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THE ROLE OF THE CRITIC

I am pleased to be here today since this year's meeting of  
the Edison Foundation coincides with the end of my first decade of  
involvement in American education. It is an honor to inaugurate  
my second decade by addressing this distinguished audience. May  
I put in a petition to the Foundation for a place on its agenda  
ten and twenty years from now, God willing?

You may think me unduly pessimistic. Why should I expect  
that twenty years hence, it will still be necessary to advocate  
reform of our schools? Are not the American people beginning  
to see that such reforms are essential if we are to survive as  
a free nation? However, if there is anything I have learned in  
the last ten years, it is the overwhelming power of resistance  
to reform possessed by organized groups with a vested interest in

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the status quo. Educational officialdom is such a group. It has been so successful in resisting needed reforms that we are today in grave danger of being overtaken in science and technology by a nation with a more efficient and rigorous educational system.

Hardly a week goes by without some news item showing Russia moving ahead in scientific knowledge or technology. A leading American mathematician reports the Soviet Union ahead of the United States by ten to fifteen years in the complicated area of accurate rocket control mechanisms--the reason being, Russian leadership in the field of non-linear differential mathematics. Three United States senators return, warning us that the Soviet Union is assuming world leadership in the development of hydroelectric power. A professor of Industrial Management and Engineering discloses Russia's ability to outproduce the West in certain machine tools. These are but a few items appearing in a recent ten-day period.

Official statistics show that in 1957 Russia had a 10% lead in scientific and technical manpower over the United States. The Soviet force, moreover, included 30% more holders of advanced degrees. Because of faster growth rates, official estimates expect the Russians will have a 25% lead in trained manpower by 1961, with an even greater advantage in holders of advanced degrees. Space experts now concede that we are five years behind the Russians.

Yet many American educationists do not appear to see the connection between these scientific advances and the quality of

Russian education. Not long ago one of them complained that it had never been "demonstrated in any way resembling a scientific procedure of thought" that Sputnik reflected a triumph of Russian education! Another urges us not to worry about keeping up with the Russians; "let's keep up with the children." Still another ridicules those among us who are concerned over Russia's more efficient education, and makes the wholly unsubstantiated--and, truth to tell, somewhat ridiculous--claim that the Russians are "worrying themselves sick about us."

One can understand educationist annoyance when Russian achievements are used to show up the mediocrity of our schools. But I am shocked and worried when I see them carelessly misleading the American public on what actually goes on in Russian education. For example, there is the wholly untrue assertion constantly being made by them that Russian schools teach only science and neglect the humanities, while ours are said to give a more rounded education. The fact is that Russian schools devote about as much time to the humanities as to the sciences and mathematics, and a great deal more to both, than do our schools. Again, I constantly come upon assertions that only a tiny fraction, a small percentage, of Russia's children graduate from the ten-year schools while more than 80% of our children go to high school. In the first place, only 55-58% of our 5th graders graduate, as can be seen if one takes the trouble to consult the United States Statistical Abstract. Figures published by the United States Office of Education

show that in 1957 1.6 million Russians graduated from their ten-year school, about 10% more than the number of Americans graduating from high school that year. In evaluating these figures we must keep in mind that while Russia has about 16% more people than we, World War II losses have probably brought her school-age population close to ours. In other words, she graduates about the same percentage from her rigorous ten-year schools as we from our easy high schools. Furthermore, Russia has not yet completed her present program of covering the land with ten-year schools; she is likely to graduate even more children some years hence.

I find such carelessness with statistics unforgivable. Not only is it untrue that only a small percentage of Russian children get a ten-year school education, the education they do get is far better than our children get after twelve years of schooling. This is obvious if one consults the examinations passed by all of these 1.6 million young Russians. These cover an amount of knowledge in mathematics, physics, chemistry, history, literature, the mother tongue, and at least one foreign language, which will rarely be possessed by young Americans unless they have completed two years of a good liberal arts college. Several times more young Russians have learned this by age 17 than young Americans by age 20. These examinations have been translated and published by the United States Office of Education and were therefore available to everyone. They have now also been included in a report of my

testimony on Russian education before the Appropriations Committee of the House of Representatives which will be sent free of charge to anyone who writes to the Committee. I suggest American parents use these examinations as a yardstick by which to measure the achievements of their local schools.

