *Is mandatory access to the Windows platform at an uncompensatory price merely a punitive antitrust remedy by another name?*

Some ask whether mandatory access to the Windows platform at a zero price would be permissible on the rationale that such an injunction could be imposed only if Microsoft first had been found to have violated the antitrust laws and that, for antitrust violators, it lies within the discretion of the court to impose a punitive remedy.²¹⁵ Under this view, the government presumably faces no limitation on its power to order mandatory access short of the Eighth Amendment's prohibition on excessive fines.²¹⁶ This argument, however, does not withstand scrutiny.

The Eighth Amendment is plainly not the only constitutional constraint on the antitrust laws. The Supreme Court has long recognized that the purposes of the antitrust laws on occasion must yield to higher, constitutional principles. Since *Parker v. Brown*,²¹⁷ for example, the Court has recognized, through the state-action immunity, that federalism permits a state government to use its regulatory prerogatives to suppress competition.²¹⁸ Similarly, the Court has recognized, through the *Noerr-Pennington* doctrine, that

215. We thank Paul Brest, Dean of Stanford Law School, for raising this question at the symposium held in William Baxter's honor at Stanford in November 1998.

216. U.S. CONST. amend. XIII ("Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted."); *see generally* *United States v. Bajakajian*, 118 S. Ct. 2028 (1998); *BMW of North America, Inc. v. Gore*, 517 U.S. 559 (1996).

217. 317 U.S. 341 (1943) (holding that a California raisin marketing program does not violate the Sherman Act since the Act does not prohibit state regulatory actions that reduce competition).

218. *See, e.g.*, *FTC v. Ticor Title Ins. Co.*, 504 U.S. 621 (1992) (holding that Wisconsin and Montana's pricing regulations for title searches and examinations violated antitrust regulations because the states did not "actively supervise" the regulations); *City of Columbia v. Omni Outdoor Advertising, Inc.*, 499 U.S. 365 (1991) (upholding a city's restricting of billboard advertising under *Parker v. Brown*); *Southern Motor Carriers Rate Conf. v. United States*, 471 U.S. 48 (1985) (holding that a four-state rate bureau regulating motor carrier prices created by legislatures did not violate the Sherman Act under the "state action" doctrine); *Hoover v. Ronwin*, 466 U.S. 558 (1984) (holding that the Committee on Examinations and Admissions of the Arizona Supreme Court did not violate the Sherman Act when it recommended admission or denial of admission to the state bar because action was an act of the State); *Bates v. State Bar of Ariz.*, 433 U.S. 350 (1977) (holding that the restraint upon attorney advertising imposed by the Arizona Supreme Court was an act of the state, and so did not violate the Sherman Act). *But see* *324 Liquor Corp. v. Duffy*, 479 U.S. 335 (1987) (striking down a New York statute regulating retail pricing of wine because there was no "active supervision" by the state); *California Retail Liquor Dealers Ass'n v. Midcal Aluminum, Inc.*, 445 U.S. 97 (1980) (striking down a scheme under which California would enforce private price coordination in the wine industry, holding that since California did not "actively supervise" the system, there was not enough state involvement to shield the regulations under *Parker v. Brown*).

the Petition Clause of the First Amendment²¹⁹ exempts from antitrust liability sincere attempts of private actors to petition government to crush their competitors.²²⁰ Those who would dispute that the Takings Clause likewise constrains the ability of antitrust law to mandate access at uncompensatory prices must explain why some constitutional provisions limit the antitrust laws but others do not. In the course of circumscribing the ability of unregulated firms to earn monopoly rent, the antitrust laws do not erase the protection that the Takings Clause affords the private property belonging to those firms.

Furthermore, as a statutory matter, the antitrust laws already specifically envision a wide range of penalties without having to add the coerced use of one's private property at less than cost. Individuals are subject to imprisonment and substantial fines, and corporations are subject to even higher fines.²²¹ Private plaintiffs may sue for treble damages,²²² the punitive effect of which has long been recognized.²²³ Injunctive relief is available to correct anticompetitive conduct.²²⁴ A court's power to punish someone found in violation of the antitrust laws is not a license for it to do so in a manner that ignores more direct punitive provisions explicitly established by antitrust statutes.

