

Biography of Theodore Veil

THEODORE NEWTON VAIL, born 16 July 1845, in Carrolton County, Ohio, belongs to the Morris county family of Vails in New Jersey, descendants of John Vail, a Quaker preacher, who settled in New Jersey in 1710. The family has always been one of position and influence. Lewis Vail, civil engineer, grandfather of Theodore N. Vail, early went to Ohio and was a pioneer in the building of canals and highways. Stephen Vail, an uncle, founded The Speedwell Iron Works, near Morristown, NJ, at which was built most of the machinery for the first steamship which crossed the Atlantic Ocean, sailing from Savannah, GA. Here, also, Morse perfected and first successfully operated the magnetic telegraph, Stephen Vail and his sons, George and Alfred, supplying Morse with the money, and Alfred the mechanical ingenuity. Alfred Vail invented the dot and dash alphabet, which has always been used in telegraphing. William P. Vail of this family was a leading physician and church worker in Northern New Jersey at Blairstown, and George Vail represented his section in Congress and was one of the lay Judges of the New Jersey Court of Pardons.

Davis Vail, son of Lewis Vail, and father of the subject of this biography, born in Ohio, came East at an early age, was connected with The Speedwell Iron Works, and married Phoebe Quinby, daughter of Judge Isaac Quinby of Morris county. By this marriage, he became related to three notable brothers in law, General Quinby, a graduate of West Point, a leading mathematician, Professor of Mathematics at the Rochester University, and general in the Civil War; Dr. William Quinby; and Dr. Augustus Quinby, all sons of Judge Isaac Quinby. After marriage, Davis Vail went to Ohio, remaining there several years. His son, Theodore, was born during the stay of the family in that part of the country. When the lad was about four years old, Davis Vail returned to the East and was again connected with The Speedwell Iron Works. In 1866, he removed to Iowa, where he operated a large farm.

Theodore N. Vail was educated in the old academy in Morristown, and then studied medicine with his uncle, Dr. William Quinby, but, having learned telegraphy at the telegraph office in Headly's drug store in Morristown, he left medicine and went to New York, where he became manager of a local office, being afterward attached to the staff of J. C. Hinchman, then general superintendent of the metropolitan and eastern divisions of The United States Telegraph Co. He went West with his father in 1866, and engaged in farming, but in the fall of 1868, went yet farther west and was made operator and afterward agent at Pine Bluffs, Wyoming, on The Union Pacific Railroad. Pine Bluffs was at that time the principal supply point for wood for The Union Pacific, which had not then been completed.

In the Spring of 1869, Mr. Vail received an appointment as clerk in the railway mail service between Omaha and Ogden, and in August 1869, he married Miss Emma Richter, of Newark, NJ. He devoted himself with great diligence to the improvement of the railway mail service, then in its infancy, and his good work in the perfection of schemes for the distribution of the mails, and especially his services in forwarding the mails during the long snow blockade of 1870, called the attention of the Department to him, with the result that he was assigned to duty between Chicago and Iowa City in the railway post office. On this line, the entire distribution of overland mails was made prior to the establishment of railway post office cars on The Union Pacific Railroad. When the railway post office was established on The Union Pacific, Mr. Vail was assigned to duty as head clerk.

In March, 1873, the Department called Mr. Vail to Washington and assigned him to duty in the office of the General Superintendent of Railway Mail Service, where he was charged with special oversight of distribution of the mails and arrangement of "schemes" or charts of distribution. During this period, the questions of the compensation of railroads and carriage of merchandise in the mails were being agitated in Congress, and the Department placed upon Mr. Vail the responsibility of preparing the post office statements, statistics and answers to Congressional inquiries. His intimate knowledge of the service, energy and capacity were recognized in June 1874, by his appointment as Assistant Superintendent of Railway Mail Service. In 1875, he was assigned to duty as Assistant General Superintendent, and when, in February 1876, Mr. Bangs resigned to go into other business, Mr. Vail was appointed General Superintendent. He had thus reached the highest grade in this branch of the Federal employment. Mr. Vail was the youngest of the officers of the Railway Mail Service, both in years and terms of service, and when the final appointment was handed to him by Marshall Jewell, Postmaster General, the latter said that his only objection to Mr. Vail was his youth.

