Radio broadcasting came into the world like a lost child born too soon and bearing the birthmark of a world culture which may never be achieved.

Her begetters, the physicists and engineers, didn’t know what to make of the creature. That she was wistful for a world not yet born did not occur to them. Indeed her begetting was in a sense accidental. They had been thinking of something else. And as for bringing her up, that was scarcely their affair. Men of science are notoriously neglectful of their technical progeny. Observing this neglect an American historian, Vernon Parrington, was moved to remark that “science has become the drab and slut of industry.”

Radio had to belong to somebody. She couldn’t belong to nobody. So one day Business picked her up off the street and put her to work selling gargles, and gadgets, toothpaste and stocks and bonds. What else could have happened? Neither art nor education had the prestige or the resources to command the services of this new instrument of communication, even if they had had anything important to communicate, which may be doubted. Government? But in America government was business and business was government to a far greater degree than in any other country. So that the development of the “art and science of radio broadcasting” became in America a business enterprise, instead of a government monopoly as in England and elsewhere in Europe.

About two years ago, Dr. Lee De Forest, one of the pioneers of electronic science, and by general concession one of the begetters of radio, encountered the lost child in his travels and was inexpressibly shocked:

“Why should any one want to buy a radio or new tubes for an old set?” declaimed the irate inventor, “when nine-tenths of what one can hear is the continual drivel of second-rate jazz, sickening crooning by degenerate sax players, interrupted by blatant sales talk, meaningless but maddening station announcements, impudent commands to buy or try, actually imposed over a background of what might alone have
been good music? Get out into the sticks, away from your fine symphony orchestra pickups, and listen for twenty-four hours to what eighty per cent of American listeners have to endure! Then you’ll learn what is wrong with the radio industry. It isn’t hard times. It is broadcasters’ greed—which is worse. The radio public simply isn’t listening in.”

One wonders why Dr. De Forest should have been so surprised to encounter this Bedlam on the air. Surely he was familiar with its terrestrial equivalent. At the moment, in fact he was engaged in fighting the Radio Corporation of America in the courts.

The vulgarity and commercial irresponsibility of advertising-supported broadcasting have been greatly complained about. Yet there is a sense in which the defenders of the American system of broadcasting are right. Radio is a new instrument of social communication—that and nothing more. In and of itself it contributed nothing qualitative to the culture. It was right, perhaps, or at least inevitable that it should communicate precisely the pseudoculture that we had evolved. Can any one deny that it did just that? The culture, or pseudoculture, was acquisitive, emulative, neurotic and disintegrating. Our radio culture is acquisitive, emulative, neurotic and disintegrating. The ether has become a great mirror in which the social and cultural anomalies of our “ad-man’s civilization” are grotesquely magnified. The confusion of voices out of the air merely echoes our terrestrial confusion.

This confusion becomes particularly apparent when attempts are made to challenge exploitation of radio by business. In the van of such attacks are the educators, marching under the banner of “freedom” and “culture” and invoking such obsolete political concepts as “States’ Rights.” Allied with the educators is the Fourth Estate. The appeal is to “public opinion,” expressed and made effective through the machinery of representative government in a political democracy where one man’s vote is as good as another’s. But we have already had occasion to examine the status of the Fourth Estate and of Education in our civilization. The press is essentially an advertising business and as such a part of the central acquisitive drive of the culture. Education is a formal, traditional function which becomes increasingly peripheral, decorative and sterile when it adheres to its ideals of disinterested “objectivity” and increasingly pragmatic and vocational when it attempts to relate itself to the acquisitive realities of business as usual. The press has a vested interest both in the purveying of news and as a medium of advertising; commercial broadcasting chiselled into the advertising income of the press and latterly began to compete in the field of news purveying. Hence the interest of the press in “reforming” the radio was strictly competitive.
and pecuniary in quality although, of course, the appeal to public opinion was not made in those terms. It may fairly be alleged that the interest of the educators was also, and not improperly, a job-holding and job-wanting interest, although again the appeal to public opinion was not made in those terms. As for the artists, the writers, poets, dramatists and critics, who might claim a modicum of service from Radio—well, art is scarcely an organized and independent estate in an acquisitive society. The artists tend either to accept service as the cultural lieutenants of business, to retreat into ivory towers or to become frank revolutionaries claiming allegiance to a hypothetical future “classless culture” and to the “militant working class” also more or less hypothetical at the present stage of the social process.