This range of remedies also invites the question of whether a court would act outside its authority under the antitrust laws if it were to order mandatory access to a bottleneck facility at less than cost. A court's exercise of its injunctive power in an antitrust case should not induce resource misallocation in a manner irreconcilable with the very maximization of consumer welfare that animates antitrust doctrine.²²⁵ This is an example of William Baxter's general postulate that, if an antitrust remedy is to issue, it must be designed to flow coherently from the underlying theory of antitrust liability. However,

219. U.S. CONST. amend. I ("Congress shall make no law . . . abridging . . . the right of the people . . . to petition the Government for a redress of grievances.").

220. *United Mine Workers v. Pennington*, 381 U.S. 657 (1965) (holding that efforts to influence public officials do not violate antitrust laws even though they were intended to eliminate competition); *Eastern R.R. Presidents Conf. v. Noerr Motor Freight, Inc.*, 365 U.S. 127 (1961) (holding that a publicity campaign by railroads encouraging governmental action against the trucking industry was not illegal even though it may have been motivated by an anticompetitive purpose).

221. 15 U.S.C. §§ 1, 2 (1994 & Supp. 1997).

222. *Id.* § 15.

223. See, e.g., Michael K. Block, Frederick C. Nold & J. Gregory Sidak, *The Deterrent Effect of Antitrust Enforcement*, 89 J. POL. ECON. 429 (1981); Michael K. Block & J. Gregory Sidak, *The Cost of Antitrust Deterrence: Why Not Hang a Price Fixer Now and Then?*, 68 GEO. L.J. 1131 (1980); J. Gregory Sidak, *Rethinking Antitrust Damages*, 33 STAN. L. REV. 329 (1981).

224. 15 U.S.C. § 16.

225. The Supreme Court has long posited that the first goal of the Sherman Act and other federal antitrust statutes is to be a "consumer welfare prescription." See *National Collegiate Athletic Ass'n v. Board of Regents*, 468 U.S. 85, 107 (1984); *Reiter v. Sonotone Corp.*, 442 U.S. 330, 343 (1979) (citing ROBERT H. BORK, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* 66 (1978)).

the problem of ordering mandatory access at an uncompensatory price—and *a fortiori* mandatory access at a zero price—is that it would aggravate one state of resource misallocation by prescribing another. The underpricing of access to an essential facility is an entry subsidy to competitors of the vertically integrated incumbent. It will induce overconsumption of that facility (and ultimately congestion) and underconsumption of existing or potential substitutes for that facility.²²⁶ The same underpricing will induce underinvestment by the facility owner in maintaining and enhancing the facility. Stated differently, one consequence of underpricing access to the essential facility is to ensure that competitive substitutes for it do not come into existence. That perverse result would place the antitrust remedy at war with the underlying theory of antitrust liability.

D. *Compelled Speech in Violation of the First Amendment*

By selecting the functionalities to include or exclude from its Windows platform, Microsoft engages in a form of editing and publishing that increasingly characterizes how information is disseminated in a computer-literate society. As the Supreme Court said in *Columbia Broadcasting System, Inc. v. Democratic National Committee*, “[F]or better or worse, editing is what editors are for; and editing is selection and choice of material.”²²⁷ For purposes of the First Amendment, Microsoft’s selection and choice of material to place on the Windows platform is no different than the *Washington Post*’s decision to print a particular news story or editorial or advertisement. The fact that many newspapers now publish continually updated electronic editions on the World Wide Web reinforces the conclusion that, in cyberspace as on paper, “editing is what editors are for.”²²⁸ Alternatively, one may view Microsoft’s Internet Explorer as an encyclopedia or a dictionary, with which the user gains access to a wealth of information on a virtually limitless number of topics. Microsoft’s editorial decision to place Internet Explorer on its Windows platform is akin to a library or bookstore choosing to offer customers the *Encyclopedia Britannica* and the *Oxford English Dictionary* rather than the *World Book* and *Webster’s Collegiate Dictionary*.

226. For a presentation of this argument with respect to the regulated bottleneck facilities of telecommunications networks, see SIDAK & SPULBER, *supra* note 135, at 548-49.

227. 412 U.S. 94, 124 (1973).