As General Superintendent, Mr. Vail established upon a firm basis the civil service policy, which had been initiated by Mr. Bangs. The superiority of the results attained under the rules adopted for the railway mail service were recognized by all the civil service commissions in Washington, to the extent that until very recently the employes of the railway post offices were not included in the general civil service laws and regulations. Mr. Vail established the system of six months' probationary appointments, which have since been so generally adopted. It was during the incumbency of Mr. Vail that a reduction took place in the pay of the railroads for mail transportation. In the

controversy which followed, some of the railroads threw the postal cars out of their trains. Within six months, however, relations were re-established with all the leading lines and increased car and train service obtained. Thereafter, more cordial relations existed between the Post Office Department and the railroad managers. An incident of this time may be referred to. Senator Beck of Kentucky was much interested in having the southwestern mails go over Kentucky routes, and made many efforts to induce the Postmaster General to order them so sent. Being referred by the head of the Department to Mr. Vail, Mr. Beck accused Mr. Vail of being under the influence of certain railroads. In an interview with Mr. Beck, Mr. Vail explained the situation and gave the reasons which governed him. Mr. Beck left apparently not satisfied. Soon after, however, when a proposition to reduce Mr. Vail's pay was pending in the Senate, Senator Beck took occasion to compliment Mr. Vail very highly, and, in a five minutes speech, said that if there were an honest and efficient officer in the employment of the Government, Mr. Vail was the man.

After the invention of the telephone and its reduction to practice, The American Bell Telephone Co. was organized by Gardiner G. Hubbard, father in law of Prof. Alexander G. Bell. Mr. Hubbard had been engaged against the Post Office Department before Congress on the question of merchandise in the mails and was chairman of the commission appointed by Congress to investigate methods of payment to railroads for mail transportation. Believing Mr. Vail to be the right man for the place, he tendered him the position of general manager of The American Bell Telephone Co. Believing in the future of the "toy," as it was then termed, and against the protest of all his friends, he accepted the position in 1878 and devoted himself to the work with his accustomed zeal and ability. The task was at times discouraging. The public were slow to recognize the great value of the instrument, and strong opposition was manifested by The Western Union Telegraph Co., which denied that Professor Bell was the inventor and set up opposition exchanges at every point. Mr. Vail introduced the methods which have proved so successful and have resulted in The American Bell Telephone Co.'s phenomenal growth. A settlement was finally effected with The Western Union Telegraph Co. after years of fighting and negotiating, in which The Western Union conceded every point of importance.

Mr. Vail established the long distance telephone service, against the opposition of all his associates in the company. The first line which was built to New York was called the "Vail's side show." He also introduced the use of copper wire in telephone and telegraph lines, since so generally adopted, having in this matter the assistance of Mr. Mason of Bridgeport, whom he induced to experiment with drawing copper wire in such a way as to give it the tensile strength necessary to withstand the stretching from pole to pole.

In 1888, Mr. Vail retired from the telephone business after having occupied the managing position for ten years. He has since traveled most of the time abroad and has introduced the telephone in many countries. Farming in Vermont now occupies a part of his time and upon his estate of 1,500 acres, called the "Speedwell Farms," he raises French coach horses, including some of the finest in the United States, Jersey cattle, Shropshire and Dorsett horned sheep, and Welsh ponies. He is a member of the Union League club of New York and the Algonquin club of Boston. He has one son, Davis R. Vail, a student in Harvard Law School in Cambridge. He died, 16 April 1920, in New York, NY.

