During the first two decades of radio broadcasting in the United States, commercial broadcasters persuaded federal regulators, much of the public, and many educators that there was little need for independent noncommercial stations. Educational programming could be entrusted to "cooperation" between commercial hosts and guest educators. An organization called the National Advisory Council in Education, backed by the Carnegie Corporation and the National Broadcasting Company, was particularly effective in promoting these ideas. The "cooperation" doctrine crucially undercut support for educational radio stations during the formative years of American broadcasting. Its wide acceptance helped reduce the number of independent educational broadcasters from 128 in 1925 to just 36 a decade later. This article reconsiders the origins of the public broadcasting system, underscoring the crippling effects of the cooperative idea, sketches the rise of cooperation and the sharpening antagonisms between cooperators and independent educational broadcasters in the 1920's, and advances the thesis that the "phantom" of cooperation was a potent cause of radio educators' defeats during the 1920's and 1930's. A 106-item reference list is included. (Author/LMM)
Tuning Out Education
The Cooperation Doctrine in Radio, 1922-38

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Doctrine of ‘Cooperation’ won early battles of ideas

The born-again seldom dwell on their first lives, and so it is with people in public broadcasting. Their institutional memories rarely go back any further than 1945, when the FCC resurrected public broadcasting by reserving FM channels for educators.

Since then, most of the turning points have been turns for the better. TV channels reserved in 1952; federal support for ETV in 1962; the Public Broadcasting Act of 1967; encouraging growth in funding and programming through the late 1970s.

Pre-1945 is remembered, if at all, as a period of false starts, a dark age happily left behind.

The trouble with that sunny sketch, of course, is that for American public broadcasting, the times remain gloomy. Recent budgetary assaults on CPB and other afflictions remind us that, even though it has entered its seventh decade, public broadcasting remains the stepchild of “The American System” of broadcasting.

By the time the field got a fresh start after World War II, advertisers and entertainers had a hammerlock on radio and were poised to pin TV as well. Having fallen fatally behind the rest of “the industry,” educators never made up the ground they lost during the 1920s and 1930s.

“As the second Carnegie Commission declared in 1979, “The failure to provide adequately for noncommercial broadcasting at the outset has had lasting effects.”

Fumbled: Educational radio seemed plentifully provided for in 1922, when already 73 colleges and schools were producing programs. By 1925 there were 128 educational radio stations in the United States. But a decade later only three dozen of these outfits survived, most of them in the Midwest. The first and biggest opportunity to establish noncommercial broadcasting had been largely fumbled.

Fumbled: The spirit of Cooperation lives on, though in guises more disintegrated.

Why? Public broadcasting was stunted in its infancy by severe deficits of money, power and expertise. Relatively few educators had the resources or the will to take broadcasting seriously. Many of the first college stations were run by faculty volunteers on shoestring budgets. Some were the playthings of physics or engineering departments, which regarded them as incidental to laboratory work. Nearly 30 percent of the broadcasting licenses obtained by educational institutions from 1921 through 1936 were held for less than a year.

Even schools determined to exploit the power of the new medium had to struggle to fill their airtime with well-crafted programs, or with any programs at all. Wisconsin’s WHA, a leader in educational broadcasting, was able to put material on the air only three days per week in 1925. As late as 1930, WHA’s programming was still chaotic and amateurish, a hash of 10-minute musical selections and 15-minute talks. Cornell’s WEAI was similarly strapped for good material, resorting over the summer to such spellbinding talks as “The Plan of the New York State Egg-Laying Contests.”

In 1931 a Federal Radio Commission member complained that, taken as a group, the nation’s educational stations were using only a third of their authorized hours, and devoting less than 20 percent of their time to instruction.

While educational stations toiled to make financial and creative ends meet, profit-making broadcasters were building an empire and a new popular art. Commercial stations massively outspent the educators, outmaneuvered them in Washington, and outproduced them on the air. Little wonder, then, that dozens of educational stations gave up the ghost. The standard explanation for the near-extinction of early educational stations is Darwinist: As radio became more competitive, the weaker members of the species died out.

But there is another explanation, one that smacks less of destiny than of ideological defeat. Educators lost contests of resources in part because they had lost prior battles of ideas. Commercial operators persuaded federal regulators, much of the public, and many educators as well that there was little need for independent noncommercial broadcasting.

Educational programming could be entrusted to “cooperation” between commercial broadcasters and guest educators. This idea crucially undercut support for educational stations during the formative years of the industry.

Ten-year delay: Cooperation achieved its greatest victory in 1935, when the new FCC ruled against reserving channels for nonprofit stations—and thus delayed the rebirth of noncommercial broadcasting for at least a decade. The best public-interest programming, concluded the Commission, “would be brought out by cooperation between the (commercial) stations and (nonprofit) organizations.”

Cooperation was more than a public relations gimmick. Alliances between commercial broadcasters and educators produced some of the most adventurous public affairs and dramatic shows available to American listeners before World War II. Ultimately, however, Cooperation proved a hollow principle. In the long run, most Cooperative partnerships satisfied neither party and most disintegrated.

What the vogue of Cooperation did accomplish was to help legitimize commercial broadcasters’ property claims to frequencies, and to delay the commitment of decent resources to noncommercial stations. While educators and regulators dallied with Cooperation as an alternative to independent stations, commercial operators were tightening their grip on the medium. By the time Cooperation was abandoned, public broadcasting had been stowed in the battered corner of the industry that it occupies today.

The spirit of Cooperation lives on, though in guises very different from the original. Current proposals to exempt commercial operators from public-service obligations in return for a “spectrum fee” might seem to have little in common with the Cooperation creed since the effect would be to drive commercial and noncommercial stations further apart. But both Cooperation and the spectrum fee notion are deregulatory schemes that reflect faith in the marketplace as the master servant of
The saga of educational radio's birth pains has always been explored from the viewpoint of the heroic independent educational stations. The lobbying group for these stations, the National Committee on Educational Radio (NCER), actually hired its own chronicle before it expired.

But no one has paid serious attention to the movement for Cooperation or to the group that promoted it, the National Advisory Council on Radio in Education (NACRE)—even though (for the most part) NACRE got the better of NCER. The pivotal role played by foundations in shaping public broadcasting also has been neglected.

**Different Carnegie Approach:** For example, it is seldom remembered that long before the celebrated Carnegie Commissions of the 1960s and 1970s called for substantial federal support for noncommercial broadcasting, the Carnegie Corporation was effecting a special educational stations by underwriting the campaign for Cooperation.

This article is the first of a series that will consider the origins of our public broadcasting system, underwriting the crippling effects of the Cooperative idea. These pieces are digested from work-in-progress based on research at the National Archives and many university collections. Here I will sketch the rise of Cooperation and the sharpening antagonism between Cooperators and independent educational broadcasters in the 1920s. Later articles will describe a crucial showdown between Cooperators and independents in 1929-1930, and the victory and eventual decline of Cooperation in the 1930s.

In the beginning, when the educational possibilities of radio seemed boundless and the "other" promised room for everybody, there was no hard division between Cooperative and independent broadcasting. The common aim of educators was to master the new medium. Questions about control of channels were secondary. During the early 1920s, independent college stations cheerfully existed alongside ad hoc arrangements for putting professors on commercial stations.

Commercial station managers were the ones who proposed Cooperation with educators. When reports of the first KDKA broadcasts reached New York in late 1920, a young Columbia University administrator named Levering Tyson immediately began scheming to put faculty on the air. But Columbia President Nicholas Murray Butler scorned the new "gadget," as did the faculty. The initiative for getting Columbia into broadcasting came, ironically, from WEAF, the station that was tuned out in 1925-27. By then, radio advertising had proved its profitability. The honeymoon of educational broadcasting broke down in 1926-27. By then, radio advertising had proved its profitability. The gold rush was on. NBC formed in 1926 to take advantage of radio's potential for national marketing. CBS followed a year later. As the market for airtime blossomed, station managers raided the hours and frequencies occupied by educational stations. Suddenly the educators had to defend their place on the air against aggressive, well-heeled competitors. The new Federal Radio Commission, set up to referee battles for frequencies, generally favored claimants who had the means to do the most consistent and polished programming.

The result was a veritable massacre among educational stations. Many were compelled to share time with commercial stations that hungered to buy them out. Others suffered debilitating switches in power, frequency, or time assignments ordered by the FRC; in a 1932 survey, one college station reported nine such shifts; another another eight. And dozens of educational stations fell silent. An investigator concluded that "by far the majority of licenses....were lost because of financial conditions" and that only a few of the losers blamed hostile regulators or bullying commercial broadcasters.

Nonetheless, the number of noncommercial outfits declined drastically. In 1925 there were 128 of them; in 1927, 94; in 1929, 62; in May 1931, just 49. Some schools adjusted to the new pattern in American radio by striking deals with commercial stations to do occasional programs; at least 15 colleges took up Cooperative broadcasting between 1930 and 1932. But the majority that lost their licenses simply gave up on radio as a good idea gone sour.

These dismal events crystallized some basic questions about educational broadcasting in the United States. Exactly what was it, who wanted it, and who was best equipped to do it? The contrasting answers proposed by Cooperators and independents split them into unfriendly camps.

**Midwestern Populism:** For more than a century, the great land-grant universities had established their own stations for extension work, broadcasting everything from advice for farmers and homemakers to lessons for grammar schools. These Midwesterners rallied behind two principles. First, they championed nonprofit enterprise, insisting that radio channels (like the lands reserved to support higher education) were public resources. Second, they defined the microphone as an extension of older teach-
The rhetoric of Populism and crusading progressivism rang through the Midwesterners' statements: The tribunes of the People struggling to conserve the public domain against predatory Interests and monopolistic Trusts. It was no accident that the most progressive state in the nation, Wisconsin, boasted the most vigorous educational station, WHA.

