After the long fight to end the "common carrier," why are we trying to resurrect it?

Antecedents to Net Neutrality

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Apparent ignorance of more than a century of economic and regulatory history now threatens the competitive constitution of the Internet under the guise of "net neutrality." Net neutrality is a slogan that stands for the proposition that the Internet and physical means of access to it should be available to all on uniform, nondiscriminatory terms. Some net neutrality proponents go further and argue that firms providing physical components of the Internet should not be permitted to offer different qualities of service, even if prices differ accordingly, and even if any customer can opt for any quality of service.

Proponents of net neutrality fear, first, that access to bottlenecks, such as the "last mile" to the home, will be monopolized and, second, that the successful monopolist will seek to favor its own vertical services by excluding or disfavoring others. Net neutrality is their answer to those threats.

But the architects of the concept of net neutrality have invented nothing new. They have simply resurrected the traditional but uncommonly naïve "common carrier" solution to the threats they fear. By choosing new words to describe a solution already well understood by another name, the economic interests supporting net neutrality may mislead themselves and others into repeating a policy error much more likely to harm consumers than to promote competition and innovation.

Net neutrality policies could only be implemented through detailed price regulation, an approach that has generally failed, in the past, to improve consumer welfare relative to what might have been expected under an unregulated monopoly. Worse, regulatory agencies often settle into a well-established pattern of subservience to politically influential economic interests. Consumers, would-be entrants, and innovators are not likely to be among those influential groups. History thus counsels against adoption of most versions of net neutrality, at least in the absence of refractory monopoly power and strong evidence of anticompetitive behavior — extreme cases justifying dangerous, long-shot remedies. My goal in this article is to add an historical perspective to the framing of the net neutrality debate.

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LESSONS OF HISTORY

History, of course, can be a useful adjunct to analysis of policy alternatives. Proponents of net neutrality may recognize their own fears and goals, for example, in the following 120-year-old statement:

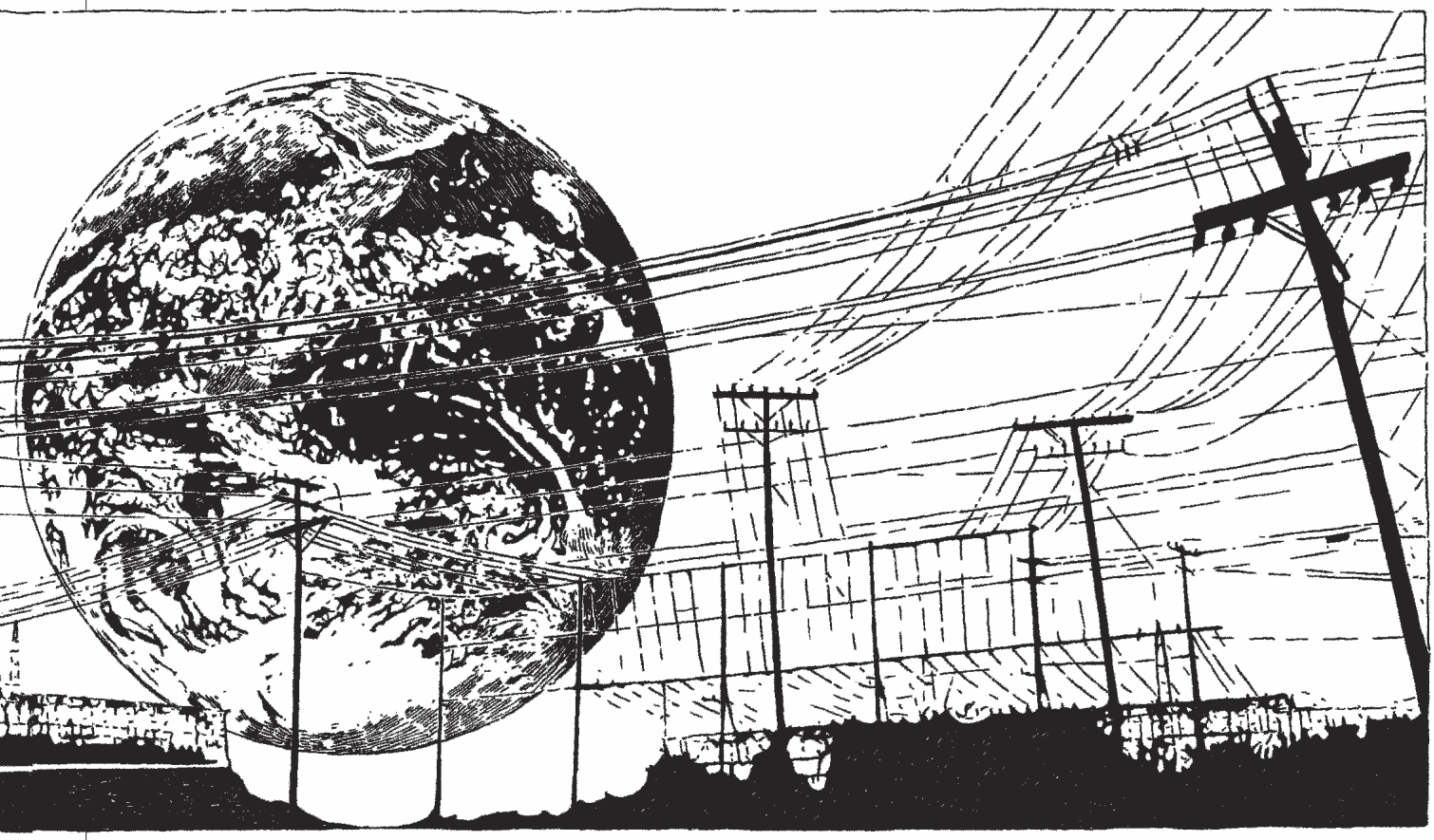
> [T]he paramount evil chargeable against the operation of the transportation system of the United States as now conducted is unjust discrimination between persons, places, commodities, or particular descriptions of traffic. The underlying purpose and aim of the [proposed legislation] is the prevention of these discriminations....