228. The Court’s decision in *PruneYard Shopping Center v. Robins*, 447 U.S. 74 (1980), does not change this conclusion. There, the owner of a shopping center was compelled to allow distribution of literature by third parties on the shopping center’s private premises. *See id.* at 88. Unlike Microsoft’s design of the Windows platform, the operation of the shopping center by its owner regularly opened the premises to invitees and did not encompass the distribution of the owner’s own speech or its performance of any editorial activity.

In *Miami Herald Publishing Co. v. Tornillo*, the Supreme Court struck down, as a violation of the First Amendment, a state law requiring a newspaper publisher to make available column space to persons previously criticized in the newspaper.²²⁹ The Court found that the right-of-reply statute was a form of government-compelled speech that would infringe upon the editorial prerogatives that are fundamental to the operation of a free press. In Microsoft's case, the state and federal antitrust authorities seek to impose on Microsoft an obligation to carry Netscape's speech. That injunction would be analogous to requiring the *New York Times* or *Wall Street Journal*, perhaps because of the size of its "installed base" of subscribers, to carry the stories or editorials or advertisements of a less-read newspaper, such as the *Baltimore Sun*.

The First Amendment to the U.S. Constitution provides that "Congress shall make no law . . . abridging the freedom of speech, or of the press . . ." ²³⁰ The mandatory access that the Department of Justice seeks for Netscape's Internet browser on Microsoft's Windows platform would directly regulate the content of protected speech. The desired injunction would be an order by government to a private entity to distribute speech that the government had selected. Implicitly, compelled speech is undertaken without compensation for the infringement it imposes on one's freedom. In that sense, it inherently constitutes a subsidy from the burdened speaker to the preferred speech. As Thomas Jefferson said and as the Court has repeated, "to compel a man to furnish contributions of money for the propagation of opinions which he disbelieves, is sinful and tyrannical."²³¹

Apart from cases involving licensees of the broadcast spectrum or regulated cable television operators, the Supreme Court has strictly scrutinized laws that compel speech.²³² The Court said in *Riley v. National Federation of the Blind of North Carolina, Inc.* that "the First Amendment guarantees 'freedom of speech,' a term necessarily comprising the decision of both what to say and what *not* to say."²³³ As Assistant Attorney General Joel Klein argued to the Court in 1993, when he served as counsel for the National Cable Television Association (NCTA) in *Turner Broadcasting System, Inc. v. FCC*,

229. 418 U.S. 241 (1974). For an early critique of the decision, see Abbott B. Lipsky, Jr., *Reconciling Red Lion and Tornillo: A Consistent Theory of Media Regulation*, 28 STAN. L. REV. 563 (1976).

230. U.S. CONST. amend. I.

231. *Abood v. Detroit Bd. of Educ.*, 431 U.S. 209, 234 n.31 (1977) (quoting I. BRANT, JAMES MADISON: THE NATIONALIST 354 (1948)).

232. See, e.g., *Riley v. National Fed'n of the Blind of N.C., Inc.*, 487 U.S. 781, 795-801 (1988) (holding a regulation that compelled speech to "exact First Amendment scrutiny" in the charitable solicitation context); *Miami Herald Publishing Co. v. Tornillo*, 418 U.S. 241, 254-58 (1974) (holding the same in a newspaper context); *West Virginia State Bd. of Educ. v. Barnette*, 319 U.S. 624, 633-34 (1943) (compulsory flag salute context).

233. *Riley*, 487 U.S. at 796-97.

“Just as a law dictating the message or subject matter of speech interferes with that freedom, so does a law requiring one speaker to utter the speech of another.”²³⁴ For the next several pages, our discussion of compelled speech tracks the argument made by the NCTA in *Turner*.

The injunction sought by the Department of Justice against Microsoft would compel Microsoft “to utter the speech of another” by requiring Microsoft to publish and advertise Netscape’s Internet browser on the Windows platform. Indeed, in its complaint against Microsoft, the Department of Justice itself remarks upon “the valuable real estate that the [Windows] desktop screen represents for the provision of software, advertising and promotion.”²³⁵ The must-carry provision of the desired injunction against Microsoft would be “a direct, purposeful regulation of the content of fully protected speech.”²³⁶ The injunction would tell Microsoft what applications it must include on the Windows platform, “even though [Microsoft] would not voluntarily carry such programming and even though its forced inclusion may lead to the exclusion of programming unfavored by [the government].”²³⁷ As the NCTA argued to the Court in *Turner* in 1993: “This sort of compelled speech—along with its opposite, prohibited speech—has traditionally received the most exacting scrutiny under the First Amendment.”²³⁸ As the Court earlier noted in 1986 in *Pacific Gas & Electric Co. v. Public Utilities Commission*, “[A]ll speech inherently involves choices of what to say and what to leave unsaid.”²³⁹ A law “[m]andating speech that a speaker would not otherwise make necessarily alters the content of the speech,” and thus it is inherently “content-based.”²⁴⁰