Increasingly these militants scorned Cooperative schemes as bargains with the devil. For example, in 1927 the University of Minnesota quit broadcasting over WCCO (Minneapolis) because the station was assigning unsuitable hours and screening out programs that displeased farm-product sponsors. Minnesota soon put its own WLB on the air. At a meeting in Kansas later that year, angry college broadcasters declared that "educational broadcasting over commercial stations is not satisfactory to educational interests. Commercial stations are thus enabled to, and experience shows that they invariably do, exercise a censorship."

Commercial broadcasters' ideas about Cooperation changed too, but in the opposite direction. The more commercialized the industry became, the more stations sought to deflect criticism by cultivating links with nonprofit groups. This incentive for Cooperation was reinforced by the clause in the Radio Act of 1927 that required licensees to serve "the public interest, convenience, or necessity." Though this language remained legally toothless, it encouraged licensees to make showy gestures to education, to forestall irksome questions at renewal time. As Judith Waller of Chicago's WMAQ admitted, the average station manager scheduled serious features "because, when he goes to Washington, he can say that they are doing educational work and must be granted time on the air." Donating a few low-priced hours, per week to teachers became a popular way for commercials to demonstrate their civic-mindedness to educational authorities. "We'll do it!" Industry leaders began to suggest that educational stations could be dispensed with altogether, because commercial radio people were willing to provide Cooperatively all the uplift that listeners desired. Many educators, particularly at private colleges, agreed. Schools like Columbia and Chicago were happy to display their faculties on the air, but anxious to avoid the expense of running their own stations, and long accustomed to relying on corporate donations anyway.

Intellectually, the case for Cooperation pivoted on the argument that radio education had more to do with radio than with education. Cooperators adopted the industry line that radio was by its nature an entertainment medium. Since it touched the emotions more readily than it engaged the mind, they said, radio was better suited for light adult education than for school instruction. Since radio had such limited pedagogical uses, and since even those required huge investments and mastery of technique, Cooperators contended that profit-making pros could handle radio education better than any educators.

By 1929, educational radio was in crisis. Independents and Cooperators were deeply divided over how to respond. But both camps lacked effective leadership. That need was soon to be met on each side by a friendly foundation. For the next decade, the Payne Fund led the movement for independent educational stations, while the Carnegie Corporation backed the Cooperative.
'work of many educational stations. It concluded that radio's full potential for adult learning could be realized only by the commercial industry. In contrast to the Payne Fund, with its roots in Ohio and its commitment to public education, the Carnegie Corp. was firmly at home on Wall Street and comfortable with private initiatives in education. From the outset Carnegie and the AAAE threw their support to the Cooperation principle and its backers in the industry.

Industry enthusiasm for Cooperation rested on both principle and prudence—the second rapidly gathering on the first. Speaking at the Third Washington Radio Conference in 1924, before radio advertising became highly profitable, David Sarnoff of RCA grandly proclaimed that the radio industry "must secure cooperation of the established elements that have long served our national culture in order that the air may carry the supreme music, education and entertainment of the country." Commercial stations should not only broadcast but also pay for programs "contributed by public and educational interests." 18

Haunted by nightmare of BBC: Five years later, industry motives for Cooperation flowed less from noble dreams than from a recurrent nightmare. That mounting criticism of radio hucksterism and monopoly might combine with the example of the new British Broadcasting Corp. to bring about radical federal intervention—either a competing government network or outright nationalization of the airwaves.

That fear was expressed in a drumbeat of nervous dismissals of the BBC model by industry spokesmen during the late 1920s and early 1930s. Sarnoff’s notion of subsidizing nonprofit broadcasters was quietly forsaken, but the strategy of buying goodwill by cooperating with educators gained adherents in the industry. NBC, central target of antitrust critics, grew especially eager to display its altruism.

Early in 1929, negotiations between AAAE and NBC produced a plan for a Carnegie-AAA-NEA alliance that would form the vanguard of educational radio. A memo of understanding drafted by AAAE Director Morse Cartwright called for a survey of educational broadcasting and tests of various on-the-air techniques. In these activities, the memo declared, "It is probable that the interests of the industry would be adequately represented by the National Broadcasting Co., the educationalists by the AAAE, and the consuming public might be represented in the financial participation of the educational foundations." 19

Actually, it was much less than probable that the whole industry would accept NBC as its surrogate. It was downright doubtful that "educationalists" would agree to be represented by AAAE, which had no ties with NEA, educational radio stations, or other interested parties in the academic world. Plainly, the outlined Carnegie-AAA-NEA entente was designed to sidestep the Independents and establish educational radio on a new Cooperative footing, with NBC stealing a march on the rest of the industry.

The plan was quickly approved by AAAE and NBC officials and by the Carnegie Corp., which granted $15,000 to get it started.

By the spring of 1929, then, two competing drives to reorganize educational broadcasting were underway. The Payne Fund championed all forms of serious radio education, especially broadcasting for schools, and favored independent stations. The Carnegie coalition concerned itself chiefly with radio education for adults and assumed that commercial stations were best equipped to do it. But the key difference between the two lay in their attitudes toward public and private enterprise.

Corporate liberalism: The Carnegie group was an alliance of private interests that espoused what scholars have dubbed "corporate liberalism." The code of capitalism with a conscience. Corporate liberals held that if left to itself, enlightened private enterprise could guarantee the general welfare. Applied to broadcasting, this code suggested that commercial stations could adequately serve the whole listening public, leaving no role for public agencies. 20

For its part, the Payne Fund did not rule out cooperation with commercial operations—provided that programming remained in educators' hands. Writing to a colleague in June 1929, Payne Fund President H. M. Clymer reported a conversation with a CBS executive who was "fully steamed up for national educational broadcasting." The proper response, said Clymer, was "to utilize the facilities which have been offered to education and also to prevent their being utilized under commercial auspices...Let's keep them in line with our national educator-planned effort." But in the tradition of Midwestern progressivism, Payne officers believed that public ends had to be served by public authorities. Their strategy was to enlist government both to check the power of private broadcasters and to offer radio services that would not carry. Convinced that only vigorous government intervention could save noncommercial broadcasting, the Payne Fund took its crusade to state capitals and to Washington. 21

The Federal Radio Commission had consistently refused to protect or promote educational radio. But prospects for federal support improved dramatically when the Department of the Interior— which then included the Bureau of Education—suddenly entered the fray. By May 1929, the success of the Ohio School of the Air in Columbus created a national Education Association to share in the enthusiasm of the Ohio School of the Air. 21

NEA's plea got a sympathetic hearing from Interior Secretary Ray Lyman Wilbur. As president of Stanford, Wilbur had held high expectations for his university's station and seen the station fail for lack of funds in 1925. (Later Wilbur became vice-president of the Pacific Western Broadcasting Federation, a Los Angeles group attempting to create an elaborate nonprofit network.)

Acting quickly on the NEA petition, on May 24, 1929, Wilbur convened a meeting of Federal Radio Commission members, network radio executives, and others to examine the condition of American radio education. William Paley of CBS and John W. Elwood of NBC declared the networks' readiness to collaborate with the NEA and the Bureau of Education on national educational broadcasting. The two Commissioners at the meeting split—one endorsing reliance on commercials for educational work, the other warning against that plan. 22

Frederick Keppel, President of the Carnegie Corp., backed the doctrine of Cooperation: that private enterprise was best equipped to put education on the air. (Shown in 1937 photo, courtesy Carnegie Corp. of New York.)
Leaving all options open, Wilbur appointed an Advisory Committee on Education by Radio (ACER) chaired by Commissioner of Education William John Cooper, charged with executing a “thorough fact-finding study.”

**Factions divide Wilbur Committee:** The appointment of the “Wilbur Committee” triggered an intense scramble among parties interested in radio education. Involvement by an aggressive cabinet officer abruptly raised new possibilities for federal action. Immediately both Carnegie and Payne got in their ears by giving the ACER grants.

The Committee itself included several partisans of cooperation, including CBS’s Paley, NBC President Merlin Aylesworth, and leaders of two organizations that had been given airtime by NBC. On the whole, though, the Wilbur Committee’s composition seemed to favor the Independents. One appointee was Judge Ira Robinson, an educational radio’s solitary friend on the FRC. Two other committee members, J. L. Clifton and W. W. Charters, had close ties with the Payne Fund and the Ohio School of the Air. Another appointee was H. Robinson Shipherd, an adult educator sympathetic with Payne ideas, a member of the NIA radio committee and a voluble advocate of a nonprofit “university of the air.” For its field investigator, the ACER hired Armstrong Perry, a veteran radio writer and a Payne Fund staff member. Shipherd became the chair of the Wilbur Committee’s workhorse subcommittee, he and Perry managed most of its data collecting.

The Payne Fund faction pressed Wilbur and Commissioner Cooper to join their crusade. W. W. Charters, one of the Ohioans on the Wilbur Committee, informed Cooper privately that “there is a lot of energy all ready to be harnessed in the field, if you would tell them (the Payne Fund) what to do. Our greatest danger is that while we are ‘researching and fact-finding,’ the companies will get away from us.”