This is from the legislative history of the first modern attempt by the federal government to regulate directly the behavior of large firms, in this case railroads. The result was the 1887 Act to Regulate Commerce, which contained this key provision:

> [I]t shall be unlawful for any common carrier [railroad] subject to the provisions of this act to make or give any undue or unreasonable preference or advantage to any particular person, company, firm, corporation, or locality, or any particular description of traffic, in any respect whatsoever, or to subject any particular person, company, firm, corporation, or locality, or any particular description of traffic, to any undue or unreasonable prejudice or disadvantage in any respect whatsoever.

This and subsequent legislation gave the now-defunct Interstate Commerce Commission (ICC) the power to prevent discrimination of the kind feared by proponents of net neutrality. The policy did not work, however. Railroads continued to discriminate, charging different prices for hauling different commodities. Railroad tariffs grew longer and more complex each decade. In the end, before it was abolished in 1995, the ICC was little more than the titular head of a series of highly discriminatory and dysfunctional regional transport cartels. There are few today who believe that this century-long experiment with regulation achieved net benefits for Americans.

We have more recent evidence in telecommunications itself of the intractable difficulty of preventing discrimination, in this case by vertically integrated monopolies. Few historical events resonate in telecommunications policy with the clarity of the 1982 settlement that terminated the trial in *U.S. v. AT&T*. Old AT&T agreed to settle by accepting the entire relief package sought by the government. The relief called for a platonically pure structural disintegration and future isolation of the local Bell telephone monopolies from the competitive services then offered by AT&T, including long-distance service and equipment manufacturing. The reason: regulation had failed to prevent discrimination against AT&T's competitors.



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VERTICAL INTEGRATION The current net neutrality debate has taken place in the rhetorical equivalent of the fog of war. The originators of the debate chose to invent new language to describe both a familiar economic problem and a familiar legal

and regulatory solution to that problem. Much of the popular writing by pro-neutrality advocates is maddeningly vague and heavy with sloganeering. Their argument seems tailored chiefly for political effect rather than analytical rigor. It has taken several years for scholars on both sides to penetrate the fog.

Translated into the language used by economists, the debate is about preventing bad (anticompetitive) behavior by vertically integrated firms that enjoy market power at one stage or another of the vertical chain of production. For example, Alcoa, which once enjoyed a U.S. monopoly on aluminum ingot, was accused by the Justice Department in the 1930s of foreclosing competition in certain fabricated aluminum products. Alcoa made and sold fabricated products in competition with independent firms, for which Alcoa was the only source of ingot. The government's idea was that Alcoa could charge a high price for its ingot and thus impose a price floor on its competitors, in effect cartelizing the fabricated products businesses. Later in the 20th century, antitrust lawyers and many economists began to find this sort of problem under virtually every vertically integrated rock, even when there was no monopoly at any stage of production.