America's Successful Men of Affairs: An Encyclopedia of Contemporaneous Biography, Volume I, page 671-4

Skeptical Inquirer, July-August, 1998, by Elie A. Shneour
<http://www.csicop.org/si/9807/seed.html>

Theodore Newton Vail (1845-1920) was twice president of the pioneering U.S. Telephone company, as the Bell Telephone Company (1878-1887) and again as the American Telephone and Telegraph Company (1907-1919). The story of his life and accomplishments is an extraordinary one, and not relevant to this essay, with but one exception. During his early tenure as president of the telephone company, Vail assembled his management staff to analyze and answer one central question: *What is our business?*¹

It would seem pretty obvious that the business of a telephone company is communication by telephone. But not for Vail. In fact, answering that kind of a question is perhaps one of the most difficult issues an organization has to ponder, and the right answer to it is far from obvious. Vail's answer was crucial, and its implementation ensured the survival and prosperity of a major American firm for more than three quarters of a century.

Vail's answer to the question "What is our business?" was "Our business is service." Although that answer becomes self-evident as soon as it is uttered, it is in its implementation that its importance is truly acknowledged. When Vail articulated it, the U.S. telephone system was already an anomaly: All telephone companies worldwide were generally nationalized because they were monopolies. And AT&T, like them, was at considerable risk of being nationalized in its turn.

The second part of the answer is more subtle than the first. In order to stay in private hands, the telephone company had to be assured of political support. And ultimately that support had to come from individuals and their communities. In order to achieve that goal, Vail undertook to install telephone lines in all areas, including isolated rural communities, which at the time made no immediate economic sense. But it was an immense service that generated exceptional customer satisfaction. And all of Vail's employees were constantly admonished to emphasize service above all.

The third part of conceptual implementation was to recognize that telephone service was as yet relatively primitive, and had a long way to go, needing extensive and sustained improvements. This required emphasis on research and technology, whose flagship became the Bell Telephone Laboratories, the fountainhead of many major inventions that have transformed our lives, including the transistor. Several of these accomplishments, however, are little known to the general public but are of at least equal importance to the invention of the transistor.

In 1931, for example, Bell Telephone Laboratories hired a young M.I.T. graduate, Karl Jansky, and assigned him to find the sources of all the causes of noise in telephone lines. Jansky spent several years on this work, and meticulously identified all sources of noise but one. He eventually demonstrated that this last source of noise originated beyond the earth, and thus was born the science of radioastronomy.

And all of these favorable consequences, including the political decision of Franklin D. Roosevelt's administration to leave AT&T in private hands, arose directly and indirectly from Vail's inspired understanding that the business of his company was service, and doing something equally inspired about it.

This brings us at last to the question, What is the business, or more properly the mission, of the Committee for Scientific Investigation of Claims of the Paranormal (CSICOP)? Surely, it is far more all-encompassing than debunking UFOs, the Bermuda Triangle, the Loch Ness Monster, health nostrums, astrology, creationism, and the whole ever-expanding gamut of misleading, outlandish, and fraudulent claims made in the name of science. And the right and apt answer to "What is CSICOP's mission?" is likely to have a host of long-term favorable consequences in the same way that Vail's answer had for the fortunes of AT&T, many of them unknowable at the time his answer was suggested and implemented.

Those of us who have been speakers on the regional and national media circuits know in our collective guts that no matter how articulate, witty, disarming, and convincing we may be, in the last analysis we change very few minds. And that is being optimistic! The rest of the time, when we are not preaching to our collective choirs, we converse knowingly with each other, reading our articles and books, and meeting at our conferences, deploring the sad state of affairs beyond our ken. And no one has yet collected James Randi's legendary \$10,000 (now more than a collective million-dollar) challenge.

The result is that despite the impressive progress CSICOP and its satellites have made since its founding, collectively we remain a series of small islands of rational thought in the vast ocean of scientific illiteracy. Many reasons have been advanced over the years for this continuing state of affairs.

