

5

ACCESS COMPETITION BEGINS: LEGAL AND ECONOMIC RATIONALES FOR NON-CONNECTION

ALEXANDER GRAHAM BELL'S patent on the telephone receiver lapsed on January 30, 1894. Almost immediately, an independent telephone movement with its own operating companies, equipment manufacturers, publications and trade associations took shape. By 1897, both the Bell and the organized independent interests had decided to conduct their rivalry as separate, closed systems, with the subscribers of one unable to place calls to the subscribers of the other.

Although price competition was often foremost in the minds of contemporaries, it was access competition that established the distinctive economic, political and social parameters of the contest and had the most far-reaching effects. One cannot understand the business strategies of the two interests, the rate policies and practices that were adopted, the reasons for the growth and eventual decline of competition, or the problems that ultimately had to be addressed by regulators without reference to the fact that two mutually exclusive networks were at war with each other.

Surprisingly, not a single published work on the history of the telephone in the United States investigates the reasoning behind either sides' decision to pursue access competition or the legal context in which that decision was made. Why weren't the two interests required to connect, and how was the decision not to exchange traffic justified? This chapter attempts to fill that gap in the literature.

The eruption of access competition was the cumulative product of three factors. One was the business policy of the Bell system. The Bell organization had always intended to maintain absolute control over its own system and thus resisted any attempts to make it cooperate with outsiders. A second factor was the prevailing interpretation of common carrier law, which militated against legislative attempts to compel interconnection. Third, and equally important, was

the development of a consensus among the independents themselves that interconnection was not a desirable goal. The independents came to see themselves as a mutually exclusive enterprise, a nationwide movement bent on displacing the Bell monopoly rather than coexisting with it.

Bell policy on interconnection

From 1893 to 1897, some independent exchange operators requested physical connections with Bell toll lines so that their subscribers could speak to telephone users in other cities.⁷² The early demands for interconnection took two distinct forms. First, there were formal requests for the installation of a trunk line connection between Bell and independent exchanges. The independent might propose to extend a line into a Bell exchange at its own expense, and offer to pay a toll or some division of toll revenue for each incoming or outgoing call.⁷³ In other cases, a competing independent exchange would simply subscribe to the Bell exchange and install the telephone in its own central office.⁷⁴ Then it would either orally relay messages between independent and Bell subscribers or, what was more significant and dangerous from Bell's point of view, physically connect the subscriber line into its own switchboard. In the first case, the demand was for a joint operating agreement that would enable Bell and the independent to exchange traffic at prescribed rates. The second tactic effectively erased the boundaries between the Bell and independent exchanges, allowing the independent to offer access to Bell subscribers without paying anything more than the regular subscription price.

A typical request for trunk line interconnection was made late in 1894 in Mt. Sterling, Kentucky, a small town about thirty miles from Lexington. The manager of the independent exchange there wrote a cordial letter to the manager of the Bell licensee in that area proposing to build a line to the nearest Bell exchange so that his subscribers would be able to call Lexington over Bell toll lines. If necessary, the independent manager would build his own toll line to Lexington, but he preferred that the Bell Company "run a line right into our central office, and let us transmit your business for you and increase your business here."⁷⁵

When the operating companies referred those requests to the national organization, they were invariably informed that licensee companies were not permitted to connect with "opposition" companies, nor could they permit opposition companies to forward messages over their lines.⁷⁶ That blunt dismissal was both predictable and logical. While joint operating agreements with the independents might have been mutually beneficial in isolated instances, their

⁷² "We are frequently asked by parties who have organized opposition companies what arrangements they could make to connect with our toll lines." O.E. Noel, President and General Manager, East Tennessee Telephone Co., to C. Jay French, General Manager, ABT Co., Dec. 10, 1894. Box 1066, AT&T-BLA.

⁷³ The Mt. Sterling independent operator offered to let Bell build a line into his exchange and pay a small toll for the use of the line by his subscribers. Letter reproduced in Noel to French, Dec. 10, 1894. Box 1066, AT&T-BLA.

⁷⁴ See, for example, C.A. Nicholson, General Manager, Central New York Telephone Co., to C. Jay French, ABT Co., Apr. 6, 1898: "Application is made to us by the opposition at Baldwinsville and Oneida for exchange connection, telephones to be placed in the Central Offices of the opposition companies at these points Under [the Bell] Exchange Contract can we discriminate against their customers forwarding messages to points on our trunk lines?" Box 1166, AT&T-BLA.