By 1977, vertical integration hysteria had peaked and the Supreme Court reversed course, recognizing that vertical integration often is pro-competitive. The consensus view nowadays is that vertical integration is simply an instance of the determination of the scope of firms, as distinct from markets. Firms make resource allocation decisions by internal fiat, using organizational tools such as management hierarchies. Markets allocate resources through arms-length transactions among decentralized actors. Much of the time, markets work very efficiently, but there is a variety of conditions under which firms do better. Hence, goods and services are produced and sold by firms with various degrees of horizontal and vertical integration. Generally, firms can be said to compete with markets as venues for resource allocation.

THE CHECKERED HISTORY OF REGULATION

Abstract economic models predict that when allocation within a firm replaces what had been decentralized market exchanges, consumer welfare (present and also future, because of incentives for innovation) may increase or decrease. In other words, the economic incentive to expand horizontally or vertically is usually, but not always, compatible with the social interest in maximizing long-run consumer welfare. We have two tools to deal with the possible bad outcomes: antitrust policy and regulation.

Antitrust policy works by seeking to prevent, directly or through deterrence, welfare-reducing expansions in the scope of firms without indirectly deterring expansions that benefit consumers. This is easy to say, but very tough to accomplish in practice. The requisite information is difficult to assemble and assess and the same tools (e.g., statements of enforcement policy and appellate precedents) can have indirect deterrent effects on both good and bad changes in the scopes of firms.

Hard as it is to calibrate antitrust policy, regulation is even more difficult. Aimed at improving serious long-term structural incompatibility between private incentives and social welfare, regulators intervene continuously and directly in firm decisions. The simplest case is the incentive of a monopolist to restrict output in order to maximize profit. Traditionally, public utility regulators set maximum prices and required utilities to serve all comers at or below those prices. In principle, this might achieve an efficient level of output. But in practice, the constraint itself almost invariably produced incentives that distort internal allocation decisions of regulated firms, raising costs. In addition to those distortions, regulatory agencies themselves frequently have been more concerned with the welfare of the firms they regulate than with the economic welfare of the public. In many cases, consumers would have been better off without regulation. The starkest evidence: deregulation of airlines, trucking, and most rail rates actually produced lower prices.

A relevant example of regulatory distortion is the incentive to expand the scope of the firm vertically into the sale of unregulated products, and a concomitant incentive to exclude competitors from such markets. This was the central economic basis for the Justice Department litigation, seeking to disintegrate the old AT&T vertically, that was commenced in 1974 and led to the 1982 settlement and the actual breakup in 1984. The policy basis for the lawsuit was the failure of the FCC, despite many years of effort, to prevent AT&T from finding ways to keep competitors out of potentially competitive markets into which it had integrated vertically. FCC staff officials testified in the trial of the case that, despite strenuous effort, their interventions had failed.

Behind the failure of the FCC's attempts to control AT&T's anticompetitive behavior were AT&T's control of the information (about, for example, its costs) required by regulators to monitor and control the company's behavior, AT&T's control of the definitions of its services and the default pricing of those services, and the inherent constraints of administrative law on agency behavior. A leading example of those problems is the series of regulatory proceedings called *Computer Inquiry I*, *Computer Inquiry II*, and *Computer Inquiry III*.

In those proceedings, the FCC sought to find an effective method to permit the old AT&T to provide services in unregulated competitive markets while ensuring that AT&T would not or could not engage in anticompetitive behavior in those markets. Among the regulatory strategies explored was the concept of the "fully separated subsidiary," a corporate unit organized to provide competitive services that was separated by an accounting firewall from the monopoly side of the business.

But it became apparent that a meaningful accounting separation was impossible, so long as the benefits from permitting AT&T to continue to supply inputs both to its own competitive downstream businesses and to the competitors it faced in those businesses arose from economies of scope or scale in the joint provision of inputs to both monopoly and competitive markets. For example, there exists no unique, economically legitimate allocation of joint and common costs. In any case, so long as AT&T owned both the regulated monopoly business and the related competitive business, anticompetitive incentives would persist. The *Computer Inquiry* rulemakings ended in morasses of complex, unworkable, and ineffective or self-defeating regulations.