The polygraph is still being used and widely advertised as a proven method of detecting lies. Astrology columns without CSICOP's disclaimer still abound in periodicals across the country. National television networks still broadcast nonsense about creationism and perpetual motion machines. Roswell, New Mexico, is still a mecca of UFO buffs. If anything, the sheer volume of these and many other myths persist with a commercial vengeance. Billions of dollars in revenue sustain the purveyors of fraud and fairy tales.

By contrast we skeptics have to pinch pennies, put our pitiful fingers in the dikes, and try, without much success, to shout some sense over the cacophonous clamor. The sad truth is that we cannot possibly compete on an even playing field against this collectivity. We are not likely to do so until science is properly taught in our schools, and until those informed students graduate as writers, editors, publishers, and network executives, promoted through the ranks. This is not likely to happen in our lifetimes, but in the meantime we cannot afford to stand still. We have to fight the good battle regardless of the odds. And I believe that we can make a difference.

The first and foremost criterion of enhanced effectiveness is to devote more time to the uninformed collectivity, and decrease the time speaking to ourselves. We perhaps should focus on the decision makers at the local, regional, state, and federal levels. An excellent model for this is the valiant Eugenie C. Scott and her *National Center for Science Education*, which advances the cause of evolutionary science in response to the creationist threat. But this still leaves the fundamental issue, the reason for this essay, unanswered.

The premise is that no matter what we do and how we do it, we are unlikely to convince enough well-meaning and intelligent people that rational thought is the very foundation of our society and that scientific knowledge has given us the tools to enhance the quality of our lives. But we should perhaps purposefully forego the goal of convincing the unconvinced that we hold the torch of truth illuminating the darkness. We may not think that this is what we are, in fact, attempting to do. But across the chasm that separates the skeptic from the convinced, we too often come across as the self-righteous proselytizer. And in the welter of messages that constantly assail us from every quadrant, a society where fifteen-second sound bites rule, ours is often diminished, laughed away, adulterated, defamed, or ignored, if not lost altogether.

Ultimately it is our benevolent credibility rather than whatever political clout we may possess that will make the difference. And the first step toward that enhanced credibility is to lower our expectations. Most people stand in firm defense of their convictions, because in today's world, where it is difficult to believe anything, there is comfort and safety in holding onto a core of beliefs, whatever their rational merit. "Give me the benefit of your convictions, if you have any, but keep your doubts to yourself for I have enough of my own," wrote Goethe. Of course, education is intended to equip every sentient human being with two fundamental tools for coping with the other social animals of his tribe: The first is the communication tool of reading, writing, counting, and knowing the tribe's history and traditions. The second is the rational thinking tool, without which the first tool cannot effectively be applied.

It is the thinking tool that CSICOP is primarily concerned with. It is inevitable that some of the facts and concepts we absorb as children are either perishable or damaged goods, yet persist into adulthood. Adults are better equipped to filter that intellectual bounty, but the price paid is that established convictions are rapidly carved in stone.

And CSICOP has chosen to challenge some of these unshakable convictions for what it views as the betterment of society. The rational fulcrum of this process is the scientific method, whose power in the affairs of men is difficult to denigrate. If the reader has any doubt on this score, he is invited to try to identify a twentieth century philosopher who has had more drastic impact on our daily lives than a twentieth century scientist such as Albert Einstein.

In the face of this intellectual brick wall of given convictions and scientific illiteracy, what can CSICOP accomplish in a reasonable time with the limited resources at its command? Or, even if CSICOP had these resources multiplied by ten, a hundred, or even a thousand times? The answer is, very little, if the goal is to refashion the given convictions into rational ones. But there is another way to approach the problem, stated witheringly by Oliver Cromwell in a letter he wrote to the General Assembly of the Church of Scotland on August 5, 1650: "I beseech you, in the bowels of Christ, think it possible you may be mistaken. . . ."