The Payne Fund had seized an important initiative. But the Carnegie-AAAE-NBC alliance was quick to respond, to head off the threat of federal intervention. First, AAAE proposed to meld its own study of radio education with the Wilbur Committee effort. Eager to economize, the Wilbur Committee agreed: The AAAE would focus on adult education, leaving the ACER to concentrate on school broadcasting. In September 1929, the AAAE study began under the direction of Levering Tyson, the Columbia Extension administrator who had experience with Cooperative broadcasting extended back to the early 1920s.

Then in November, the AAAE convened a conference at Carnegie Corp. headquarters that evidently was designed to counter the meddling tendencies of the Wilbur Committee. In attendance were Cooper and Charters, but a majority was made up of Carnegie and AAAE board and staff members. The outcome was a hearty endorsement of Cooperation. Extolling the networks for their support, the AAAE conference declared that “both educational and industry groups are at one in the principal objectives of encouraging the broadcasting of educational material.”

**Blunt warnings:** Yet the Wilbur Committee’s preliminary findings signaled that Payne Fund principles were in command. The subcommittee headed by Shipherd cited the tendency toward monopoly in radio (a slap at the networks) and concluded that educational stations could defend themselves against commercial competitors only by securing “radio channels permanently reserved” for them. Shipherd’s group also endorsed his favorite project, an endowed university of the air.

Armstrong Perry’s field investigation report was even blunter: Radio educators would have to unite and obtain federal assistance “or see the broadcasting facilities of the country come so firmly under the control of commercial groups that education by radio would be directed by businessmen instead of by professional educators.” Perry told the Committee that “control of the radio channels is the most important question.”

These forthright reports might have marked a great turning point in the early history of American public broadcasting. Had the Shipherd and Perry recommendations been accepted and quickly implemented, independent educational radio would have acquired the official backing it needed to weather its hard times. Given emergency aid in 1930, educational radio stations might even have begun to grow again in tandem with the resurgence of government activism of the New Deal.

But though Shipherd and Perry had controlled the ACER’s data-gathering, they could not muster a majority of the Committee itself. Faced with seemingly radical proposals, Cooper, Charters and others came down with a case of cold feet. Moreover, network spokesmen counter-attacked. They filed minority committee reports denouncing Shipherd’s idea for a radio university. Secretary Wilbur agreed that the plan was premature. In reply to the call for reserved channels for educators, NBC and CBS executives argued that such privileges were superfluous, since the networks were delighted to cooperate with qualified educators. The man from NBC estimated that his company was already devoting 22 percent of its time to education.

**Limp final report:** The network viewpoint prevailed. The committee’s final report was a bland stew that generally favored Cooperation and conspicuously avoided annoying the commercial industry. When the document reached Wilbur on Feb. 15, 1930, it was cleansed of the radical proposals that had been recorded in stenographic meeting minutes. Under the heading “Reconciling Educators and Commercial Broadcasters,” the ACER report simply decided that commercial and educational people had equally valuable skills, without suggesting how to merge them.

The Committee’s chief recommendation was that Wilbur create in the Bureau of Education a unit charged with coordinating research on radio education. Wilbur also was urged to “bring to the attention of the Federal Radio Commission the importance of educational interests in broadcasting.”

In short, the Wilbur Committee evaded all the big questions before it. The campaign to draft the federal government into the movement for Independent educational broadcasting had fizzled.

Shipherd refused to give up. He pestered Wilbur and Cooper to help him raise money for his envisioned radio university. “I do not want to antagonize him,” Cooper wrote Wilbur in an internal memo, “since he has some rather important contacts. On the other hand, I do not...
care to get further involved. "When Shipherd persisted, Cooper commented to Wilbur, "No ordinary 'fade out' will take this actor out of the picture.” Wilbur replied, "Agreed.""

With the Wilbur Committee taking the posture of innocent bystander, the way was cleared for the Carnegie group to execute its blueprint for Cooperation. On Jan. 6, 1930, the AAAE convened another meeting on radio education at the offices of the Carnegie Corp. Cooper was there, as were Keppel, Owen D. Young of General Electric (then a parent company of RCA and NBC), and several university presidents.

Concluding that the broadcasting industry needed "some representative organization to which it can turn for advice and counsel in educational matters," the meeting resolved that the AAAE should form a National Advisory Council on Radio in Education, composed of delegates from industry, education, government, and the general public. Major grants from Carnegie and John D. Rockefeller, Jr., got NACRE started in the summer of 1930. Its figurehead leader was Robert Millikan, president of the California Institute of Technology; its executive director was Levering Tyson, veteran promoter of Cooperative radio education and investigator for AAAE. But there was never any doubt about who had the final word in NACRE affairs—Carnegie Corp. President Frederick Keppel. Radio educator Lyman Bryson later recalled that Tyson ran "a commission on education by radio"—for Keppel, "a kind of offshoot of the AAAE."

In the summer of 1930 Tyson published the final report of the AAAE radio education study under the title "Education Times In. The book was virtually a charter for NACRE and for the whole movement for Cooperation. Tyson's basic premise was that since "broadcasting is a business," radio education had to live up to business standards at the microphone. The industry's "intense commercial spirit" was partly at fault for retarding non-commercial broadcasting, but on the whole Tyson blamed the troubles of educational radio on the educators.

Dismissing the claim that radio channels lay in the public domain, Tyson declared that education has no "inherent right to part of the air." The academic world had to slug it out in the marketplace with other competitors. If educators had failed on the air, he charged, that was because they were too lethargic or obtuse to learn the tricks of the new medium.

Tyson conceded that educational stations were handicapped by lack of capital, but he saw no promise in endowments, listener subscriptions, federal subsidies, or other remedies. Educational radio would instead have to fall back on the largesse of big-hearted tycoons like GE chief Owen D. Young, whose philanthropic instincts Tyson applauded. Young's attitude, joined with industry offers of free time, "holds out the greatest hope for educational broadcasting."

Though in theory NACRE was a neutral organization, Tyson described its mission as that of emissary from industrial to education. Working closely with the networks, NACRE would "present suggestions to the educational world with more force than those suggestions would have if made by the broadcasters themselves." Its task, in other words, was to buffer educators' distrust of the industry and induce them to cooperate.

Educators organize in response: Tyson spoke as if NACRE would have the whole field to itself. Despite the retreat of the Wilbur Committee, however, the foes of Cooperation did not fall silent. To the contrary, as the decline of Independent educational stations accelerated, there was growing agitation for protective legislation of the kind recommended by Shipherd and Perry. At its July 1930 convention, the NEA passed a resolution calling on Congress to "safeguard the use of education and the government a reasonable share of the broadcasting channels of the United States." The American Council on Education, the National University Extension Association, the Association of Land-Grant Colleges, and other groups also spoke up. The ubiquitous Payne Fund provided money for a new forum for radio educators, an annual Institute for Education by Radio (IER) at Ohio State that first met in June 1930.

The Payne Fund also kept its own lobbyist at the Bureau of Education. Armstrong Perry, the Payne Fund staffer who had been loaned to the Wilbur Committee, stayed in Washington as a specialist in radio education. In this post Perry was able to encourage educators who wanted their own stations. He also had the amiable ear of Commissioner Cooper.

Apparently acting at the instigation of Perry, Cooper abruptly called a national conference on "educational radio problems" in Chicago on Oct. 13, 1930. (NACRE viewed this move as an inexplicable stab in the back.) Explaining his motives, Cooper cited the rising fear that a commercial monopoly might soon squeeze education off the air entirely. Tyson and several members of the Wilbur Committee attended, but in contrast to earlier meetings, this one—in the heart of the Midwest—was dominated by several dozen proponents of Independent broadcasting. Led by spokesmen of the NEA, the conference proceeded to petition Congress to reserve 15 percent of all radio channels for schools and government agencies, and recommended the formation of a committee to plan defenses for besieged educational stations.

Two months later, representatives of nine educational organizations—met as the National Committee on Education by Radio. Underwritten by a $200,000 five-year grant from the Payne Fund, the NCER was dedicated in general to promoting education by radio, in particular to sheltering independent stations. Joy Morgan, editor of the NEA Journal, chaired the group. Tracy Tyler, trained in educational research at Ohio State, was hired as executive secretary. The versatile Armstrong Perry headed a unit called the Service Bureau.

By early 1931, NACRE had a militant rival. The heyday of Cooperative broadcasting was past, but for the next eight years NCER would continually undercut NACRE's attempts to prove that in educational radio, the commercials knew best.

**Rival lobbies fought for regulators' nod**

"...if you educators do not hold radio for yourselves," Judge Ira Robinson told educational broadcasters in June 1930, "it is going to be so fortified by commercial interests that you will never get it.""

The lone pro-education member of the Federal Radio Commission, Robinson had ample grounds for alarm. Since the mid-20s, dozens of school-operated stations had been driven from the air by a combination of commercial competition, FRC pressures, and their own lack of resources and resourcefulness. In 1930, the mortality rate seemed to be rising; more than 20 educational stations would fall silent by the end of July.

During the previous winter, Commissioner Robinson had been involved in a promising initiative that might have brought the federal government to the rescue. But
the Advisory Committee on Education by Radio, appointed by the Secretary of the Interior, had pulled back from recommending measures that would do much good for beleaguered educational broadcasters. Radio educators were left to forage for themselves in economic and political terrain made ever more barren by the Depression.

By 1930, the commercials' campaign to fortify their position was based on the strategy of "cooperating" with nonprofit groups—offering free airtime as an alternative to noncommercial stations. A CBS vice president told radio educators in 1930 that as soon as educators mastered the art of holding audiences, "you will find that the commercial broadcasting companies are entirely willing to turn over facilities for educational programs."