Remarkably similar problems arose in a series of negotiations between AT&T and the Antitrust Division intended to

lead to a settlement of the antitrust litigation. The negotiations took place at the end of the Carter administration and in the early years of the Reagan administration. The talks ended in complex regulatory proposals ultimately abandoned by both sides as unworkable. They were referred to by the parties as *Quagmire I* and *Quagmire II*.

AT&T chairman Charles Brown later explained his decision to accept the relief sought by the government in the antitrust case. The "quagmire" of unworkably detailed regulatory solutions that seemed inevitably to emerge from efforts to solve the underlying problem of incentive incompatibility (not his phrase) led him to conclude that isolation of the monopoly portion of the business from its competitive components (the relief requested from the court by the Antitrust Division) was the only way AT&T would be able to escape endless private and public disputes with competitors and regulators, and become free to focus on its business of providing communication services. AT&T therefore capitulated.

Unfortunately, Judge Harold Greene had not had the benefit of the *Computer Inquiries* and *Quagmire* experience. When the government and AT&T filed the proposed settlement, with its stark and permanent isolation of the monopoly local service companies from participation in any competitive business requiring use of their monopoly facilities, Judge Greene rejected the platonic solution in favor of regulation by the court. He made exceptions for certain "information" services and he insisted on a waiver process, permitting the local monopolies to enter competitive lines of business on a case-by-case basis with the court's consent. Predictably, the court was subsequently bogged down in massive and bitter multi-year waiver proceedings, most of which recapitulated the lessons of the *Computer Inquiries* and the *Quagmires*.

Despite Judge Greene's misstep, the temporary isolation of the Bell companies from long-distance service, combined with growing competition from wireless telephone providers, was sufficient to permit competition to develop in long-distance service. The AT&T settlement ultimately was undone by the 1996 Telecommunications Act, which sought to solve the problem of competitive access to monopoly local telephone facilities by, among other policies, providing for the further (accounting) disintegration of local telephone facilities into "network elements," each to be offered and priced separately to businesses seeking to compete with the local Bells. The resulting FCC implementation procedures were repeatedly challenged by the Bells, resulting in several trips to the Supreme Court. The 1996 Act failed to induce facilities-based entry into local wire line telephony. Instead, market forces took an end-run around the Bell bottleneck.

The arrival of competition in local telephony (and, as it turned out, video services) was made possible by the advance of digital and wireless technology and continuing reductions in the hardware costs of providing such services. Today, cell phone companies and cable television companies offer local phone services that compete with the former Bell telephone monopolies. Competition has finally come to local telephone service, not because of a century of government regulation, but in spite of it.

DOOMED TO REPEAT HISTORY

The history of attempts to regulate the old AT&T under traditional utility regulation principles (common carrier access rules and maximum price regulation) suggests some lessons for communications policy today. Those lessons recapitulate the story of the earlier attempts to control discrimination in rail service.

First, as the examples above attest, there is little clear evidence that traditional regulation ever achieved even its narrow objective of making nondiscriminatory service available to all at cost-based prices. On the contrary, discrimination on the basis of factors correlated with price elasticity has been a commonplace of regulation from the time of the 1887 Act to the present.

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Second, the remedy makes the disease worse. Regulators and regulation often have served as deterrents to technical innovation, both by incumbent monopolists and potential entrants. Bell Labs was a famous source of *invention*, but AT&T was a ponderous and reluctant *innovator*. The framework of regulation and the principles of administrative law give incumbent producers great leverage in preventing entry by competitors. This, in turn, reduces the incumbent's own incentive to innovate.

Third, there is no body of learning or experience from other contexts suggesting that these failures might be remedied significantly by "better" regulatory practices. The long-run interests of consumers arguably are better served by unregulated (and therefore hopefully shorter-lived) monopoly than by regulated (and therefore likely semi-permanent) monopoly.

With the possible exception of the platonic isolation approach of the original, never-implemented 1982 Justice Department/AT&T settlement agreement, no approach to controlling anticompetitive behavior by vertically integrated, regulated monopolists in the communications industry has been successful, and most have injured consumer interests. If consumers really did face the imminent prospect of last-mile monopoly and anticompetitive access discrimination in broadband services, the sad lesson of history is that the "net neutrality" remedy is a cure far worse than the feared disease. R