" . . . Think it possible you may be mistaken . . ." is exactly what CSICOP ought to aim for as its ultimate goal. To plant a seed of doubt into an unwavering conviction is a vast accomplishment in education as well as in thinking on one's own. To be able to doubt is humbling and constructive because it requires the application of rational thought in weighing alternatives. Once that seed has been planted, it can germinate into a full reexamination of the options, which opens unlimited vistas, or it can remain a dormant seed. In either case, the process cannot help but enrich each human being and make him or her a more effective and a more balanced member of a better society.

To have accomplished this remarkable feat would be the ultimate accolade for any organization. It is within the scope of what CSICOP can achieve, and in all humility, it ought to aim for that attainable goal.

The Kingsbury commitment (when Vail first started suggesting the concept of "natural monopoly") Mueller (page 92), resulted in swapping of properties and a "dual system". That period seems key to setting the stage for an ultimate take over.

The Graham Willis act repealed the Kingsbury provisions, which lead to Bell acquiring massive portions of the market more easily. (By the time the Communications act of 1934 was enacted Bell had 85% of market share)

At first glance it looks as though the period in between Graham Willis 1921 and the Comm act of 1934 were the crucial years in which Bell solidified its status as a regulated monopoly.

However, I postulate that because the movements for serious investigation and re-regulation of the telephone industry leading up to the Comm Act of 1934 were all shot down, it was the Comm act of 1934 that was paramount as a "defining moment" for the Bell monopoly. The act said in effect, the government accepts the concept of Bell as a natural monopoly and will regulate it as such despite allegations of "prolific abuses" (Splawn report)

See (provision Sec 221 *Special Provisions Relating to Telephone Companies*) (Paglin 749) which is taken from ICC guidelines modified in Graham-Willis.

In other words, it seems the act was a rubber stamp of approval for Bell's "special regulatory privilege" (Paglin page 837) when the rest of the telecom industry was subject to guidelines of section 314 "The Preservation of Competition in Commerce" (Paglin, page 25)

It is written that "AT&T lobbyists worked extensively behind the scenes to kill rate fixing and competitive provisions (of the act) and garnered a majority of the committee against it" (Paglin 46)

In response an enraged Dill introduced legislation authorizing investigation into Bell's;

1. Financial structure
 2. Methods of competition
 3. Discriminatory practice
 4. Suppression of patents
 5. Refusal to sell equipment to competitors
 6. the extent to which local subscribers has borne the cost of R&D for motion picture and radio
 7. Failure to reduce charges during a period when the market price was falling
 8. Exorbitant salaries for management
 9. The methods of propaganda for, financing of and involvement in political realms suiting Bell's cause
 10. The DOD-Bell-Western Electric relationship including many patent sharing issues that served an unfair advantage to Bell.
- (Where the Water Falls 190-93)

After much pressure from lobbyists and others in the Congress Dill backed off the resolution despite it being passed :

"Senator Dill explained on Senate floor that Mr. Gifford (ATT President) had been "insistent that it would wreck the telephone companies business and make it impossible to do business and painted a very black picture" 78 Cong. REC 8824 May 1934)

What is particularly interesting is that Walker used that resolution to commence an investigation that became known as the Walker report (1939), which was used as late as the 1960-'s when MCI was entering the market and anti-trust was being invoked.

Mr. Hanback having presented the following resolution: Resolved, That the Committee on Expenditures in the Department of Justice be, and is hereby, empowered to make full inquiry into any expenditure upon the part of the Government relative to the rights of the Bell and Pan-Electric Telephone companies; and for the purpose of this investigation, and to the end that the people may be fully advised, the committee is granted the right to send for persons and papers, all expenses to be audited and accounted for upon approved vouchers, and when so approved to be paid out of any moneys in the Treasury not otherwise appropriated--

At the end of line 12 on page 12 insert: ``Provided further, That no part of this appropriation shall be expended for telephone service in any post-office where the postmaster is required, by order of the Postmaster-General or otherwise, to use no other telephone service than that of the Bell Telephone Company or any of the telephone companies connected with or controlled, in whole or in part, by said Bell Telephone Company."