To promote Cooperation, the Carnegie Corporation and its subsidiary, the American Association for Adult Education, joined with NBC to form a National Advisory Council on Radio in Education (NACRE) in the summer of 1930. Calling for a truce with the industry, NACRE's new executive director, Levering Tyson, tried to soothe skittish educators: "The mere fact that alert business interests have temporarily taken possession of the air facilities that education will later want, need not worry anyone."

These blandishments failed to dissuade advocates of independent educational stations from forming a pressure group of their own, the National Committee on Education by Radio, in December 1930. Formally representing nine educational organizations, NCER drew most of its strength from stations at Midwestern land-grant universities, the National Education Association, and a foundation named the Payne Fund. Rejecting offers of Cooperation, NACRE demanded that Congress reserve 15 percent of all radio channels for the exclusive use of educators and government agencies. The rivalry between NACRE and NCER would materially shape the course of educational broadcasting in the 1930s.

NACRE placed its messages through a lively newsletter called Education By Radio, and commissioned its own testament (Music for Education, by Frank Ernest Hill) before it folded in 1941. It is remembered as the group that held the fort for educational radio stations during the Depression, sustaining the cause. NCER's program convictions were less precise. As befits a group backed heavily by the NEA, NCER lauded the potential of school broadcasting to aid teachers. More broadly, NCER endorsed the kind of comprehensive programming, modeled on university extension services, that was familiar to listeners of the Midwest's midday. NCER spokesmen envisioned educational broadcasting as the redemption of Jeffersonian democracy, restoring the means of self-improvement to everyone with a radio set.

The heart of NCER's programs was the bill introduced in the Senate early in 1931 by Simeon Fess of Ohio that would protect 15 percent of the nation's radio resources from commercial exploitation. Correspondence at the National Archives shows that NCER did much more than lobby for this bill. NCER Chairman Morgan had it drafted and then persuaded Fess to sponsor it.41 Rights to the air: NCER's rationale for the reservation of frequencies was explained by Armstrong Perry, a veteran campaigner for educational radio who later joined the NCER staff. "Even if the work of educational stations compared poorly with commercial programs, " Perry told a gathering in 1931, "I still believe democratic government demands that some channels shall be in the hands of the government and not completely in the hands of certain groups." The objective was to forestall a commercial monopoly, not to bar business from the air. Critics of current educational programming were unfair, NCER believed, because radio educators had never enjoyed the security and resources they needed. "The development of education by radio will not really begin," Morgan wrote, "until education's rights on the air are realized in terms of independent channels permanently assigned to our states and to educational institutions."

On the question of what educational stations ought to broadcast, NCER convictions were less precise. As befits a group backed heavily by the NEA, NCER lauded the potential of school broadcasting to aid teachers. More broadly, NCER endorsed the kind of comprehensive programming, modeled on university extension services, that was familiar to listeners of the Midwest's midday. NCER spokesmen envisioned educational broadcasting as the redemption of Jeffersonian democracy, restoring the means of informed citizenship and self-improvement to everyone with a radio set.

But whether educational radio was to be merely useful or sublime, NCER treated it as very serious business. Armstrong Perry denounced the FRC for accepting the commercials' classification of radio as "an amusement enterprise...more nearly related to the vaudeville theater...
and the movies than to the public school, to the college, or to the university.\textsuperscript{19}

**Demonology:** The rhetoric of NCER people declared their politics. These were disciples of Midwestern progressivism, with more than a little Populism and Bryan Democracy clinging to them. Their archenemies were the network monopolists, the "radio-power trust" that "would force the educational institutions to become dependent upon a commercial despotism."\textsuperscript{47}

According to NCER demonology, the notorious electric utility industry lay behind the networks. NCER stalwarts loved to note that the parent company of NBC was RCA, which was in turn controlled by General Electric and Westinghouse. They observed as well that NBC President Merlin Aylesworth had been public relations director for the power industry's trade association. An early number of NCER's newsletter pointedly reprinted an article by Sen. George Norris, progressive crusader par excellence, on "The Power Trust in the Public Schools."\textsuperscript{46}

NCER and its cohorts suspected that the Radio Commission was in cahoots with the monopolists. In dozens of RFC hearings, the NCER Service Bureau helped defend college stations against assaults on their licenses, frequency assignments, and time allotments. The Commission remained unsympathetic. Even the strongest university outfits, such as Wisconsin's WHA and Ohio State's WLTW, had to make do with daylight hours and tend off repeated challenges to their right to broadcast.

Smaller stations succumbed despite NCER aid. "We have been very hard hit both the depression and also by the Federal Radio Commission," the program director at University of Arkansas station KUOA told a colleague in early 1932. Given unusable broadcasting hours by the RFC, the station had leased all but a daily half-hour to advertisers. "The Commission may still boast that it has never cut an educational station off the air," the Arkansan remarked disgustedly. "It merely cuts off our head, our arms and our legs, and then allows us to die a natural death."\textsuperscript{19}

NCER also inherited much of the provincial paranoia and sanctimony of agrarian reform movements. The networks were suspect as much for their urban immorality as for their greed and despotism. In a typical outburst of 1931, Morgan declaimed, "We are in vastly greater danger as a people from New Yorkism than we are from communism. There is more danger that the trivial, the sensuality, the jazz, the contemptuous notions of home life, which are bred in the hothouse metropolitan centers will sap the ideals and the vision of the outlying regions which have been the stable centers of our national life...Through motion pictures and radio, the smart-alecky attitude of commercialized amusements...tends to destroy the home life and the community ideals of our smaller towns and rural communities."\textsuperscript{50}

In January 1932, *Education by Radio* featured a statement by the National Congress of Parents and Teachers that might have been written by Aunt Polly, protesting hucksters who "invade our homes—even on Sunday...to destroy the ideals of sincerity and good taste which are at the heart of sound character."\textsuperscript{50}

To the evangelists of NCER, the National Advisory Council on Radio in Education bore the marks of Satan. NCER was New Yorky; it taught compromise with commercial monopolists; most damning of all, it was "financed by the Carnegie-Rockefeller interests." Morgan charged that NCER was a front, "a smoke screen which seeks to protect the industry from the just and wholesome criticism of an enlightened public." Rolling several favorite themes into a single indictment, NCER asked in 1933, "Shall educational broadcasting be in the hands of privately appointed committees operating in New York on funds supplied by private foundations, working hand in glove with the commercial radio monopolies which are closely allied with the greatest power companies—such committees for example as the National Advisory Council on Radio in Education?"\textsuperscript{52}

**NACRE—proponents of Cooperation**

NACRE countered with accusations of its own. Director Levering Tyson claimed that while his organization was formed in mid-1930, practically everyone who cared about educational radio supported "the general cooperative idea," NACRE was then on the verge of uniting government, industry, education and the general public, with the "emphatic approval" of Secretary of the Interior Ray Lyman Wilbur and Commissioner of Education William John Cooper.\textsuperscript{53}

Then came the great betrayal, Tyson complained. "For some reason (which to this day has never been disclosed)," he wrote, Commissioner Cooper lent his prestige to the formation of NCER. "At this important psychological moment, after the industry had conscientiously and sincerely entered into an agreement with education to engage in a cooperative effort to develop the best uses of radio, the founders of NACER put off the real move for sound educational radio, Tyson lamented. "The forces have been scattered ever since."\textsuperscript{54}

This version of NACRE origins was disingenuous because, as Tyson knew, college stations, the Payne Fund, the NEA and many others distrusted the industry's offers of Cooperation before and after the founding of NACRE. It was pressure from these groups that moved Cooper to "call the conference that founded NCER. If either organization was guilty of interloping, it was NACRE."

**Educators in top posts:** Accurate or not, Tyson's recollections reflected the strategy of painting NACRE as a "consolidated educational front," seeking to unite and conciliate, in contrast to NCER's divisive partisanship. NACRE's twin purposes, Tyson announced, were to disseminate information about educational radio and to encourage educators to produce good programs. Its accent was to be on study and research. Unlike NCER, which rushed into the public arena branding the Fess Bill, the NACRE board voted to avoid politics and special pleading. The board's make-up seemed consistent with these scruples. During most of NACRE's career, university heads filled its presidency (Robert Millikan of Cal Tech), all of its vice-presidencies (Livingston Farrand of Cor-
nelling its quarrels to private contacts. NACRE's coziness was advertised by the fact that it was the influence of the commercial industry. NBC was aggressively lobbying NBC to pick up the costs of Chicago programs aired over NBC's outlet WMAQ. Hutchins later enlisted Tyson to help hint obtain NBC airtime and "a small subvention" for University radio productions. For several years Hutchins awkwardly jugged his indebtedness to NBC with his service to NACRE.

For uplift or instruction?: Less prominent than these university executives, but more potent in directing policy, were NACRE's patrons, the Carnegie Corporation and its offspring, the American Association for Adult Education. Carnegie and AAAE had launched a campaign to mobilize resources for adult education back in the mid-1920s. In this effort, they collided with the NEA, which had its own Department of Adult Education. The battles between NCER and NACRE echoed within this wider war-between NEA and AAAE. Following the lead of AAAE, NACRE promoted a liberal-arts conception of radio education, as a source of enrichment and uplifting recreation, in contrast to the NEA-NCER emphasis on vocational training and academic instruction. For Carnegie, AAAE and NACRE, broadcasting was less central to education than what the earnest idealists of NCER had in mind.