The American system is quantitatively successful as judged by the rapid extension of service—some kind of service—to about 15,000,000 American homes. Today the potential radio audience numbers over 60,000,000. In less than twelve years radio has become a cultural indispensable and has introduced important new factors into the social and political process.

The bill for this service is paid first by the set owners. Mr. H. O. Davis of the Ventura Free Press estimates the annual amount of this bill, covering the cost of power, new tubes, repairs and replacements of radio sets, at $300,000,000. The same authority estimates that the maximum annual expenditures of all broadcasting stations and networks, including the operation of enormously expensive advertising sales departments, is not more than $80,000,000 and that $50,000,000 covers the total expense for the actual production and transmission of all programs.

The estimates are based on the technical and economic status quo of the “art and science of radio” as developed by business. Mr. Davis undertook a reconnaissance study of this status quo, which took the form of an analysis of a typical day’s output transmitted to the listening public by 206 American broadcasting stations. The following is quoted from his summarized findings:

The average number of interruptions for sales talk during a total of 2365 hours of broadcasting, sustaining programs included, was 5.28 per hour per station.

The average number of interruptions for sales talks during 1195 program-hours sponsored by advertisers was 9.36 per hour. (Interruptions for station announcements are not included in these figures.)

On 1195 hours of programs sponsored by advertisers the sales talks consumed 174.7 hours, or 14.61 per cent of the total program time, almost three times the maximum permitted on Canadian programs.

The number of “spot ads,” sales talks unaccompanied by entertainment supplied by the advertiser, totaled 5092 and consumed 57 hours. Canada prohibits the broadcasting of “spot ads.”
Out of a total of 2365 broadcasting hours 789 hours, or 32.26 per cent, were consumed by the playing of phonograph records. “Electrical transcriptions”—specially made records—consumed 30 hours or 4.82 per cent of the total broadcasting time.

A little more than 75 per cent of the entire number of hours was devoted to music of some kind.

All musical programs consumed 1845 hours.

On the day of the survey the 206 stations under observation broadcast $9\frac{3}{4}$ hours of symphony-orchestra music, devoting .6 per cent of the total music time to this type of entertainment. The same number of hours was filled by the output of so-called haywire or hill-billy orchestras.

Dance orchestras, on the other hand, filled 388 hours or 21 per cent of the total music-time with jazz.

Other instrumental and vocal music of the popular variety, crooners included, occupied 1219 hours, two-thirds of the total music-time.

From the quantitative standpoint vaudeville is next in importance to music. It occupies almost half of the time not given over to music. Vaudeville includes reviews, jinks, dramatic sketches, jamborees and similar mixtures of entertainment.

The third largest portion of all broadcasting time is taken up by sales talks of advertisers, which consume 8.5 per cent of all time on the air, including both sponsored and sustaining time. In fact, commercial sales talks consume as much of the broadcasting time as all news broadcasts, all religious and political addresses and two-thirds of the lectures put together....

On a typical day the average station will devote three-quarters of its programs to some kind of musical presentation, but the highest class of symphony-orchestra music will be heard during one-half of one per cent of the total music time. And when music is on the air, four programs out of ten will consist of the playing of phonograph records. More than five times every hour the program will be interrupted for the delivery of a sales talk lasting in excess of one minute. In addition there will also be four breaks per hour in the program continuity for station announcements, making a total of nine interruptions per hour.