In 1993, the petitioners in *Turner* eloquently argued why the government’s assertion of promoting diversity of speech cannot justify the use of compelled speech to attain that objective. Indeed, to the contrary, it explains why courts rightly apply exacting scrutiny to compelled speech:

There is nothing unusual about the government defending a law that compels speech on the grounds that it regards the compelled speech as important and that, absent regulation, the speech will not be heard by a sufficiently broad audience. At some level, the notion that favored speech is of particular importance, and will not otherwise be adequately heard, lies behind every instance of

234. Appellant’s Brief, *Turner*, *supra* note 152, at 12.

235. Complaint ¶ 100, at 34, in *United States v. Microsoft Corp.*, No. 98-1232 (D.D.C. filed May 18, 1998).

236. Appellant’s Brief, *Turner*, *supra* note 152, at 16.

237. *Id.*

238. *Id.* (citing *Sable Communications of California, Inc. v. FCC*, 492 U.S. 115, 126 (1989) (“[T]he government may . . . regulate the content of constitutionally protected speech in order to promote a compelling interest if it chooses the least restrictive means to further the articulated interest.”)).

239. 475 U.S. 1, 11 (1986) (plurality opinion).

240. *Riley v. National Fed’n of the Blind of N.C., Inc.*, 487 U.S. 781, 795 (1988).

compelled speech, or the government would not bother to compel it. Were that interest regarded as sufficient, therefore, little would be left of the First Amendment protection against compelled speech.

This kind of justification also has a dubious foundation: the very reason that compelled speech is subject to a high level of scrutiny is the conviction that it is fundamentally improper for government to insist that private parties utter speech favored by the government [T]hat kind of compulsion is just the mirror-image of laws prohibiting speakers from saying what they wish to say. In both instances—censorship and compelled speech—the government is insisting that its preferences, not those of private parties, should be transcendent in the marketplace for speech. If that purpose is not enough to justify censorship of speech, as it plainly is not, it should fare no better as a basis for compelling speech.²⁴¹

That assessment comports with numerous Supreme Court decisions. As the Court stated in *Harper & Row, Publishers, Inc. v. Nation Enterprises*, “[F]reedom of thought and expression ‘includes both the right to speak freely and the right to refrain from speaking at all.’”²⁴² In addition to protecting against prohibitions on speech, the First Amendment encompasses “‘necessarily, and within suitably defined areas, a concomitant freedom *not* to speak publicly, one which serves the same ultimate end as freedom of speech in its affirmative aspect.’”²⁴³ Similarly, the Court said in *Miami Herald Publishing Co. v. Tornillo* that the First Amendment prohibits “compulsion exerted by government on a newspaper to print that which it would not otherwise print.”²⁴⁴

The Court reaffirmed this line of reasoning in 1995 in *Hurley v. Irish-American Gay, Lesbian and Bisexual Group of Boston*.²⁴⁵ An association of veterans’ groups, the sponsors of Boston’s St. Patrick’s Day parade, refused to allow an association of gays, lesbians, and bisexuals to march in the parade. The Court held that applying a state public accommodations statute to require parade organizers to include a group imparting a message that the organizers did not wish to convey violated the First Amendment.²⁴⁶ The Court analogized the organizers’ control of the parade to an editor’s control over a newspaper.²⁴⁷

As the petitioners argued in *Turner* in 1993, “[t]he exercise of editorial discretion, of course, is not unique to newspapers. As the Court has recognized, ‘through original programming or by exercising editorial discretion

241. Appellant’s Brief, *Turner*, *supra* note 152, at 35-36 (citation omitted).

242. 471 U.S. 539, 559 (1985) (quoting *Wooley v. Maynard*, 430 U.S. 705, 714 (1977)).