Still less visible in NACRE affairs, but always present, was the influence of the commercial industry. NBC played more than a passing part in getting NACRE started, its pledges of support helped persuade Carnegie to make major grants to NACRE, and NBC obtained the right to approve the Council's director. Throughout NACRE's history, its activities depended directly on airtime and assistance donated by the networks. In return, NACRE showered public praise on the industry, confining its quarrels to private contacts. NACRE's coziness with the commercials was advertised by the fact that it shared one of its principal committees with the National Association of Broadcasters.

Another kind of progressive: Ties with broadcasting businessmen did not prevent NACRE from presenting itself as an agency of reform. Nor was this hypocrisy. It might be argued, in fact, that NACRE belonged to one wing of the progressive movement—the Eastern wing, long at odds with Midwestern protest, that proposed the efficiency and generosity of big business as the answer to the nation's problems.

NACRE was made in the mold of an earlier vehicle of progressive Cooperation, the National Civic Federation. Founded in 1900, NCF sought to soften antagonisms toward corporations by inviting representatives of labor and consumers to work with management. It became a fountainhead of "welfare capitalism," the creed of solicitude for workers that was designed to smooth the rough edges from the corporate economy.

Similarly, NACRE urged educators to make peace with the broadcasting industry and coaxed the commercials to heed radio's higher uses. Like NCF, NACRE carefully distinguished enlightened corporate leaders (the networks and large urban stations) from the barbarism of small businessmen (local stations with Philistine views on education). And like NCF, NACRE sought to generate enough voluntary public service to satisfy lethargic government regulators.

For all its talk about unifying the movement for educational broadcasting, NACRE was barely able to stitch together its own parts. The word "Cooperation" covered a mess of different motives. The Council's commercial patrons viewed education as a frill or a necessary nuisance; its educator-members had sincere hopes for noncommercial radio but persistent doubts about its feasibility.

Era of Cooperation: Alliance with networks puts education on the air

The mixed ancestry of NACRE was aptly mirrored in the organization's director, Levering Tyson. An extension administrator at a private university and pioneer of radio Cooperative education, Tyson appeared to be well-qualified to forge alliances between education and the radio industry. But academic snobberies had pushed his sympathies toward the business side of broadcasting, and Tyson had only contempt for the
work of the Independents. An outspoken, self-righteous man, he was a poor choice to reunify the legions of educational broadcasting.

Head of home-study (correspondence courses) in Columbia's profitable extension division since 1919, Tyson became a champion of commercial common sense in academia. In 1928 he was projecting an income of $500,000 from 9,000 home-study enrollments, and predicting bonanza enrollments of 35,000.20

But this emphasis on revenues put Tyson sharply at odds with administrators at public universities that offered free extension services. At a convention of the National University Extension Association in 1930, shortly before assuming the NACRE directorship, Tyson defied the fuzzy-headed moralists who presumed to criticize his programs. Denying that Columbia's extension division had "a purely proprietary character," Tyson nonetheless proclaimed a heresy: If private correspondence schools could do $50 million of annual business, "there must be something here worth looking into."21

Tyson was equally pugnacious on the subject of educational broadcasting. He had produced some of the earliest successes in the field when he arranged for Columbia faculty to give courses over New York station WEAE in the 1920s. Ironically it was NBC, later a founder of NACRE, that knocked Columbia off the air after it absorbed WEAE. But Tyson blamed the collapse of his experiments on snooty faculty. "I fought a losing fight at Columbia and was defeated," he later remembered, "not by the industry, but because there was no interest on the part of the University." This summarized Tyson's perennial diagnosis of radio education's ills in America: The medium had bountiful potential, but hidebound educators refused to seize it. He complained that most radio work by educators was "bunk" or "material for parody."22

To charm the Big Audience: Tyson's own visions for radio education revolved around the premise that broadcasting had to run on business principles. The market test was sovereign. Tyson once contrasted the "pitifully small audiences" for educational shows with the multitudes that tuned in to hear Amos and Andy and Lowell Thomas. NACRE should steer clear of programs not "planned to reach and to be received by large audiences.

It would seem to this is the principal use of radio."23 Echoing many a commercial station manager, Tyson declared, "There is no great difference between showmanship and education," so that educators had much to learn from The Goldbergs. But pedagogues on the air insisted on sounding like pedants. It is impossible to "force intellectuality down democracy's throat unless it opens its mouth," Tyson scolded educators in 1934. The only hope lay in borrowing the magic of commercial broadcasters—the people who revered the Big Audience and knew how to charm it.24

Tyson's convictions melded easily with the views of industry leaders. The networks' position was pungently summarized at NACRE's first annual convention in 1931 by Henry Adams Bellows, a CBS vice president and NAB spokesman who once sat on the FRC. Bellows told the NACRE faithful that serving the public interest simply meant "showing that the public within a station's service area is genuinely interested in its programs." If a broadcaster's programs were lively enough to be popular, he was serving the public interest. Bellows admitted that much commercial broadcasting was awful, but held that the work of educational stations was worse. In any case, Bellows denied that industry performance justified either BBC-style government ownership or reserved channels for educators—the twin industry bugaboos of the early 1930s. "Our system of privately owned and commercial operated stations is a pretty solidly established fact," said Bellows, and segregating educators "in a limbo of special wavelengths" would only "condemn them to remain unheard and disregarded. The best option for all parties was Cooperation. Let educators take responsibility for producing programs and the broadcasters would happily give them the microphone, "provided they do not bore their hearers into open desertion."25

The networks soon gave NACRE the means to act on these convictions. Anxious to deflate critics, CBS and NBC volunteered substantial blocks of hours to the new organization. Times had never seemed riper for setting radio education on a new Cooperative footing. The wrangles of 1929-31 had merely postponed the question of who was to take responsibility for educational broadcasting. Yet the Depression created a rising demand for sober, public-service uses of the medium. Seizing the moment, NACRE launched the most ambitious experiments in national educational broadcasting that had ever been tried in America.

NACRE made its debut in a style that highlighted both its blue-chip connections and the networks' eagerness to publicize their generosity. Speaking at NACRE's first convention in May 1931, Robert Millikan of Cal Tech gave an address that was introduced by President E. C. Elliott and U.S. Commissioner of Education John Studebaker.
Meanwhile, Tyson was recruiting leaders in various academic fields to plan programs under the auspices of NACRE. "cooperating committees." In October 1931, series developed by two of these groups went out over 50 NBC stations. Aspects of the Depression consisted of 32 weekly talks; each 15 minutes in length, by such prominent economists as Rufford Tugwell, Francis Perkins, John R. Commons and Paul Douglas. The series was produced by a committee based at the Brookings Institution. Psychology Today, produced in association with the American Psychological Association, gave the microphone to such worthies as John B. Watson, Floyd H. Allport and Edward L. Thorndike.

Both series were "supposed to strike a happy medium between instruction and amusement. To 'insure the most popular sort of presentation consistent with scientific scholarship,' the economics series featured "questions and pertinent remarks" by a sort of master of ceremonies. The psychologists pledged to avoid material "which is abstruse or dull, or merely entertaining." In addition to elaborate promotional campaigns, the University of Chicago Press published a "Listener's Notebook" for each unit of Psychology Today (45,000 were sold for 25 cents each) and printed the texts of both series.26

**Primetime NBC:** Tyson and a group of political scientists had grander plans. Talks to set up a NACRE-American Political Science Association committee suddenly were upgraded when, in the fall of 1931, NBC offered NACRE a windfall. A primetime weekly half-hour for civic education, guaranteed for four years. At this point Frederick Keppel of the Carnegie Corp. and such distinguished academics as Charles Beard and Charles Merriam joined the planning. The upshot was the creation of a Committee on Civic Education by Radio (CCER) that included Beard, Merriam and the progressive educator George S. Counts. Reducing to produce a program titled You and Your Government, CCER ran its first set of talks, on party politics, over 45 NBC stations in 1932.

Setting to work in the direst months of the Depression, CCER approached its task in an evangelical spirit. With the nation's leaders in disgrace, CCER chairman Thomas Reed wrote, You and Your Government might help to bolster democracy and "save the present situation." The first series ranged from general lectures to analyses of recent events; by such notables as Stuart Chase, John Dewey and William Hard. Over the lifespan of You and Your Government, there were to be a total of 13 series covering 210 individual broadcasts.

Other NACRE committees took to the air with series designed to be at once informative and reassuring. NBC gave most of the airtime, but CBS ceded desirable hours too.

- A bizarre NACRE series, given what was happening to the job market, began to run on 60 CBS stations in February 1932: Eight programs on Vocational Guidance, filled with advice on choosing the right career.

- AFL-sponsored speeches on American Labor and the Nation started on CBS in May. Later in the year, NACRE's Economics Committee mounted its second series, The Economic World Today, on NBC, and another committee assembled 15 talks on The Lawyer and the Public that NBC aired early in 1933. Subsequent series included Art in America (cosponsored by museums, and arts organizations), Coping with Crime (American Bar Association), and America Must Choose (Foreign Policy Association and World Peace Foundation).

**Chicago Round Table:** While NACRE was laying down this barrage of national programs, the University of Chicago was developing an exemplary schedule of local cooperative broadcasting. An aggressive radio committee headed by Allen Miller won the confidence of faculty by targeting elite listeners for University programs. Rejecting the cult of the Big Audience, Miller declared that "it is better to have an audience of 500,000 intelligent listeners than an audience of 5,000,000 listening to a popular and possibly inaccurate program." Using the facilities of WMAQ and WJJD, the University increased its time on the air from three programs per week in the spring of 1926 to 33 in the spring of 1933.