The reader, who is also probably a radio listener, will be able to dub in the sounds that go with this statistical picture: the bedlamite exhortations and ecstacies, the moronic coquetries and wise-cracks, the degenerate jazz rhythms, punctuated by the ironic blats and squeals of a demon from the outer void known as “Static.” An evening spent twiddling the dials of a radio set is indeed a profoundly educational experience for any student of the culture. America is too big to see itself. But radio has enabled America to hear itself, and what we hear, if closely attended to, supplies important clues to the present state of the culture.
When we turn to the educators who have struggled for the uplift of radio what we find is merely further proof of the cultural disintegration which radio makes audible. It may be said without serious exaggeration that the problem of the controlling and administering of radio broadcasting is approximately coextensive with the problem of controlling the modern world in the economic and cultural interests of the people who inhabit it. Granted that the radio is socially and culturally one of the most revolutionary additions to the pool of human resources in all history—how does one go about integrating it with a civilization which itself functions with increasing difficulty and precariousness? Radio is potentially, even to a degree actually, an instrument of world communication. But the interests of the world population divide along racial, national and class lines. If these terrestrial conflicts could be reconciled, presumably we should have harmony on the air—even conceivably the communication of a world culture. As it is, the great mirror of the other not only reflects the conflicts of class and nation and race, but serves to expand the scale and increase the intensity of these conflicts.

An adequate study of these conflicts, as they are reflected in the current struggle for control of the microphone, would require a book in itself. We have space here only for a brief description of what happens when education and the arts encounter business-as-usual as represented by the “American system of broadcasting.”

The records of the Federal Radio Commission show that in May, 1927, when the present radio law went into effect, there was a total of 94 educational institutions licensed to broadcast. By March, 1931, the number had been reduced to 49. According to the National Committee on Education by Radio, 23 educational broadcasting stations were forced to close their doors between January 1 and August 1, 1930. At present, out of a total of 400 units available to the United States, educational stations occupy only 23.16 units, or one-sixteenth of the available frequencies. In short, educators and educational institutions which desire to make independent use of the radio as an educational instrumentality are facing strangulation. They must either fight or acquiesce in the present trend, which, if continued, will give the commercial broadcasters complete control of the air—the educators being invited to feed the Great Radio Audience such education as the commercial stations consider worth broadcasting, at hours which do not conflict with the vested interests of toothpastes and automobile tires or with the careers of such established radio personalities as Amos ‘n’ Andy, Phil Cook and Lady Esther.

The militant wing of the educators has chosen to fight and was organized as the National Committee for Education by Radio. Represented on the committee are the National Education Association,
the National Council of State Superintendents, the National Association of State Universities, the Association of College and University Broadcasting Stations, the National University Extension Association, the National Catholic Educational Association, the American Council on Education, the Jesuit Education Association and the Association of Land Grant Colleges and Universities. Joy Elmer Morgan, editor of the *Journal of the National Education*, is chairman of this committee. Its work is financed by the Payne Fund.

Let us turn now to the battalions of the opposition by which these educational militants are confronted. On June 1, 1931, there were in the United States 609 licensed stations divided in a ratio of one to sixteen between the education and the commercial broadcasters. The strongest of the latter group are affiliated in two great chains with the National Broadcasting Company and the Columbia Broadcasting Company. N.B.C. is a one-hundred per cent owned subsidiary of the Radio Corporation of America, which manufactures radio equipment and pools the patents of General Electric, Westinghouse and American Telephone and Telegraph. Obviously the educational militants are facing a closely affiliated group representing the dominant power and communications interests of America. N.B.C. and Columbia represent big business, and what does big business care for education and culture? But big business cares a great deal, insist the commercial broadcasters, citing their cultural sustaining programs and their repeated offers of free time on the air to educators. There is, in fact, a group of educators who have accepted the existing commercial set-up of broadcasting to the extent at least of working with it and through it. They too are organized. The National Advisory Council on Radio in Education is financed jointly by John D. Rockefeller Jr. and the Carnegie Corporation. Its president is Dr. Robert A. Millikan and its vice president is Dr. Livingston Farrand, President of Cornell University.