243. *Id.* at 559 (quoting *Estate of Hemingway v. Random House, Inc.*, 244 N.E.2d 250, 255 (1968)).

244. 418 U.S. at 256.

245. 515 U.S. 557 (1995).

246. *See id.* at 566.

247. *See id.* at 570.

over which stations or programs to include in its repertoire, [a cable operator] seeks to communicate messages on a wide variety of topics and in a wide variety of formats.”²⁴⁸ That reasoning—as well as the Court’s subsequent reasoning in *Hurley*, which the petitioners in *Turner* correctly anticipated in 1993—applies with equal or greater force today to Microsoft, its Windows platform, and Internet Explorer. In arguing that a must-carry regime would be unconstitutional to impose on regulated cable television monopolies, the petitioner in *Turner* provided a powerful argument for why, if “cable operators” is simply replaced by “Microsoft” in the following passage, the same mandatory access remedy would be unconstitutional to impose on Microsoft:

The must-carry law . . . deliberately and explicitly seeks to set aside this freedom of choice in favor of making cable operators the bearers of speech that the government wishes to advance. The law, in purpose and effect, is no different from a law providing that, with respect to the designated channels, “local broadcast stations shall have an absolute right to determine the news, entertainment, and information that may be shown to the public.” Like speakers subject to a board of censorship, the right of cable operators to select their own programming has been made secondary to the preferences of entities designated by the government. Whether looked at as an abrogation of their editorial discretion, or as an infringement of their right to speak only as they voluntarily would choose, the law pays little respect to longstanding principles of freedom of speech and of the press.²⁴⁹

As previously noted, Judge Williams reached this same conclusion in his dissent in the lower court decision in *Turner* in 1993.²⁵⁰

The Department of Justice seeks mandatory access to the Windows platform for only *one* speaker, Netscape, and would make Microsoft’s Internet Explorer removable at will by the OEM, such that the end consumer might never receive the speech and editorial choices that Microsoft would otherwise make through its publication of Internet Explorer on the Windows platform.²⁵¹ The desired injunction, therefore, would discriminate between the speech and editorial decisions made by Microsoft through Internet Explorer and the speech and editorial decisions made by Netscape through Navigator. The injunction then would deem Microsoft’s speech and editorial decisions less deserving of public attention than Netscape’s. Such discrimination

248. Appellant’s Brief, *Turner*, *supra* note 152, at 8 n.12 (quoting *City of Los Angeles v. Preferred Communications, Inc.*, 476 U.S. 488, 494 (1986), and citing *FCC v. Midwest Video Corp.*, 440 U.S. 689, 707 (1979) (stating that cable operators must exercise “a significant amount of editorial discretion regarding what their programming will include”).

249. *Id.* at 19-20.

250. See *Turner Broadcasting Sys., Inc. v. FCC*, 819 F. Supp. 32, 67 (D.D.C. 1993) (Williams, J., dissenting).

251. As noted earlier, the state attorneys general seek mandatory access for Netscape’s Navigator and one other Internet browser. See State Attorneys General Proposed Order, *supra* note 158.

among speakers is subject to strict scrutiny²⁵² and has been found to violate the First Amendment.²⁵³ Moreover, the 1993 argument of the petitioners in *Turner* makes clear why, even if Microsoft were found to be a monopolist, strict scrutiny would still apply to the mandatory access to the Windows platform that the Department of Justice and the state attorneys general urge the court to impose on Microsoft:

[I]n *Miami Herald Publishing Co. v. Tornillo* . . . the Court, while recognizing that many localities have only one newspaper . . . made clear that laws ordering publication of designated material must be reviewed according to the most exacting First Amendment standard. The proponents of an enforced right of access in *Tornillo* pointed to “dominant features of a press that has become non-competitive and enormously powerful,” manifested by such characteristics as “[c]hains of newspapers, national newspapers, national wire and news services, and one-newspaper towns” and a “monopoly controlled by the owner of the market” But the Court nonetheless gave strict scrutiny to the law mandating access, holding that indicia of economic concentration were insufficient to uphold that access or to justify governmental intrusion upon the editorial function.²⁵⁴