⁷⁵ *Ibid.*

⁷⁶ C. Jay French to O.E. Noel, "Business in connection with opposition enterprises," undated draft, Box 1066, AT&T-BLA.

overall effect would have been to completely unravel Vail's plan of organization. In effect, interconnection would have made independent companies part of the Bell system without their having to sign a license contract. Thus, Bell would have been helping to build up telephone companies over which it had no financial, managerial or technical control. Independent connecting companies could not be required to buy Western Electric equipment; nothing could guarantee that they would route their toll traffic over Bell lines; nothing could prevent them from later building their own, competing toll lines or competing exchanges. Later on, the task of technically integrating and organizing long-distance connections would have been greatly complicated. American Bell saw the license contract as the only way to maintain an integrated system under its control—and integration was also the bulwark of its strategy to control the telephone business itself. Now that the patents had expired, interconnection was the only way to induce operating companies to become Bell licensees. Bell management really had no choice but to resist these early, casual attempts to integrate its operations with independent companies. To do otherwise would have corroded the foundations on which its whole organization was based.

The Kentucky case, moreover, demonstrates clearly the economic consequences of the two approaches to interconnection. Had the independent been allowed to interconnect, it would have had no need to build an additional, competing toll line to Lexington. The two companies would have settled into a pattern of complementarity rather than competition. With interconnection denied, the opposition companies had to build their own facilities in order to match the scope of telephone access available through Bell. Refusal to interconnect was "anti-competitive" only in the sense that it prevented new companies from benefitting from the access facilities of the incumbent. In a far more meaningful sense, however, it was the *refusal* to connect that encouraged robust competition, because it impelled Bell's rivals to set up lines and exchanges that duplicated or, when possible, surpassed Bell's, and thereby allowed for more complete competition for subscribers and traffic.

Interconnection and common carrier law

When it became clear that overtures for voluntary interconnection would be spurned, some independents turned to the courts and the legislatures. Legal maneuvering over interconnection rights peaked in March of 1896, when three separate lawsuits pertaining to interconnection consumed the attention of the national Bell management.

The telephone was already regarded as a common carrier cast in the same general mold as the telegraph and railroad companies. The law regarding the relations between competing telephone companies was still unclear, however. The technical characteristics of the business differed enough to make the application of statutes and case law based on railroad and telegraph precedents less than obvious. It was true, for example, that state laws required telegraph companies to accept and deliver messages brought to them by other telegraph companies.⁷⁷ Early telephone interconnection bills in Michigan (1893), Ohio (1895), Indiana (1895), Illinois (1897), and Wisconsin (1897) seemed to have been drafted with those precedents

⁷⁷ A typical nondiscrimination statute, Section 103 of the New York state Transportation Corporations Law read: "Every such [telephone] corporation shall receive dispatches from and for other...telephone lines or corporations...and on payment of the usual charges by individuals for transmitting dispatches as established by the rules and regulations of such corporation transmit the same." The use of the terms "dispatches" or "messages" in these laws shows the extent to which the telephone business was viewed as an extension of the telegraph business. In reality, telephone companies were in the business of providing *circuits* for real-time voice communication rather than discrete "messages."

in mind.⁷⁸ But the transfer of telegraph messages did not necessitate physically linking and jointly operating the competing companies' wires. All it required was a willingness to accept a hard copy message from one company for transmission at the second company's convenience. Telephonic communication, on the other hand, involved a real-time link between two parties and thus would have necessitated integrating the facilities and operations of rival companies.

Some proponents of interconnection sought to base their claims on the common carrier status of railroad, telegraph, and telephone companies. Common carriers were required to serve all members of the public without discrimination. If the concept of nondiscrimination could be stretched to include service to competing companies, it could form the legal rationale for interconnection. Rivalry between separate systems had existed for some time in both the telegraph and railroad industries, however, and the courts had drawn a fairly sharp distinction between nondiscriminatory service to the *general public*, an obligation which was clearly imposed by the law, and contracts with *connecting companies*, where special arrangements favoring one company over another were considered normal prerogatives of business management.