Two years ago the educational militants were engaged in propaganda for the Fess Bill, which would have assigned 15 per cent of the broadcast band to educational broadcasting by educational stations. Latterly they have turned more and more to the demand for congressional investigation of radio with the hope that a congressional committee would recommend government ownership and operation of radio facilities as in England and more recently in Canada. The conservatives, as represented by the National Council on Radio in Education, abstain entirely from political propaganda and lobbying. The objectives of the council, as stated in its constitution, emphasize fact-finding and fact-dissemination; it undertakes to “mobilize the best educational thought of the country to devise, develop and sponsor suitable programs, to be brought into fruitful contact with the
most appropriate facilities in order that eventually the council may be recognized as the mouthpiece of American education in respect to educational broadcasting.” Officially it still suspends judgment on the question of private versus public ownership and operation of broadcasting facilities, remarking that, “as yet no one is prepared or competent to say whether or not this [the announced educational program of the council] will eventually force the council to discuss the mechanisms necessary for educational broadcasting and whether their ownership should be in commercial hands, in the hands of educational institutions, or in the hands of non-profit co-operative federations, or perhaps in all.” That statement was written four years ago and the council is still busy “finding the facts” by rigorously “objective” scientific procedures, meanwhile sponsoring politically innocuous educational broadcasts on free time contributed by the commercial chains.

In May, 1933, the National Council on Radio in Education held its annual assembly. The Director of the Council, Mr. Levering Tyson, delivered a report discussing various activities in broadcasting, research and publication and urged the establishment of a National Radio Institute. The writer participated in the discussion of this report and of the prepared speeches which followed it, which are published in *Radio in Education, 1933*. I was frankly puzzled by the attitude of the educators as revealed at this conference.

In this view business, including the business of selling toothpastes, laxatives, stocks and bonds, etc., by radio is assumed not to be educative. The advertisers’ sales talks (doctrinal memoranda in the Veblenian terminology) and the jazz, vaudeville and other entertainment by which they are made more palatable—all this is assumed not to be educative. But obviously this business expresses the central acquisitive drive of the culture. Obviously it influences the lives of the radio listeners infinitely more than the relatively microscopic amount of “education” which the council had been able to put on the air—more in all probability than the total output of American class rooms and lecture platforms. Yet, by definition, it is not “education,” which is conceived of as a meliorative something added to a secular process which may be profoundly diseducational in that it contradicts and opposes at practically every point the attitudes and ideals of the educator.

In arguing for a more realistic and more vital conception of the educational function the writer pointed out that the end result of American commercial broadcasting, as we have it, is demonstrably diseducational; that radio advertisers are not interested in educating the great radio audience in any true sense. What really happens is that the advertisers are interested solely in promoting the sale of

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1 *Education by Radio 3, no. 12 (1933).*
products and services. Hence they tend to exploit the cultural inadequacies of the radio audience and its moral, ethical and psychological helplessness.

At this meeting, Mr. Henry Adams Bellows, LL.D., vice president of the Columbia Broadcasting Company, made the usual formal offer of free time on the air to the assembled educators. At the moment it happened that a group of Communist “fellow-travelers,” organized as the League of Professional Groups, was conducting a series of public lectures under the general title “Culture and Capitalism.” The services of this group, which included some well-known teachers and writers, were offered without charge to Mr. Bellows but, as might have been expected, these radicals clamored in vain for “the freedom of the air.”

The issue of censorship was again raised at this meeting after Mr. Hector Charlesworth, chairman of the Canadian Broadcasting Commission, had declared that Communists and communist sympathizers were permitted on the air in Canada. The position of the American commercial broadcasters, as stated repeatedly by Mr. Bellows and others, is that the American system provides more effective freedom for minority groups than the system of government ownership as operated in England and in a more modified form in Canada. The contention, of course, finds little support in the experience of Communists and others who recurrently make application in vain to the educational directors of the major chains.

It is difficult to write about the problem of radio censorship since all our eighteenth century concepts of “freedom” are quite evidently made obsolete by the technical nature of the instrumentality. Some form of censorship and some form of international control is necessary. The domestic problem is simplified under a political dictatorship. Both Mussolini and Hitler promptly seized complete control of radio upon assuming power and used it to consolidate and extend their rule. At the moment Hitler’s use of radio, which knows no political boundaries, is perhaps his strongest weapon in his struggle to bring Austria under the Nazi hegemony. It is safe to predict that in the next great war, radio will constitute a major offensive weapon, second only in effectiveness to the airplane.