Again, this argument would apply with equal or greater force to Microsoft and its alleged dominance of operating systems for personal computers. To establish under strict scrutiny that their desired remedy of mandatory access to the Windows platform was constitutional, the Department of Justice and the state attorneys general would have to “show that the ‘regulation is necessary to serve a compelling state interest and that it is narrowly drawn to achieve that end.’”²⁵⁵ The numerous theories of alleged antitrust violations by Microsoft contained in the complaints of the Department of Justice and the state attorneys general do not immediately indicate which governmental interest those antitrust enforcers would argue is supposedly “compelling” and for which the requested remedy of mandatory access would be “narrowly drawn.” If, however, those antitrust enforcers were to assert that preventing monopolization of PC operating systems was their governmental objective, it still would be exceedingly difficult for them to show that mandatory access to the Windows platform for *only one* (or at most *two* rival suppliers of Internet browsers) would be a narrowly drawn means to achieve competition in operating systems. The requested remedy would fail for being woefully un-

252. See, e.g., *Burson v. Freeman*, 504 U.S. 191, 207 (1992) (“distinguishing among types of speech requires that [a] statute be subjected to strict scrutiny”).

253. See, e.g., *Simon & Schuster, Inc. v. Members of the New York State Crime Victims Bd.*, 502 U.S. 105, 116 (noting that “‘regulations which permit the government to discriminate on the basis of content of the message cannot be tolerated under the First Amendment’”) (quoting *Regan v. Time, Inc.*, 468 U.S. 641, 648-49 (1984)).

254. Appellant’s Brief, *Turner*, *supra* note 152, at 33 (quoting *Tornillo*, 418 U.S. at 249 & n.13, 249, 251, 256, 258) (internal citations omitted).

255. *Burson*, 504 U.S. at 198 (quoting *Perry Educ. Ass’n v. Perry Local Educators’ Ass’n*, 460 U.S. 37, 45 (1983)).

derinclusive: Rather than attempting to turn the Windows platform into a common carrier of applications software, the requested remedy would merely turn Windows into Netscape's exclusive (or near-exclusive) private carrier for its Navigator browser—a private carrier that could even be forced to deny carriage of Microsoft's own Internet browser. Moreover, even if mandatory access were deemed by a court to be a narrowly drawn means to accomplish the governmental objective, it still would not follow that the government could order such mandatory access *at a zero price* to Microsoft. Such a price would constitute a taking of property, as shown earlier.

The mandatory access injunction sought against Microsoft still would be unconstitutional if the applicable standard of review were less than strict scrutiny. The state and federal antitrust authorities may wish Netscape to receive a wider audience for the speech and editorial choices that the company makes through publication of its Internet browser on PC operating systems. But that interest, even if legitimate, could be advanced through direct assistance or subsidies from the government and cannot, to quote again from the petitioner's brief to the Supreme Court in *Turner*, "justify the means of telling private speakers that they must carry the speech" of another.²⁵⁶

The Court has not extended the same level of protection to government mandates of compelled speech by regulated, electronic media. In *Red Lion*, the Court in 1969 upheld the Federal Communications Commission's rule imposing a right-of-reply duty on broadcasters. The Court distinguished the broadcast result from the print result in *Tornillo* on the grounds that broadcasting was extensively regulated because of the purported scarcity of the electromagnetic spectrum and the resulting government licensing of that spectrum under a public interest standard. Similarly, in *Turner*, cable television companies challenged on First Amendment grounds the requirement in the 1992 Cable Act that they carry the signals of local broadcasters. Cable operators asserted that this requirement compelled them to engage in speech with which they did not agree. The Supreme Court, emphasizing the common carriage aspects of the cable systems, found no violation of the First Amendment.

Microsoft's case more resembles *Tornillo* than *Red Lion* or *Turner*. Like the *Miami Herald* newspaper, Microsoft's Windows operating system is a platform for the delivery of speech and editorial choices of content. The compulsory insertion of Netscape's browser into every copy of Windows is intended to compete against and displace the speech and editorial choices of content that Microsoft already provides through its Internet Explorer. In contrast, Microsoft's Windows platform can be distinguished from a broadcaster or a cable operator. To compete in the marketplace, Microsoft's Windows (like the *Miami Herald*) does not need, as a prerequisite to conducting

256. Appellant's Brief, *Turner*, *supra* note 152, at 15.

business, any license, franchise, certificate of public convenience and necessity; nor does Windows use any government-licensed spectrum or public right of way. Unlike a broadcaster, Microsoft does not operate pursuant to a public interest standard; unlike a cable television operator, Microsoft is not subject to rate or price regulation with regard to its sale of the Windows operating system. Microsoft is not a common carrier, and the injunctions sought by the Department of Justice and the states attorneys general would not have the practical effect of making Microsoft one, as those desired remedies would impose on Microsoft the duty to carry *only* the Internet browsers of Netscape and at most one other company. Through its design of Windows, Microsoft engages in greater editorial control over content than does a cable operator who passively retransmits over a coaxial wire the programming that program originators beam down from a satellite.