Like the NACRE committees, Chicago radio advocates were determined to find ways of enticing dial-twisters to give education a hearing. In 1931, after much tugging against faculty skepticism, the University radio committee devised a format for what became the outstanding educational show of the pre-War years: The University of Chicago Round Table. Named for a table in the faculty club reserved for free-swinging exchanges of views, the Round Table featured three professors convening on current topics over WMAQ on Sunday afternoons. Chosen for their microphone manner, participants met beforehand to outline topics but did not rehearse.

The idea was to get away from the preachy stiffness of lecturers without sacrificing intellectual seriousness. Underwritten by a private grant that furnished stipends for speakers, the Round Table eventually boasted 20 "regulars," led by the philosopher T.V. Smith and Percy Boynton of the English Department. The program quickly gained a following in Chicago and won applause from educational broadcasters from across the country. But planners' hopes that the Round Table would be quickly picked up by a network were frustrated until NBC began to air the show nationally in cooperation with NACRE in October 1933.

Another innovative program launched in 1931, Philosophers in Hades offered dramatized philosophical discussions conducted by Smith. But they proved too esoteric and were dropped after a year.

By 1933 the cause of Cooperation was riding high. The burst of invention by NACRE and the University of Chicago appeared to have vindicated the networks' promises and educators' hopes. But these successes rested on shaky supports. NBC executive Judith Waller candidly told the university's radio committee early in 1932 that her NBC superiors were split between two attitudes. The network program director, John Royal was a "one-time actor who has no respect for educational features and who, in fact, seems lacking in appreciation of anything cultural." Waller feared that "those favoring education are in the minority." Partly because of this, but also because educational leaders themselves continued to doubt radio's value, confidence in Cooperative broadcasting was eroding even while new programs were making shaky debuts.

**Too much education:** Despite the popularity of the Round Table, money worries at Chicago jeopardized the whole schedule of University programs. As the grant that had subsidized the Round Table ran out, President Hutchins appealed for support from NBC, with its local affiliate, WMAQ. The University's Advisory Council, Hutchins was insisting that his institution could afford only $5,200 for all of its broadcasting in 1932.

A year later, rumors that Chicago might withdraw from radio entirely prompted Tyson to send Hutchins an anxious letter of encouragement. NBC's decision to carry the Round Table as a sustaining feature temporarily bolstered the University's commitment to radio. But even while this centerpiece of Chicago programming was gaining national exposure, 18 of the University's local shows were being dropped. NBC executive Judith Waller explained that NBC higher-ups decided that
Too little style: Within NACRE, too, the optimism that stimulated the experiments of 1931-32 quickly receded. One reason was that NACRE's style was much inferior to their substance. "Something more needs to be done about the development of a technique of teaching by radio," the reviewer concluded. NACRE's Committee on Psychology dejectedly agreed that future talks needed to be done by an expert with "radio personality." The Economics Committee offered an equally grim appraisal of its broadcasting, despite its efforts to enliven its programs with dialectic formats. "The speaker is a more important factor in the program than the speech," concluded the Committee's secretary.

Looking back over three years of NACRE broadcasting in 1934, Tyson pronounced it a flop. All his exhortations had gone for naught; educators persisted in bringing amateurish methods to the microphone. The result was a record too poor to justify further efforts. "We are still way behind the popularity of some commercial programs or some of the sustaining programs broadcast by the industry," Tyson told the NACRE board in 1935. Morse Cartwright, director of the organization that gave NACRE most of its funding agreed: NACRE shows that should have been drawing 50 million listeners were getting only a tenth that number. Measured by the industry standard of the Big Audience, NACRE's on-air experiments had fizzled.

In May 1936, a Tyson-led committee charged with charting NACRE's future reported that "relatively few attempts at educational broadcasting on a national scale have been successful." Accordingly, NACRE ought to quit its own production efforts and refrain "from further stimulation of educators...to produce educational programs." The committee report went on to question basic premises that lay behind NACRE's Cooperation ideal. It doubted that the networks would any longer "recognize a single organization as competent to represent the educational world" and noted, without protest, the networks' insistence that program production "should rest with them rather than with the cooperating organization." Accepting the attitude of the industry, NACRE prepared to redefine its role in Cooperation. In the future, it would serve as "repository and sieve" for educational program ideas—less a partner of the networks than a helpful adviser.

'Heresy' survives! Hutchins' acerbic candor signaled that NACRE's grand experiment in national Cooperative broadcasting was on the skids. The educators accused the commercials of hypocrisy; the commercials charged the educators with incompetence. But both NACRE partners stood by the Cooperative idea—the networks be...
cause they still needed a service record that would play well before regulators and critics, the educators because they had no alternative. For his part, Hutchins emphasized that he had no basic quarrel with the broadcasting industry, provided that the industry furnished the facilities that university radio projects required. To an executive of the University of Wisconsin's WHA, Hutchins archly remarked, "I assumed that nobody wanted to operate a radio station at a university that he had to". NACRE wasn't able to make Cooperation work, but the rhetoric of Cooperation survived.

Ironically, NACRE played its biggest advocacy role precisely while NACRE leaders were starting to admit the inadequacies of their broadcasting experiments.

Early in 1934, the Roosevelt Administration floated a proposal for a new commission to replace the FRC. Senators Wagner of New York and Hatfield of West Virginia suddenly threw a wrench into the approval machinery by offering an amendment that would require the new agency to reserve 25 percent of all radio frequencies for nonprofit broadcasters—the old Fess principal, long promoted by the National Committee for Education by Radio, plus an extra 10 percent.

The Wagner-Hatfield amendment was a last hurrah that had scant chance of becoming law. But it threatened to delay the creation of the Federal Communications Commission. To mollify backers of Wagner-Hatfield, the Senate approved another amendment—section 307(c) of the Act—directing the FCC to carry out a formal study of the fixed percentages proposal. The Wagner-Hatfield amendment was then defeated and the Communications Act of 1934 was passed.

Back to the FCC: The new FCC carried out the mandated study in October and November 1934. A month of hearings piled up nearly 14,000 pages of testimony. Once again, the key questions about nonprofit broadcasting were raised: Should the nonprofits receive government protection and aid? Or should they be left to fend for themselves in the free market, operating Independent stations where they could, relying on commercial concessions where they had to?

Once again, Cooperators and Independents hastily mobilized, as they had done when the Wilbur Committee convened five years before. The National Committee on Educational Broadcasting (NCER) managed the case for the Independents, mixing arguments for reserved channels with general appeals for government assistance.

The commercials countered with statistics showing that they were already devoting huge proportions of their time (Paley of CBS estimated 70 percent) to public-interest broadcasting. NBC President Merlin Aylesworth introduced Freeman Gosden (Amos) and Charles Correll (Andy) to the FCC as "philosophers to the American people," and the pair dutifully testified that they instructed their fans with tips on taxes and tooth care.

For the networks and the National Association of Broadcasters, the FCC hearings held one hellish month. Floyd W. Reeves, director of personnel for the Tennessee Valley Authority, stunned observers by recommending that the federal government "own and operate a national system of radio stations," chiefly "for the purposes of adult education. Here was the commercial broadcasters' nightmare: A proposal for an American BBC, coming from a government agency that competed with the power industry, a major patron of the broadcasting business. But that subversive specter quickly dissolved when the TVA chairman wired the FCC to repudiate Reeves's testimony. The agency backed the use of radio for education, the TVA chairman explained, but it believed that "all such programs should be under non-governmental and nonpartisan control and direction."

Finally, the FCC appeared less impressed by visions of government networks or the philosophy of Amos 'n' Andy than by the potentials of Cooperation. Back in 1929, when federal regulators had last showed any signs of wanting to protect radio education, Cooperation had been more a promise than a practice. By contrast, the 1934 inquiry heard abundant testimony on Cooperation as a vital force in the broadcasting world, most of it presented by NACRE, the rest by industry spokesmen. Tyson and his colleagues made no attempt to whitewash commercial broadcasters, but neither did they reveal the record of behind-the-scenes frictions that were then eroding the NACRE experiments in Cooperative programming.

Idealistic fringe: In effect, the NACRE presentations nearly "balanced" the critical testimony of the National Committee on Education by Radio. The net result of the 1934 hearings was to picture Independent educational broadcasters as sincere but disorganized idealists, skirmishing on the fringes of the industry, while portraying Cooperation as the disciplined march of the future.

This, in any case, was the way the FCC interpreted what it had heard. In its report to Congress, dated January 1935, the FCC observed that many educators had spoken against reserved channels "hoping thereby, to protect the present cooperative effort being carried on between the commercial stations and nonprofit organizations." Concluding that "the interests of the nonprofit organizations may be better served by the use of existing facilities... than by the establishment of new stations," the FCC pledged to promote "cooperation in good faith by the broadcasters."

NCER Secretary Tracy Tyler called the FCC report "a straddle—a device for killing time while the commercial interests become more firmly entrenched."

Whatever the FCC's motives, clearly NACRE and Cooperation had carried the day. Instead of intervening in defense of educational stations, the federal authorities would take up the NACRE mission of matchmaking between educators and commercials. To that end, the FCC created a 40-member Federal Radio Education Committee (FREC) under the chairmanship of Commissioner of Education John W. Studebaker. Levering urged funding by the Rockefeller Foundation and NACRE's chief benefactor, the Carnegie Corp. Carnegie had special reason to hope that the FREC would be friendly to its ideas: Studebaker had first made his mark in adult education with a Carnegie-funded project he had engineered while he was superintendent of schools in Des Moines.