I hope they will not allow themselves to be fooled by the specious argument often made by educationists that what goes on in Russian schools has no relevance for us, since Russia educates her children in order that they may be useful to the state, while we do so in order that our children may have the personal advantages a good education provides. The objective in both cases is to impart knowledge in the humanities, in mathematics and the sciences to a child growing into adulthood and, in the process, to develop his mental capacities. What is relevant for us is that Russia gets a larger percentage of her children through a rigorous course of higher secondary education than any other country, especially our own. She also gets more students to become first-rate scientists and engineers than we are able to do. Therefore, she has a larger pool of trained professionals, and is able to forge ahead of us in important areas affecting national strength and power. This is what is meant when one speaks of the Russian educational menace.

I hope parents will not allow themselves to be fooled by educationist misrepresentation of what critics advocate when they point to Russian educational achievements. Neither I nor other

critics have ever recommended that we take over the Russian educational system; we do urge that we consider Russian educational achievements as a minimum standard for our own educational objectives. We warn that it would be suicidal if we allowed scholastic levels in our schools permanently to drop below this minimum standard. We flatly reject educationist claims, that since ours is mass education it must therefore be mediocre, or that democratic education can never be as good as education in an authoritarian society.

It is an old progressive gimmick to propound an antithesis between democratic and good education, as if the two were mutually incompatible. Not only is it used today to deprecate Russian educational achievement; it has always been the alibi of our educationists when one confronts them with the unquestioned superiority of European educational accomplishments. Of late, however, the critics have been bringing in evidence to prove how phony is this alleged incompatibility of excellence with equal educational opportunities. We now have ample data showing that from the first day the European child goes to school, he forges scholastically ahead of ours.

Recently the Council for Basic Education published a book by Charles H. Schutter and Richard L. Spreckelmeyer, entitled Teaching the Third R. In it, arithmetic textbooks here and abroad are compared in great detail. In view of the frequent accusation made by educationists that children abroad learn by rote, it is

interesting to observe how much emphasis is placed in European schools on developing a "figure sense" in children by teaching them mental shortcuts to problems. In contrast, rote learning is quite prevalent in our own schools, and there is also far more emphasis on memorizing formulae instead of reasoning out ways to solve arithmetical problems. Tables show at what age children reach given levels of arithmetical knowledge. From Ireland to Poland, from Sweden to Italy, in England, France, Germany, Holland, Denmark--throughout Europe in fact--children move ahead so much faster that by the sixth year they are almost two years further along than our own children. This is true not only in arithmetic but in the other two "R's" as well. Rarely does a European child complete his formal education without being able to write legibly and correctly, but many of our college freshmen have to take remedial courses in this simple skill. Nor do normal European children fail to learn to read with ease before they enter their early teens.

Mind you, I am speaking of comparative achievement levels in elementary schools here and abroad. These are free public schools attended by children before they are separated by ability into different secondary schools. Thus, for elementary schooling, the stock argument of American educationists that European education is good because it is class education, and ours must necessarily be inferior because it is mass education will simply not stand up.

In their homogeneous secondary schools, Europeans continue to gain over our children. The abler children who attend higher

secondary schools, in particular, advance much faster than children who take college-preparatory courses in high school here. Abroad, a liberal education comparing favorably with what Americans acquire in sixteen years of school and college takes but twelve years--in a very few countries, thirteen. Europeans are therefore four years ahead of Americans when they begin their professional education at a university; for most top-level professions here, a Bachelor of Art's degree is a prerequisite before one is admitted to professional school. I find it personally humiliating that most European universities also demand a Bachelor of Art's degree of Americans wishing to matriculate, while they admit all Europeans with a "maturity" certificate, obtained at the end of the higher secondary school.

For some time, I have been collecting "maturity" examinations from various European countries which I hope some day to translate and publish. The amount of knowledge in the humanities, in mathematics, and in the sciences required to pass these exams will rarely be possessed by American students unless they have taken a four-year liberal arts course at college. At that, few of them could pass the foreign language test of the European maturity examination. There the student must show he can write an essay--without using a dictionary--in at least two, more often three, foreign languages. I have before me several such essays and I find them deeply disturbing. In spelling, grammar, style and composition, these essays could rarely be equalled by our best

high school graduates in their own mother tongue. Few PhD candidates here could match them unless they had specialized in foreign languages. Yet American educationists constantly equate the high school diploma obtained for a college-preparatory course with the European maturity certificate. This gives our people a wholly false idea of where we stand educationally.