The paragraph under consideration contains an appropriation of \$225,000 ``for necessary miscellaneous and incidental items directly connected with first and second class post-offices." The Chair understands that under the statutes a part of this money may be expended for telephone service. The amendment offered by the gentleman from Minnesota provides that no part of the appropriation shall be expended for telephone service in any post-office where the postmaster is required, by order of the Postmaster-General or otherwise, to use only one kind of telephone. Now, the Chair would call the attention of the gentleman from Indiana, chairman of the Post-Office and Post-Roads Committee, to the fact that this amendment is not put in as a limitation upon the use of the entire sum appropriated in this paragraph of \$225,000. This limitation is merely a limitation upon the amount which the Postmaster-General may use for telephone services authorized by law, and this amendment simply says in effect, in order that this amount may be available, the Postmaster-General must refrain from saying to the postmaster that he must use one single telephone. The Chair therefore is of opinion that this amendment comes within the rule, and it is simply a limitation upon the expenditure of a part authorized by this paragraph for telephone services, and therefore the Chair overrules the point of order.

Sec. 5905 5905. To a bill relating to laying of conduits for telephone wires, an amendment relating to the prices to be charged for services was held not to be germane.--On May 26, 1902,\1\ the House was considering the bill (H. R. 12865) to provide for the removal of overhead telegraph and telephone wires in the city of Washington, for the construction of conduits in the District of Columbia, and for other purposes, when Mr. Thetus W. Sims, of Tennessee, proposed the following amendment: Add to the bill a new section, to be section 8, to read as follows: ``Any telephone company operating under the provisions of this bill shall charge not to exceed \$50 per year for telephones."

5413. On March 19, 1900,\4\ the House was considering the bill (H. R. 9047) to incorporate the Washington Telephone Company, etc., and had ordered it to be engrossed and read a third time, under the operation of the previous question. The bill having been read a third time, Mr. William H. Moody, of Massachusetts, moved to recommit the bill with instructions. Mr. Joseph W. Babcock, of Wisconsin, moved that this motion be laid on the table.

Birth of the Bell Monopoly

It was a vigorous, but messy, competition. In those days, competing systems did not interconnect. The subscribers of competitors were unable to talk to Bell subscribers. In 1907 Theodore Vail was named president of the American Telephone and Telegraph Company ("AT&T"), by then the parent company for the Bell system. Vail reorganized the company and launched a campaign to establish a unified national telephone system under AT&T's control. Corporate self-interest was involved. Prices and profits had fallen dramatically in the early years of the 20th Century. Working with the federal government, Vail and AT&T established the Bell system monopoly. The result, realized over the next half century, would be the most technologically advanced and far-reaching telephone system in the world.

Vail argued that the public interest would be best served if there were a single national network, coordinated and controlled by a single entity, AT&T, with wasteful duplication eliminated. (This concept was promoted by AT&T under the slogan, "One Policy, One System, Universal Service.") There would be no need for a tangle of wires coming to a business or a home that needed to communicate with users of different phone systems. In return, the company would accept government regulation of its rates and service.

In the meantime, the company was acting to assert and expand its market dominance. When AT&T moved to acquire a number of its independent competitors as well as telegraph giant Western Union, the federal government became concerned. It eventually charged AT&T with violating the Sherman Antitrust Act.

A landmark settlement (the "Kingsbury Commitment") was reached in 1913. The deal framed the conditions for the telephone industry for decades to come. The company embraced federal regulation (as it would state regulation over the next several years) and committed itself to:

- Dispose of its Western Union holdings;
- Discontinue acquiring other telephone companies operating in competition with the Bell System, with certain exceptions;
- Allow competitors to interconnect with the Bell system for long-distance toll calls.