Meanwhile, in America, the confusion brought about by our various and sundry forms of censorship, both overt and concealed, is almost indescribable. Miss Lillian Hurwitz, in a study of radio censorship prepared for the American Civil Liberties Union, has no difficulty in showing that despite the prohibition of censorship embodied in our present radio law, The Federal Radio Commission “has construed the standard of public interest, convenience and necessity as to enable it to exercise an indirect censorship over station
programs.” The very assignment and withdrawal of radio licenses by the commission involves an indirect censorship.

Meanwhile, as Miss Hurwitz abundantly proves, the stations themselves are obliged to operate a systematic censorship, if only to protect themselves against libel suits. They go much further than that, of course. They not only impose their own conception of the “public interest, convenience and necessity” but their own standards of taste, morals and political orthodoxy. They protect their own source of revenue by forbidding radio lecturers to attack radio advertising. When Mr. F. J. Schlink, director of Consumers’ Research, addressed the American Academy of Political and Social Science on the subject of the New Deal as it affects the consumer he was cut off the air by the Columbia Broadcasting Company. Only after the issue was publicly posed by the resulting newspaper publicity, was he permitted a week later to make the same speech over Columbia facilities.

What will emerge from this welter of technical and commercial necessities and political make-believe is quite impossible to predict. Proposals to unify all communications services under a single government control are now before Congress with the President’s endorsement. A non-partisan investigation of the broadcasting system has been repeatedly urged and something of the sort is probably imminent. Meanwhile, however, it should be pointed out that a tightened control of the American Telegraph and Telephone Company would perhaps put the government in a position to audit the wire charges which constitute a heavy proportion of the overhead of the broadcasting chains. It has been widely asserted that these charges are excessive; that both the technical and economic problems of broadcasting could be solved by a combination of “wire and wax.” By “wax” is meant wax records which have been so perfected that an electrical transcription is now practically indistinguishable from an original studio broadcast. By “wire” is meant wire chain hookups, the present cost of which is at present almost prohibitive except for the two major chains. Then also there is an assortment of more or less known technical potentialities, such as wired radio, short wave and micro-wave broadcasting and television, although the latter, according to competent technicians, is at present to be classified as a stock-market development rather than an electronic development.

Taken together these various potentialities make impossible any clear anticipation of what is likely to happen. With this exception however: the trend of both technical and economic developments point to the need of centralized control. This will be particularly true if the Roosevelt Administration is forced, by the failure of the NRA to increase buying power, to go left in the direction of a functional reorganiza-

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tion of distribution. As we shall see later, when we come to discuss
the NRA program with respect to advertising, this cannot be accom-
plished without a huge deflation of the advertising business, affecting
both the press and the commercial broadcasters.

A significant factor in the situation is, of course, Mr. Roosevelt’s
immensely skillful and successful use of radio in building public
support for his administration. On the whole, it would seem only a
matter of time when Mr. Roosevelt, or whoever succeeds him, will
be obliged to say to radio broadcasting, “You’re mine! I need you to
help me rule!” A faint intimation of this rather probable development
appears in the speech of Federal Radio Commissioner Harold A.
LaFount at the 1933 Assembly of the National Council on Radio in
Education already referred to. Commissioner LaFount said:

Educational programs could, and I believe in the near future will, be
broadcast by the Government itself over a few powerful short-wave
stations and rebroadcast by existing stations. This would not interfere
with local educational programs, and would provide all broadcasters
with the finest possible sustaining programs. The whole nation would
be taught by one teacher instead of hundreds, and would be thinking
together on one subject of national importance. Personally I believe
such a plan would be more effective than a standing army.

The commissioner, who in view of his record, can scarcely be
accused of being unfriendly to the commercial broadcasters, was
probably innocent of dictatorial ideas. Yet his language is, to say the
least, suggestive.

A more detailed discussion of the problem of radio is contained in the
writer’s pamphlet “Order on the Air!” published by the John Day Com-
pany.

[NRA refers to the National Recovery Administration.]