Harold McCarty of Wisconsin's WHA, president of the National Association of Educational Broadcasters, reflected the Independents' skepticism about the new FREC when he told a colleague that the first meeting was pretty disappointing and discouraging. Discussion veered away from what I regard as some of the vital issues calling for Cooperation and centered upon some things that are fairly harmless and not of pressing importance."

Renounced militance: Defeated and exhausted, the militant founders of NCER gave up the reigns to new officers. Under the leadership of Arthur Crane, president of the University of Wyoming, NCER briefly championed a "parallel public broadcasting system," to be operated by the government, that would "supplement, not supplant" private industry. But this proposal was resisted by conservative Independents, like officials at Ohio State, who argued for going along with the FCC's new emphasis on Cooperation. Crane gave in. NACER renounced the confrontational tactics of the ear-
In 1930s, and lobbied politely for an innocuous system of councils to produce programs for airing by existing stations—a plan not likely to upset anyone in the industry. Harold McCarty told Crane that he was "disappointed to see how the objective of supporting the effort to acquire educational broadcasting facilities had been subordinated" in NCER's program. 

But the new wave proved irresistible. NCER's official historian noted that the organization finally "accepted the status quo in broadcasting, and stood ready to cooperate both with the FREC and the commercial broadcasters in constructive measures for the improvement of the American System." It was a measure of NCER's retreat from its origins that this historian, hired by NCER shortly before it folded in 1941, was Frank Ernest Hill, a writer who had long been affiliated with NACRE.

The new emphasis on accommodation was celebrated in a National Conference on Educational Broadcasting, organized by NACRE but co-sponsored by NCER, FREC, and other groups in December 1936. W. W. Charters, a veteran of the Wilbur Committee, applauded the "spirit of good will" that reflected the promoters' desire "to avoid controversial issues." Commissioner of Education Studebaker extolled the networks for their contributions to the latest Cooperative experiment, a Washington-based Federal Radio Project that would produce several impressive series over the next few years.

In Chicago, the fortunes of Cooperation were revived by a University Broadcasting Council that pooled the resources of seven local stations with those of the universities of Chicago, Northwestern and DePaul. Operating on Rockefeller and Carnegie grants, the Council was broadcasting 30 hours per week of educational programming by the spring of 1937. Meanwhile, the FREC was planning a series of expensive research studies and busily advocating reconciliation between educators and commercial radio.

All this upbeat activity was deceptive. The FCC verdict of 1935 gave the decision to Cooperation. The true victors were the commercials. With the threat of government intervention finally dispelled, the rising creed in educational broadcasting placed less emphasis on Cooperation than on the slogans of "the American System," aimed at preserving private control of broadcasting facilities.

Flag-waving: Happily contrasting the free enterprise basis of American radio with European state ownership, RCA President David Sarnoff told the 1936 National Conference that "we cannot have a controlled radio and retain a democracy." William Paley of CBS virtually repeated Sarnoff's speech at the 1937 National Conference, warning that "he who attacks the fundamentals of the American system attacks democracy itself." It remained for the FREC to swell this self-congratulatory chorus by explicitly identifying Cooperation with "The American Way," rooted firmly, as Studebaker noted, in private property.

In 1939, Harold Engel of Wisconsin's WHA complained to a colleague that "the propaganda campaign carried on by the 'industry' to entrench the 'American System'" was "aimed at an ultimate commercial monopoly." Whether or not there was conspiracy afoot, during the late 1930s patriotic capitalism swallowed Cooperation, and the FREC found itself tagging along behind the flag-waving networks. The networks made some notable strides in public affairs programming, but most of them were in-house initiatives rather than Cooperative projects shared with independent educators. NBC introduced the Town Meeting of the Air, a lively debate show, in 1935. Three years later CBS invented The People's Platform, a lighter version of the Chicago Round Table in which experts talked issues with celebrities and "men-in-the-street." In 1942, NBC upped the ante on the old American School of the Air by launching a University of the Air. The networks also ornamented their staffs with prominent educators. NBC landed the services of James Rowland Angell, ex-president of Yale, as its "educational counsellor" in 1937, CBS hired the adult educator Lyman Bryson in 1938. But none of this changed fundamental network attitudes toward educational programming. According to Bryson, the CBS Board of Adult Education had many first-rate members (including several ex-directors of NACRE), but met only once a year and eventually "died of malnutrition." One of the CBS Board's few achievements was to propose a highbrow Great Books program called In the Hall of Learning, which went on the air in 1941. Bryson recalled that when the program's first moderator, a college president, quarreled with the CBS program department on scholar vs. showman issues, "naturally the showman had to win." Eventually Bryson, a CBS employee, took over as the program's director.

The truth was, Tyson later admitted, that the industry had "worn a smashing victory" in 1935, a victory that supposedly committed it to cooperate with educators but actually freed it from FCC pressure to honor its commitments.

Denouement: The heady toasts to a new era of mutual understanding prefaced many speeches but few on-the-air accomplishments. One by one the organs of Cooperation faded from the scene. Chicago's University Broadcasting Council fell apart in 1938 when the University of Chicago decided that its partners weren't pulling their weight. The Federal Radio Project produced some well-crafted series on NBC and CBS, despite scheduling shifts like those that had plagued NACRE shows; but Congress killed the Project's appropriations in 1940. The second National Conference on Educational Broadcasting, held with much fanfare in 1937, proved to be the last. The FREC sponsored pioneering radio research, but as George H. Gibson has remarked, it "never got around" to its primary task of fostering more Cooperative broadcasting. Critics charged that by creating the FREC, the FCC mostly pigeonholed its responsibility for overseeing educational radio. In any case, the FREC failed to survive World War II.

The ultimate fate of Cooperation might have been read in the rapid denouement of NACRE. With its Carnegie support running out and the FREC pledged to pick up the torch for Cooperation, NACRE scaled down its program in 1936. Tyson, by now thoroughly disillusioned, recommended that NACRE quit national production work and instead stick to informational services. A half-year later he submitted his resignation and urged that NACRE turn over its portfolio to the FREC. By the start of 1938, Tyson was installed in a college presidency (the ceremony was carried over NBC) and NACRE was a collection of forgotten files.

Freed of his duties as a go-between, Tyson revealed an unexpected condor. He continued to tread lightly on the industry and to flog NCER. In a preface to a NACRE-sponsored survey of educational stations that came out in 1937, Tyson pinned the blame for the Independents' troubles on a Philistine public: "If the American people have not risen to a level where they regard broadcasting as a cultural opportunity, they cannot expect either an industry or their government to regard it." But in the same year, Tyson began to criticize the FCC as well. Declaring that only a "royal commission" of elite citizens could set American educational radio on a firm footing, Tyson implied that it was already too late to undo the conciliatory policies of a NACRE to have much effect. During the period 1930-1936, Tyson told the soon-to-ex-
pursue NACRE Board, "habits were formed in American radio and patterns were set. If during these evolutionary stages foremost educators in this country could have been a party to the formation of plans and had been welcomed in the councils of the broadcasters, and vice versa, there is no doubt that the structure of American radio would be different today from the form we now observe.*

Fatal inertia: What Tyson neglected to say was that NACRE had been organized precisely to foster joint planning by industry and academy. Failing in that function, but succeeding by its rhetoric, NACRE covered up the fatal inertia in American educational radio and thus helped to fashion the status quo that Tyson deplored.

As Cooperation was coming to a dead-end, the movement for independent educational broadcasting showed fresh signs of life. James L. Fly, an antitrust crusader, who had been general counsel of the TVA, brought vigorous pro-education views to the chairmanship of the FCC. In January 1938, the FCC suddenly reversed its past policies by reserving for educational stations 25 high-frequency AM channels. Two years later, impressed by testimony marshaled by Commissioner of Education Studebaker, the FCC reserved five of the new FM channels for educators. Only a few school boards and colleges had applied for FM licenses before Pearl Harbor disrupted planning for new outfits. But even during the war, Fly and Studebaker exhorted educators to take advantage of the bountiful vistas that FM would open up for educational broadcasting when peace returned. In January 1945, Tracy Tyler, now editor of the Journal of the Association for Educational Radio, reminded his readers that they had "missed the boat in the early days of AM broadcasting" and pleaded with them not to squander this second chance. Finally, in 1945-1946, the FCC reaffirmed its faith in noncommercial radio by reserving 20 FM channels for educational stations.65

After the war, academics moved with growing confidence into FM radio, and then into the new domain of television. A generally supportive FCC, the postwar passion for schooling, and vigorous lobbying by the National Association of Educational Broadcasters, all contributed to this expansion. Cooperation with commercial stations was neither trusted nor needed any longer. The future of educational broadcasting clearly lay with the hundreds of independent stations that then occupied channels in the enlarged broadcast spectrum.

Yet, aftereffects lingered from the alliance with Cooperation. The FM frontier and friendly regulators gave educational broadcasters new homesteads, but they could not recover the ground that had been lost to the commercials under the aegis of Cooperation. "The industry emerged from the war commanding the lion's share, not just of broadcasting resources but of the power to define the medium's purposes and potentials in the public mind," an opinion survey conducted for the NAB by Paul Lazarsfeld in 1946 confirmed the commercials' ideological triumph. The American public liked commercial radio as it was. Lazarsfeld concluded, largely because it was so well adapted to the nation's "general stage of intellectual development."66

The challenge of advancing listeners' "intellectual development," of inviting them to learn, would be left to the noncommercial. But the noncommercial would remain a sideshow to the business' Big Top. Levering Tyson was right. The heyday of Cooperation, the early 1930s, fixed the essential "habits and patterns" of American radio—habits and patterns that consigned public broadcasting to the underfunded idealism that has been its hope and its cross ever since.