The most salient precedent was provided by the railroad Express cases, a decision made by the U.S. Supreme Court in 1886. The case involved “express” services, companies which contracted with railroads to provide intermediary shipping services. The express companies assembled components of the various rail networks to provide through service to shippers. In an attempt to obtain what might today be called “equal access” to competing railroad facilities, various express companies sued the railroads, and the cases were tried together. The express companies were unsuccessful. In denying their attempt to compel the railroads to give them throughline facilities on a nondiscriminatory basis, Chief Justice Waite distinguished between common carriers and a “common carrier of common carriers.”⁷⁹ The railroads were required to be the former but not the latter; that is, they had an obligation to provide nondiscriminatory service to the public, but not necessarily to other common carriers. In a case based on the Express precedent, Judge Waite's opinion held:

Now while the rule is well settled that a common carrier must serve its public impartially, still it must be borne in mind that its duty is to the public, and not to other and competing common carriers. One common carrier cannot demand as a right that it be permitted to use a rival common carrier's property for the benefit of its own business.⁸⁰

The Supreme Court applied a similar distinction to the telegraph industry in 1887. Compulsory connections that allowed one company's facilities to be occupied or used for the commercial benefit of a rival company were rejected as a “taking” of private property, prohibited by the Fifth Amendment. Nondiscrimination, the court ruled,

⁷⁸ None of the physical connection bills listed in the text passed.

⁷⁹ “The constitution and the laws of the states in which the [rail]roads are situated place the companies that own and operate them on the footing of common carriers, but there is nothing which in positive terms requires a railroad company to carry all express companies in the way that under some circumstances they may be able, without inconvenience, to carry one company.” The Express Cases, 117 U.S. 601 (1886).

⁸⁰ Postal Telegraph Cable Co. v. Hudson River Telephone Co., 467 Supreme Court (1887).

Does not authorize [the plaintiff] to transmit its own messages over defendant's wires, on payment of the merely nominal sum required of its ordinary subscribers. Such a rule would result unjustly to the defendant, as it would enable the [plaintiff] to enter into competition with the defendant in the transmission of messages over its own wires.”⁸¹

Despite these favorable legal precedents, the Bell Company had no guarantees as to how the law would be interpreted in the case of telephone interconnection.

The first legal challenge came from a financially shaky independent, the National Telephone Construction Co. of Waukesha, Wisconsin. The National Co. exchange had attracted about 75 subscribers.⁸² In the fall of 1895, the Wisconsin Telephone Company discovered that the independent, which subscribed to Bell's long distance service, had linked the Bell line to its switchboard so as to allow its exchange subscribers to be patched into the Bell toll network.⁸³ When Wisconsin Telephone threatened to remove its phone and discontinue service, the National Company filed suit and succeeded in obtaining an injunction. "This will evidently be a test case," a Wisconsin Telephone official wrote to American Bell, "and will have great weight in similar proceedings which must arise elsewhere.”⁸⁴

While the Waukesha case was pending, the Norwalk Telephone Company, an independent exchange competing with the Bell Company in Norwalk, an Ohio town of 7,000, submitted a notice to the Central Union Company (the Bell licensee in the Midwest) requesting permission to build a trunk line connecting its exchange with the Central Union's. The letter was "carefully and formally drafted, with legal skill for its purpose," Central Union's lawyer observed. "It is of value in showing on what lines the attack on us in Ohio may be expected to come.”⁸⁵ News that this gauntlet had been thrown down soon reached President Hudson in Boston, who went about securing the best legal assistance available.⁸⁶

Simultaneous to the Norwalk case, an independent exchange in Madison, Wisconsin, sued the Western Union telegraph company in an attempt to compel it to place one of its telephones in the Madison telegraph office.⁸⁷ Wisconsin Telephone (the Bell licensee) already had a telephone in the Western Union office, allowing it to call in messages to be sent over telegraph lines. The cooperative arrangement between Bell and Western Union was a product of the 1879 patent settlement. Because telegraphy was still a far more prominent mode of communication than the telephone at that time, the Madison independent's inability to place calls to the Western Union

⁸¹ *Ibid.*

⁸² The telephones of the Waukesha independent were reputed to be of poor quality and its service unreliable. W.A. Jackson, Wisconsin Telephone Co., to John Hudson, President, ABT Co., Nov. 13, 1895. Box 1298, AT&T-BLA.

⁸³ Miller, Noyes, Miller & Wahl to ABT Co., Nov. 12, 1895, Box 1298, AT&T-BLA.

⁸⁴ W.A. Jackson to C.J. French, Oct. 7, 1895, Box 1298, AT&T-BLA.

⁸⁵ A.A. Thomas, Solicitor, to H.B. Stone, President, Central Union Telephone Co., Jan. 2, 1896. Box 1298, AT&T-BLA.