AT&T's acceptance of regulation marked the beginning of the end of competition. Federal officials adopted AT&T's view of competition as "duplicative," "destructive," and "wasteful" and of telephone service as a "natural monopoly." Soon, they and industry leaders began promoting the idea of a unified telecommunications system. In 1921 Congress passed the Willis-Graham Act to permit the consolidation of overlapping phone systems. By the mid-1920s, the era of competition had ended. Each community had a monopoly provider of local service, most often a subsidiary of AT&T, but in some cases an independent company. Long-distance service was provided by the Long Lines Department of AT&T.

The Communications Act of 1934 established the Federal Communication Commission ("FCC"), consolidating federal regulatory authorities previously exercised by the Interstate Commerce Commission and the Federal Radio Commission. This New Deal legislation did not fundamentally change federal policy toward telephones. The FCC was given authority over interstate telephone service; state commissions retained responsibility for intrastate activity. This basic framework remained intact until the Telecommunications Act of 1996.

Over the next several decades, industry changes and evolving regulatory policy created the conditions leading to the 1996 Act. Challenges dating from the earliest days of the industry — for example, interconnection — continued to plague regulators and providers. In addition, technological advances began to erode the basic logic, always questionable, that justified treating the industry as a natural monopoly.

A series of decisions and events, outlined below, documents the inexorable march toward market competition and deregulation.

Kingsbury Commitment

From Wikipedia, the free encyclopedia.

The **Kingsbury Commitment** of [1913](#) marked the beginning of [AT&T's monopoly](#). The [Bell System](#) and independent [telephone](#) operators reduced competition out of concern for government intervention. The government had been increasingly worried that AT&T and the other Bell Companies were monopolizing the industry.

Under [Theodore N. Vail](#) from 1907 AT&T had bought Bell-associated companies and organized them into new hierarchies. AT&T had also acquired many of the independents, and bought control of [Western Union](#), giving it a monopolistic position in both telephone and telegraph communication. It is also credited with using almost illegal methods to eliminate competition. Vail stated that there should be "one policy, one system (AT&T's) and universal service, no collection of separate companies could give the public the service that [the] Bell... system could give." Faced with a government investigation for antitrust violations AT&T had to act.

In the Kingsbury Commitment, actually a letter from AT&T VP Nathan Kingsbury of [December 9](#), AT&T agreed with the Attorney General to divest itself of Western Union, to provide long-distance services to independent exchanges under certain conditions and to refrain from acquisitions if the [Interstate Commerce Commission](#) objected.

The Commitment did not settle all the differences between independents and Bell companies and averted the federal takeover many had expected. However the Commitment played into AT&T's hands - the company was allowed to buy market-share, as long as it sold an equal number of phones. So AT&T was able to consolidate its hold on the most profitable urban markets, and interconnection only strengthened its hand in long-distance traffic. Between 1921 and 1934 the ICC approved 271 of the 274 purchase requests of AT&T.

The entire network was nationalised during [WW I](#) from June 1918 to July 1919, following re-privatization AT&T resumed its almost monopoly position. In 1934 the government acted to set AT&T up as a regulated monopoly under the jurisdiction of the [Federal Communications Commission](#).

Universal service: A century of commitment

Soon after the start of the twentieth century, Theodore Vail, president of AT&T, articulated his vision of the future of the nascent telephone industry:

The Bell system was founded on broad lines of "One System," "One Policy," "Universal Service," on the idea that no aggregation of isolated independent systems not under common control, however well built or equipped, could give the country the service. One system with a common policy, common purpose, and common action; comprehensive, universal, interdependent, intercommunicating like the highway system of the country, extending from every door to every other door, affording electrical communication of every kind from every one and every place to every one at every other place.^{[1](#)}

Vail's vision may have been intended as much to further the corporate strategy of the powerful Bell company as to promote a social policy, but the concept of universal service,,connecting each to all,,has been at the center of telecommunications policy ever since.^{[2](#)}