If we compare them with Russian ten-year school graduates, Europeans who have passed a "maturity" examination are about two years ahead of the Russians as far as basic knowledge is concerned. Their schooling also has developed in them considerable ability to think independently, and it has given them a much broader cultural background. While I feel that we should consider Russian educational achievements as minimums below which our schools must not be allowed to fall, I believe we ought to strive beyond this for the goal of matching European levels, at least for those of our children who will go on into the professions. As it is, many of them are barred from becoming professionals here because of the length of time it takes, and the high cost. In consequence, we have a chronic shortage of professional people.

It is important that we not let ourselves be fooled into believing that our schools are unique because they charge no tuition; this was true before World War I, but since then one European country after another has made all schooling up to age 18 tuition free, or subject to such minimal charges that no really talented child is barred from school because of poverty. Moreover,

European universities are far less expensive than ours, so that in professional education the European student does not face the financial barriers our students encounter.

Misconceptions about European education are slowly disappearing as a result of information made available by the critics of American education. We are beginning to realize that ours was not the first nation to establish public education or that it alone opens the educational door to the very top for all children. But we still seem bemused by educationist claims that it is "undemocratic" for other Western nations to separate their children after elementary school, and to put them into different types of secondary schools according to their mental abilities and vocational aims. We still hold the comprehensive school sacrosanct and consider it the only truly "democratic" school.

I find it difficult to understand why we think it "undemocratic" to have children attend separate schools, each appropriate to their abilities and aims, as long as these schools are open to all, free of charge. We do not say it is "undemocratic" that nurses go to nursing school and doctors to medical school, and that each obtains a different diploma. Nor do we send enlisted personnel to the same school as officers. Why do we get angry at Europeans for weeding out the dullards from the talented children and sending dullards to be admitted to a school where they would just sit around understanding nothing? What does it benefit them to be given

diplomas which stand for nothing but a given number of hours spent sitting at a school desk? Are the less able children harmed when the abler children are allowed to pass more rapidly through the elementary stages of education and into the higher ones? What is democratic about penalizing God-given talent by letting it go to waste, so average children won't feel a sense of inferiority?

It may be beguiling in theory to think of all our children going to school together. But will it really serve their best interests to send them to schools where not only the children of the poor mingle with those of the rich, which is, of course, what I consider highly desirable and strongly advocate, but where the child with IQ 70 sits beside one with IQ 170, and where the morally weak child freely associates with the child who has been carefully raised to distinguish right from wrong and to conduct himself responsibly? Such mixing is supposed to teach a lesson in democracy. This makes no sense to me. Obviously, no child will receive an education best suited to his abilities and vocational aims in such a school; nor will the bright child develop admiration and respect for the dullard, or the potential young delinquent profit from associating with well-brought-up children. It is far more likely that the dullard will be frustrated, the bright child bored, the average child never challenged mentally, the good child corrupted by the young ne'er-do-well, and everyone's manners and mores downgraded to a dead level of mediocrity.

Most of these disadvantages remain, even when we take account of different learning capacities by setting up multiple tracks. They are an improvement over heterogeneous classes, and I suppose we ought to be grateful that some educationists have finally made this concession to the urgent demands of critics and the public. But it is a somewhat amateurish way of dealing with the problem of children's unequal mental aptitudes. The small homogeneous school, characteristic of European education, does a much better job.

I do not believe that at a huge comprehensive school talented children can ever receive as good an education as at a small English grammar school, French <sup>lycée</sup> lycée, or Swiss Gymnasium. In their enthusiasm for gigantic schools and democratic togetherness, American educationists overlook the difficulty of conducting under the same roof such varied enterprises as life-adjustment training, leisure-time activities, vocational training, and serious basic education, especially when the choice lies with the child as to which course he will take. How can we expect children to choose higher mathematics when their classmates are having fun learning how to play canasta, cook or find a mate? Why should an 8th grader tackle a hard subject when next door the kids are happily whizzing through a course in "Home and Family Living?" Why should he take tough exams when others get promoted on true-false tests posing such "difficult" problems as: should boys use deodorants, or can one use cake soap for shampooing?