⁸⁶ Melville Egleston, AT&T Legal Department, to John E. Hudson, President, ABT Co., Mar. 16, 1896. Egleston took charge of the litigation and on his recommendation Bell retained the Cleveland law firm of Squire, Sanders & Dempsey. Box 1298, AT&T-BLA.

⁸⁷ Dane County Telephone Co. v. Western Union Telegraph Co., State of Wisconsin, Circuit Court of Dane County. Petition of the plaintiff, Box 1298, AT&T-BLA.

office limited its value to potential subscribers. Twice the independent company asked Western Union to allow it to put one of its phones in the office at no charge to Western Union. Both times it was ignored. Charging discrimination and injury, it filed suit in the State Circuit court February 20, 1896.

It was already well established in law that telephone companies were required to supply service to all telegraph companies who requested it. The Madison case, however, was an attempt to invert that doctrine, demanding in effect that telegraph companies be required to *accept* telephone service without discrimination. The AT&T counsel working on the Norwalk, Ohio, case recognized that the principle at stake was closely related to the right to compel physical connection of telephone companies:

The telegraph company is threatened with the establishment of a rule of law which might enable not only telephone companies, but also district messenger companies, and other similar companies, to compel the furnishing of facilities for delivering messages to a telegraph company on the premises of the latter, different from those allowed to the general public; and, going further, might enable other telegraph companies to compel a rival telegraph company to at least allow [their] wires... to be carried into the office of the defendant company, so that messages could be there repeated and forwarded; and the next step, of course, is to compel actual physical connection of the lines of the two companies.⁸⁸

American Bell was not optimistic about the outcome of the Wisconsin cases. In 1882 the Wisconsin legislature had passed a law requiring telephone companies to "receive and transmit without discrimination messages from and for any other company...upon tender or payment of the usual or customary charges therefor."⁸⁹ That was a straightforward application of telegraph precedents to the telephone system. An unfavorable decision might lead other states to pass similar laws. Bell looked for a way to avoid taking the case to its conclusion. It uncovered rumors that the Waukesha independent was eager to sell out, and began to make overtures to its management.⁹⁰ When the interconnection issue threatened to erupt into litigation in Wausau, another Wisconsin town, Bell offered to put its own long-distance instruments into the offices of independent long distance users for free in order to preempt the demand for linking the two systems.⁹¹

Attempts to avoid the issue notwithstanding, Bell's lawyers prepared a strong legal defense against compulsory interconnection. They asserted, first, that its status as a common carrier required it to serve the *general public* without discrimination, but not other telephone companies.⁹² That reasoning had been upheld by the courts in *Postal Telegraph Cable Co. v.*

⁸⁸ Egleston to Hudson, Mar. 9, 1896. Box 1298, AT&T-BLA.

⁸⁹ 1882 LAW OF WISCONSIN, Chapter 196. Cited in Gabel, 1987, p. 341.

⁹⁰ Fuller to Hudson, Nov. 16, 1895. AT&T-BLA, Box 1298.

⁹¹ Fuller to Hudson, Nov. 30, 1895. AT&T-BLA, Box 1298.

⁹² "[The Bell Company] only undertakes to do business on its own lines and through its own instruments. It does not offer to connect generally with other companies. It does not undertake business of that character, and a common carrier is only bound to do the kind of business it holds itself out to the public as doing." Legal memorandum, Miller, Noyes, Miller & Wahl, Nov. 12, 1895, p.5. AT&T-BLA, Box 1298.

Hudson River Telephone Co., as noted before. That defense, however, relied on the interpretation of statute law and thus could be superseded by new legislation. A more fundamental argument was that the requirement to connect with a rival company was an unconstitutional “taking” of private property. That argument had two separate nuances. Connection involved physically entering the premises of the company, attaching wires to its switchboard, and engaging its workforce in the operations required to connect subscribers. Such intrusions seemed an invasion of one company's property rights by another. But there was another element to the argument more directly related to the unique circumstances of the telephone business. The telephone company, its lawyers asserted, had expended large sums of money and energy on the construction of a telephone system linking subscribers all over the state. Its competitors had built only small, local exchanges. If the two exchanges were interconnected, the small exchange would be able to profit from the sale of widespread access without running the risks or assuming the burdens of building a large-scope system. To allow a competitor to benefit from the involuntary use of those facilities was nothing more than the expropriation of its property. In that argument, the “property” at issue was not so much the physical facilities of the telephone company, but the *access to subscribers* it had created by constructing those facilities.