In short, the distinguishing characteristics that would lead a court to find that a broadcaster or cable television operator may be compelled to carry the messages of a third party are absent from Microsoft's Windows platform. Windows is in all salient respects the electronic analogue to the *Miami Herald*. The First Amendment therefore strictly limits the power of government to order Microsoft to open the Windows platform to third parties wishing to disseminate their own messages over that medium of expression.

E. *Recapitulation*

Lawyers and economists have posited numerous reasons why the injunctive remedies sought against Microsoft by the Department of Justice and the state attorneys general would harm consumers and waste judicial resources. Because this is an antitrust case, however, it may be less obvious that certain parts of those desired injunctions also would violate Microsoft's constitutional rights of private property and free speech.

Microsoft has a powerful argument that the mandatory access to the Windows platform sought by the antitrust authorities would be a physical invasion of Microsoft's property and would constitute a per se taking of private property under *Loretto*. That per se taking would be uncompensated, and thus unconstitutional, since the Department of Justice's prayer for relief must be read to envision such mandatory access being priced at zero. To avoid constituting a taking of property, an injunction ordering mandatory access would have to include an access price that would fully compensate Microsoft for its direct incremental cost and its opportunity cost of granting such access to Netscape or other producers of web browsers.

In addition to presenting this takings issue, the Microsoft litigation poses the novel legal question of whether Microsoft's government-compelled publication and advertising of another company's software on the Windows platform would violate Microsoft's rights of freedom of speech and association

under the First Amendment. An injunction ordering Microsoft to insert the applications software of other companies into the Windows platform would be like a law requiring a newspaper to print stories written by other newspapers, or a law requiring a bookseller to stock books that he would not otherwise carry. The First Amendment prohibits such compelled speech.

The Microsoft case thus illustrates how the First and Fifth Amendments may significantly circumscribe mandatory access remedies, such as those envisioned by the essential facilities doctrine. Constitutional protections of private property and free speech would strictly constrain—or, at a minimum, attach a hefty price tag to—any injunction ordering Microsoft to give Netscape mandatory access to Windows. Any government victory on the liability issues could be rendered Pyrrhic by the unavailability or costliness of a remedy that mandates competitor access to the Windows platform.

CONCLUSION

The essential facilities doctrine has not produced a body of antitrust law that, consistent with the teachings and practice of William Baxter, sets forth a feasible remedy for the competitive harm that is asserted to exist. American courts have mandated access to a facility deemed “essential” in only a small number of cases. The courts have been even less inclined, perhaps because they feel ill-equipped, to prescribe and monitor price, terms, and condition of access. Nonetheless, state and federal antitrust enforcers continue to seek mandatory competitor access as an injunctive remedy in cases of increasing technological and economic complexity—even when, as in the current Microsoft litigation, they eschew the “essential facilities” label. A century of antitrust litigation has not produced a coherent framework by which courts can police the pricing, terms, and conditions of access to the mythical “only bridge across the Mississippi” in *Terminal Railroad*. Good cause surely exists to question whether future litigation will discover such a framework while antitrust authorities seek to mandate competitor access to lines of software code.

* * *

Bill Baxter’s passing prompts additional remarks: Like others who knew Bill, we cherish our associations with him. We marvel at his passion and talents for deep understanding and candor, and for concise, dazzling expression. Bill’s fundamental and unwavering commitment was to increase human welfare. He fulfilled that commitment—through teaching and through government service—in many ways. Some were made obvious in global headlines. Others will influence wide areas of industry and commerce, but with little notice. We are pleased to be reminded, every time we use a tele-

phone, computer, or credit card—to name only some of the obvious examples—that Bill's achievements do profound justice to his qualities and to his ideal.