Vail's vision was certainly futuristic at the time, because only about 10 percent of the households in the country had telephone service.³ But this goal was effective and produced a rapid extension of service and concentration in the industry.⁴ A quarter of a century later, when Congress passed its first piece of comprehensive legislation dealing with the telecommunications industry (the Communications Act of 1934), the penetration of telephone service had risen to almost 40 percent. And AT&T's market share had risen from about 50 percent to more than 80 percent.⁵

In the Communications Act of 1934 Congress established a national policy of universal service that went beyond merely laying the wires and infrastructure to connect each to all. It included a commitment to making service economically accessible to all Americans. To continue the highway analogy introduced by Vail, it was not enough that the roads be in place; public policy declared that pricing be such that all Americans could avail themselves of telephone service. The Federal Communications Commission (FCC) was created at this time,

[f]or the purpose of regulating interstate and foreign commerce in communication by wire and radio so as to make available, so far as possible to all the people of the United States, a rapid, efficient, Nation-wide, and world-wide wire and radio communications service with adequate facilities at reasonable charges.⁶

Patent monopoly

Bell patents telephone and gets his primary support by Boston bankers that George Bradley, W.G. Salastonn and G.Z. Salisby had organized. Western Union immediately replies by using their telegraph network only to be forced to give up its telephone infrastructure along with 87 patents in 1879. Bell acquires Western Electric and signs an exclusive contract that created uniformity and also proved very profitable for Western.

AT&T becomes Big Apple

Bell culminates a process of constant restructuring by moving the company to New York under ATT causing a shift from holding company to centralized management structure. This also allowed Bell to avoid menacing regulations from Massachusetts and put them in a great position to take advantage of the world's biggest financial institutions. During this time Bell Labs acquired numerous patents that put them in a good position going into the patent expiration period.

Competition –Turn of the century

Upon the expiration of the patent, independents sprouted up and immediately began the process of consolidation to counter the powerhouse of Bell. Price wars and problems of interconnection weakened non-Bell systems and many were absorbed into ATT. During this period trusts and bonds were the backbones of the industry and regulation was largely absent. Bell held 50% of the total market and grew at a rate of between 15-22% annually. *1899,1900, 1906 the annual rate of growth exceeded 22%

The most serious threat to Bell was the American Telephone, Telegraph and Cable Company (headed by rival banker, Rockefeller). When they attempted a major consolidation. JP Morgan used his influence in other markets to force investors away from the telephone industry. *The Financial History of American Telephone and Telegraph Company*; Stehman, page 57

VAIL

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Important Acts

1907 States try and force interconnection and tax

1910 Mann-Elkin widens state efforts of regulation but proves ineffective

1913 Kingsbury commitment forces divestiture of WUnion, puts ATT under ICC and requires connection/access.

World War

President Woodrow Wilson issued a proclamation assuming control of telephone and telegraph systems in the United States, placing them under the direction of the Post Office Department as of July 31, 1918. This proclamation is issued under authority of a joint resolution of Congress. Western Electric and ATT become vital source of technology and manufacturing during wartime. The Bell System announces plans for the introduction of machine switching (dial telephones) in its exchanges. Cost studies have been underway since 1884. In January, certain long line rates are increased by 20% by order of the Postmaster. On July 30, Postmaster General A.S. Burleson signs an order returning the telegraph and telephone systems to private ownership

Graham-Willis act solidifies the theory of the natural monopoly and precludes it from anti-trust suits
Cross-licensing agreement further expands monopoly status, creates stability in telecom

Cross Licensing Agreement

ATT goes into agreement with RCA and agrees to get out of broadcasting while each member company agrees to lines of competition and privilege.

The Communications Act of 1934 established the Federal Communication Commission ("FCC"), consolidating federal regulatory authorities previously exercised by the Interstate Commerce Commission and the Federal Radio Commission. This New Deal legislation did not fundamentally change federal policy toward telephones. The FCC was given authority over interstate telephone service; state commissions retained responsibility for intrastate activity. This basic framework remained intact until the Telecommunications Act of 1996.