In the middle of 1896, that view of the interconnection issue scored some important victories. In Waukesha, Bell mooted the issue by buying out its competitor. In the Madison lawsuit, the case for compelling the telegraph company to accept service from an independent telephone company was rejected. Relying on the precedent of the Express cases, the Judge ruled that a common carrier who makes special cooperative business arrangements with another company need not extend the same arrangement indiscriminately to all other companies. The principle of nondiscrimination applied to consumers only, not to business rivals.⁹³ The same reasoning was used two years later in a case involving telephone interconnection in New York state.⁹⁴

Independent opposition to interconnection

In Norwalk, Ohio, the independents themselves suspended the litigation – not because they feared losing, but because they feared they might win. According to an intelligence report gathered by F.R. Colvin, a Bell agent working undercover in the independent ranks, most independent exchange operators in Ohio opposed compulsory interconnection.⁹⁵ The Norwalk case was the first item of business when the Ohio Independent Association met in March of 1896. The Ohio meeting was also attended by a delegation from Indiana. According to Colvin's sources, “every delegate at the meeting rose one after the other and roasted Mr. Graham [the Norwalk Co. representative] alive for commencing the litigation.”⁹⁶ Already, the Ohio independents had exchanges in seventy five small towns. Bell, in contrast, had only 31

⁹³ Opinion of Judge Siebecker, *Dane County Telephone Co. v. Western Union Telegraph Co.* (document undated—decision made Mar. 18, 1896), AT&T-BLA, Box 1298.

⁹⁴ The Judge held that a reasonable construction of the common carrier statute in New York did not require one telephone system to supply connections with its system to another company enabling the latter to utilize the connected system as part of its own on payment of the nominal sum required of ordinary subscribers. *Syracuse Standard*, July 2, 1898. Box 1166, AT&T-BLA.

⁹⁵ F.R. Colvin to President Hudson, Apr. 8, 1896. Box 1298, AT&T-BLA.

⁹⁶ *Ibid.*

exchanges in Ohio towns with populations under 10,000. Most of the towns with non-Bell exchanges were connected, or were in the process of being connected, with independent toll lines. If the Norwalk Company won its case, they feared, the Bell Company would be able to demand and get access to those lines. That would increase the scope of Bell's access in the state and undermine the incentive for telephone users to subscribe to an independent exchange. According to Colvin, "the whole convention to a man then entreated Graham to have Judge Wickham withdraw the suit."⁹⁷ After some soul-searching, Graham returned to Norwalk and became a dues-paying member of the state independent association. The Ohio independents pursued a strategy of building exchanges and toll lines in areas not served by the Central Union Company.⁹⁸ Nothing more was heard of the Norwalk Company's lawsuit.

The Ohio meeting was not an isolated incident but came to typify the attitudes of the organized independent movement. In the years to follow, numerous state independent associations passed resolutions against interconnection with the Bell system.⁹⁹ In later attempts to compel interconnection by legislation, Bell and independent forces were usually united in their opposition.¹⁰⁰

Proposals to interconnect Bell and independent telephone exchanges continued to surface sporadically in various states throughout the 1890s and early 1900s. They failed because the weight of legal precedent was against them and because of the political opposition of the Bell and independent interests. From the skirmishes of 1894 to 1996 emerged a common doctrine regarding the effects of connecting competing telephone companies. Its essential tenets were accepted by both the Bell companies and by most of the organized independent movement and were bolstered by the U.S. Supreme Court's interpretation of the Fifth Amendment.

Access competition as property rights doctrine

The basis of that doctrine was a distinct way of applying the concept of property rights to the telephone business. The telephone companies were asserting ownership over the relations of access created by their toll lines and exchanges. For both Bell and independent, "competition" meant separate systems supplying different subscriber universes, each vying with the other to attract customers. The subscriber universe itself was their most important product—the valuable resource they offered to sell to the public. Competition was a matter of making that resource better than one's rival's, which in that case meant more universal. Interconnection destroyed that form of rivalry by eliminating the differences in their access universes. It thoroughly undermined the competitive advantage to be gained by attracting new subscribers, building competing exchanges, and constructing toll lines. J.W. Gleed of Bell's Missouri and Kansas Co., speaking against a physical connection law proposed to the Missouri legislature in 1907, put it that way:

⁹⁷ *Ibid.*

⁹⁸ The Secretary of the Ohio Association wrote a letter to every independent exchange "particularly touching the necessity of hurrying the construction of toll lines connecting towns so small as not to be reached by the Central Union Co." Colvin, *Ibid.*, at 8.