Notes


However, in this narrative, I have tried to advance a new thesis, that the phantom of Cooperation was a potent cause of radio educators' defeats during the '20s and '30s. To substantiate my argument, I have assembled evidence from many underutilized collections in Washington, Madison, New York, Chicago, Ithaca and Columbus. In the following notes, I have chosen to stress these less familiar materials rather than the secondary sources that already well known to students of Broadcasting history.


3. Frost, "The Licensing of Educational Broadcasting Stations," p. 41

4. WHA Radio Archives, Box 34: Logs and Schedules, 1930-34, State Historical Society of Wisconsin, Madison; "Radio Station Lecture Broadcasts," Louis C. Baschever Papers, Ohio Library, Cornell University, Ithaca.


19. For a good discussion of the meaning and evolution of corporate liberalism, see James A. Weinstein, The Corporate Ideal in the Ladder State, 1890-1918 (Beacon, 1968).


22. Ray Lyman Wilbur to Herbert Hoover, May 4, 1923, Federal Communications Commission Files, Box 144, RG 173, National Archives, Suitland, Md.; Pacific Western Broadcasting Federation Prospectus, Advisory Committee Files, Box 30, National Archives, Washington.

23. Perry, Radio in Education, pp. 56-60; Frank Ernest Hill, Tune In for Education: Eleven Years of Education by Radio (National Committee on Education by Radio, 1929), pp. 3-4.


25. Minutes of the Meeting of the Advisory Committee on Education by Radio, June 13, 1929, in Report of the Advisory Committee, pp. 8-10. Shipper is identified as "a friend of Perry of the Payne Fund" in W. W. Charters to W. J. Cooper, June 24, 1929, Advisory Committee Files, Box 36, National Archives, Washington. A copy of a "National University of the Air (The Shipper Plan)" is contained in Box 32, the Advisory Committee Files.


27. Levering Tyson, Education Tunes In: A Study of Radio Broadcasting in Adult Education (American Association for Adult Education, 1930), pp. 9, Commissioner (W. J. Cooper) to Dr. F. P. Keppel, July 2, 1929, Advisory Committee Files, Box 36, National Archives, Washington.

28. Tyson, Education Tunes In, pp. 10-11.


32. "Report of the Advisory Committee on Education by Radio, Feb. 15, 1930," in Report of the Advisory Committee, pp. 66-76. For a copy of the unedited stenographic notes of the Committee’s crucial Dec. 30, 1929 meeting, see Box 36 of the Advisory Committee Files.

33. Shipper to William John Cooper, Jan. 10, 1930, and Feb. 13, 1930; Cooper to Secretary (Wilbur), Jan. 13, 1930, Commissioner (Cooper) to Secretary (Wilbur), attached to letter of Feb. 13; all in Advisory Committee Files, Box 36, National Archives, Washington.

34. Tyson, Education Tunes In, pp. 11, 57-58.

35. Ibid., Reminiscences of Lyman Bryson, Radio Pioneers Project, Oral History Collection, Columbia University.

36. Tyson, Education Tunes In.


38. Perry’s close ties with Cooper are suggested in William John Cooper to Livingston Farrand, Sept. 24, 1930, Livingston Farrand Papers, Ohio Library, Cornell University. For evidence of Perry’s work as behind-the-scenes agitator for government support of educational radio, see exchanges between Perry and E. C. Giffin, South Dakota Superintendent of Public Instruction, in Advisory Committee Files, Box 32, National Archives, Washington.


40. Hill, Tune In for Education, pp. 16-19.


44. Armstrong Perry to Ella Philip Chandall, Jan. 8, 1931, Advisory Committee Files, Box 32, National Archives, Washington.


49. William S. Gregson to B. B. Brackett, Feb. 25, 1932, NAEB Papers, Box 4a, State History Society of Wisconsin.


53. Minutes of the Meeting of Board of Directors of NACRE, Feb. 10, 1937, Farrand Papers, Box 25, Ohio Library, Cornell. Tyson’s version of the events attending the founding of NACRE was borrowed almost verbatim by Hill for his Listen and Learn, the fullest account of NACRE activities.


56. W. C. Stone to Farrand, June 17, 1926; Farrand to Owen D. Young, Feb. 28, 1927; Delegate S. Kimball to Young, April 12, 1934; and Farrand to Levering Tyson, Jan. 26, 1931; all in Farrand Papers, Box 25, Ohio Library, Cornell.
57. Correspondence of Hutchins with Owen D. Young and Everett Case, February 1932, in Hutchins Papers Addenda, Box 100, University of Chicago Archives; Minutes of Special Meeting of the (University of Chicago) Radio Committee, Feb. 13, 1932, Allen Miller Papers, State Historical Society of Wisconsin; Hutchins to Tyson, April 10 and April 17, 1933, Hutchins Papers Addenda, Box 99, University of Chicago Archives.


59. The April 1929 memorandum of understanding that led to the establishment of NACRE contained the provision that the new director was "to be acceptable both to the National Broadcasting Company and to the Association." [Cartwright, "Memorandum on Studies and Experiments in Radio Education."]

60. On the National Civic Federation, see Weinstein, The Corporate Ideal in the Liberal State.


70. Reed, "Report of Committee on Civics and Government," pp. 49-51; Four Years of Network Broadcasting, p. 10.


72. Minutes of Meeting of Radio Committee, March 10, 1931, Allen Miller Papers, State Historical Society of Wisconsin; "Radio at the University," Miller Papers.

73. Allen Miller to Charter Heslep, July 15, 1933, Miller Papers, State Historical Society of Wisconsin.

74. Minutes of the Meetings of Radio Committee, April 14, 1931; November 1931; December 1931; June 8, 1933; all in Miller Papers.

75. Minutes of Meeting of Radio Committee, February 1932, Miller Papers.


77. Tyson to Hutchins, April 10, 1933, Hutchins Papers Addenda, Box 99, University of Chicago Archives.


80. NACRE Subcommittee Report on National Programs, attached to Tyson to Hutchins, May 15, 1936, Hutchins Papers Addenda, Box 99, University of Chicago Archives.


82. Four Years of Network Broadcasting, pp. 52-58, 69-70.

83. Ibid., pp. 73, 49, 75.


86. Digest of Hearings, FCC Broadcast Division, Under Section 307(c) of the Communications Act of 1934: October 1-20, November 7-18, 1934, pp. 123, 130, mimeograph, FCC Library, Washington, D.C.


88. Report of the FCC to Congress Pursuant to Section 307(c), pp. 5-6; Hill, Tune In for Education, pp. 67-73.

89. NAEB Bulletin, Feb. 18, 1935, in NAEB Papers, Box 1a, State Historical Society of Wisconsin.

90. Reminiscences of Lyman Bryson, Radio Pioneers Project, Oral History Collection, Columbia; correspondence between Lyman Bryson and Morse Cartwright, 1932-33, in Lyman Bryson Papers, Manuscript Division, Library of Congress.

91. Harold McCarty to W.I. Griffith, Feb. 28, 1936, NAEB Papers, Box 1, State Historical Society of Wisconsin.


93. Crane's new, softened program for NCER was presented in "An American Public Radio Board Plan," Education by Radio 6 (May 1936), pp. 13-15; McCarty's complaint appears in a letter to Crane, Jan. 6, 1938, in NAEB Papers, Box 1, State Historical Society of Wisconsin.


Manuscripts and Archives, New York Public Library. On the
aims and atmosphere of the FREC, see also The Service Bulletin of
the FREC, the first number of which appeared in November
1939.

98. Harold A. Engel to Frank Schooley, June 7, 1939, NAEB
Papers, Box I, State Historical Society of Wisconsin.

99. Fragmentary reflections of Angell's career with NBC may
be found on microfilm in the James Rowland Angell Papers,
Group No. 2, Series No. 11, Box No. 19, Yale University Library.

100. Reminiscences of Lyman Bryson, pp. 114-117, 159-162.

101. Tyson, "The Need for Standards and How They Might Be

102. On the demise of the University Broadcasting Council,
Minutes of Radio Committee Meeting, Feb. 14, 1938, Allen
Miller Papers, State Historical Society of Wisconsin; and Judith
C. Walker, Radio The Fifth Estate, second edition (Houghton
Mifflin, 1950), pp. 303-304. For criticism of the FREC, see
George H. Gibson, Public Broadcasting: The Role of the Federal Gov-
and Learn, pp. 137, 200.

103. Tyson, Preface to S. E. Frost, Jr., Education's Own Stazioni:
The History of Broadcast Licences Issued to Educational Institutions
(University of Chicago, 1937), pp. viii-ix.

104. Tyson, "The Need for Standards," Educational Broadcas-
ting 1937, pp. 78-79; Director's Report to the NACRE Board, Feb.
10, 1937, in Farrand Papers, Box 25, Qlin Library, Cornell.

105. Studebaker's role in organizing support for reserved FM
channels is described in The Service Bulletin of the FREC 2 (April
1940):1-2. The statement by Tracy Tyler is from "New Radio De-
velopments Challenge Educators," Journal of the Association
for Education by Radio 4 (January 1945):61. Gibson, Public Broadca-
sing, gives the fullest account of the events that turned around
FCC policy on reserved channels in the period 1938-1946.

106. Paul Lazarsfeld and Harry Field, The People Look at Radio
(University of North Carolina, 1946), pp. 72-73.