⁹⁹ C.A. Pleasance, *The Spirit of Independent Telephony* 81 (Independent Telephone Books 1989).

¹⁰⁰ *Telephony Magazine*, the voice of the independent interests, actually reprinted in full the testimony of a Texas Bell manager against compulsory interconnection.

My opponent has built up a telephone system of 1,001 subscribers. I have an exchange in which each subscriber has access to 6,000 other persons. Now assume this [physical connection] law to have taken effect. Where before my competitor owned an exchange which gave each of his subscribers access to 1,000 persons only, now my competitor owns an exchange in which each subscriber has access to 7,000 persons. What I may call the 'access value' of my competitor's exchange has simply been multiplied by seven...without a penny of expense or a particle of increase in his rate.¹⁰¹

The Ohio independents' reaction to the Norwalk case makes it clear that they too conceived of telephone competition in those terms. Their plan was to control telephone connections to towns neglected by Bell and eventually to attract subscribers away from Bell in other areas through its control of these connections. Even the independents who supported compulsory interconnection comprehended the issue in the same terms. Bell, they reasoned, was politically unpopular. It won subscribers because its lines reached places and subscribers that the independents' did not. If telephone subscribers did not have to choose between two mutually exclusive subscriber universes, one controlled by Bell and the other controlled by the independents, but could instead obtain access to Bell toll lines and subscribers while subscribing to an independent exchange, Bell would lose most of its customers. One independent spokesman predicted that with interconnection, "we can obtain at once every one of their exchange subscribers."¹⁰²

American Bell felt the same way about its toll network linking exchanges in the larger cities. Giving independents access to its more extensive toll network would eliminate its leverage over the subscription decisions of telephone users in the local exchange. As a commodity around which property boundaries could be drawn, however, access had an unusual feature. When independent companies subscribed to a Bell exchange and then connected the Bell line into their own switchboard, they acquired the ability to sell access to Bell subscribers. Technically, there was no distinction between Bell's sale of access to a normal customer of the exchange and the sale of exchange access to a competing telephone company, which could then profit from the resale of the subscriber set Bell had created. In order to maintain system boundaries, a legally enforceable distinction between those two classes of users had to be drawn. From a property rights standpoint, the situation was analogous to copyright and patent protection. Patent and copyright laws allow the creators of new information to sell access to it without losing their proprietary control of it. In prohibiting unauthorized reproduction of copyrighted material or unlicensed use of patented inventions, intellectual property law distinguishes between buyers who benefit from the use of the information itself and those who use the access to information created by the initial sale to profit from its resale. Both sides' unwillingness to interconnect stemmed in part from their recognition of that unique economic characteristic of telephone access. Merging the subscriber universes of competing telephone companies via interconnection, in their view,

¹⁰¹ J.W. Gleed, Missouri and Kansas Telephone Company, "Argument Against the Proposed Law Compelling the Physical Connection of Telephone Systems," 22 pp., printed, submitted to the Missouri Legislature 1907. AT&T-BLA.

¹⁰² David Gabel, *The Evolution of a Market*, Ph.D. dissertation, University of Michigan 346 (1987).

undermined their control of the basic resource on which their business was founded: communications access.

To the Bell interests, interconnection would encourage “all sorts of small, parasitic companies [to] spring up to sap the revenues of large companies already established.”¹⁰³ The independent opponents of interconnection emphasized not parasitism by small companies, but interconnection's deleterious effects on their own attempts to construct an alternative system. If Bell subscribers could obtain access to independent exchanges through Bell toll lines, who would invest in and who would subscribe to an independent long distance system? If a large city occupied by a Bell exchange was enabled to gain access to the surrounding towns dominated by the independents, why would the city franchise a competing exchange? By the end of 1897, most of the organized independent operators were willing to take up the gauntlet thrown down by Bell's refusal to connect with them. They confidently looked upon the thousands of small communities lacking Bell exchanges and the hundreds of new independent exchanges springing up in them. In the two hundred cities with dual service, they saw independent exchanges undercharging Bell companies and attracting as many subscribers in six months as the Bell exchange had gathered in the previous seventeen years. They knew they were up against a powerful foe; their public pronouncements and trade publications exhibit that blend of strident defiance and paranoia typical of an underdog unsure of its success. By embracing access competition as their modus operandi, however, the independents signaled their willingness to make it an all-or-nothing battle. By 1897, the course of telephone rivalry was set for the next fifteen years.

¹⁰³ J.W. Gleed, *supra* note 30.