I presume we do not wish to carry "democratic" education to a point where only children of the rich can afford to become professional people. Yet this would assuredly happen if we heeded those educationists who brand everyone as undemocratic who advocates special public schooling for our talented youth. Do we want the services of doctors, lawyers, engineers and other professionals? Well then we won't get them unless we provide proper schooling for those of our children who are willing and able to become professionals. To call this advocating that only an "elite" be well educated, while the rest of our children receive an inferior education, making them forever hewers of wood and carriers of water, is highly irresponsible demagoguery. At present nobody gets a really good public education; what critics advocate is that everybody receive the best education he is able and willing to absorb. What could be more democratic?

Apart from the disadvantage of attending comprehensive rather than homogeneous schools, our children learn less than those abroad, because we are confused about the objectives of formal education, because we set ourselves extremely modest goals, because our teachers lack the professional qualifications and status they enjoy abroad, and labor under the handicap of being controlled in their professional work by an army of administrators and narrow specialists who dictate pedagogical methods, select <sup>the</sup> textbooks, and determine curricula. It is these non-teaching persons, these so-called "professional educators," who shape American education, and must be held responsible for its mediocre achievements.

The theories of progressive education have left a deep imprint which cannot easily be erased. Under their influence, educationists have gradually denuded the high school curriculum of its former solid content, and filled it with frills and know-how courses; they have abandoned the concept that advancement must be earned by scholastic performance, and substituted automatic promotion. In their determination to make the schools "democratic" and to keep the less able child happy, they have been raising a generation of Americans who expect to obtain all good things without effort, and who acquire a wholly false notion of their own importance, because they have never had an opportunity at school to compare their own true accomplishments with those of others.

Stung by criticism, American educationists are presently making an effort to shift the entire responsibility for watered-down curricula on the American public. But it was their own rejection of genuine education in favor of life-adjustment training that opened the doors to pressure groups hounding the schools with requests to teach their particular pet subjects. Moreover, the public has now awakened to the need for school improvement, while educationists still erect roadblocks to prevent genuine reform. One has but to steep himself in the writings of leading educationists to sense their profound anti-intellectualism and dislike for quality education. The following passage taken from Kilpatrick's biography by Tenenbaum shows how and why our curricula have become divested of solid content:

"The writer has seen a class of six hundred and more graduate students in education, comprising teachers, principals, superintendents, vote their opinion in overwhelming numbers that Greek, Latin and mathematics offered the least likely possibilities for educational growth; and with almost the same unanimity they placed dancing, dramatics and doll playing high on the list in this regard."  
(My italics.)

We and we alone among all modern democracies have devalued our intellectual currency; we have downgraded the high school diploma to a point where it does not even promise competence in elementary subjects, as witness the need of many graduates to take remedial courses at college in reading, writing and arithmetic. Educationist dogma declares that nevertheless children are better educated today than in the past. If we go back far enough this is probably true. Our country never had as good an educational system as the more advanced nations of Europe; it was late setting up a tax-supported school system. Our children sit in school many more hours, days, and years today than seventy-five years ago and we spend forty times as many tax dollars to keep them there. Even allowing for the steady erosion of the value of the dollar, they ought to have learned a bit more at a per capita cost of \$135 in 1954 compared to \$7.91 in 1880. Or so one would think.\*

The American dream of making higher secondary schooling available to all, free of charge, has however not been realized because we have downgraded the high school until it provides

\* See United States Statistical Abstract.

for a majority of children, not very much more real education than is normally acquired elsewhere in elementary schools. I do not wish to enter into the battle of statistics about how many high school children take what subjects. I merely wish to point to the decline in foreign language teaching. I believe this decline was a direct result of progressive dogma that life is not "enriched" by learning foreign languages unless these are actually spoken in the community in which one lives. Even today, when many parents have taken the initiative in arranging foreign language courses for their children, and when our leaders publicly deplore our linguistic illiteracy, many educationists remain strongly opposed to such courses.

Two years ago, Secretary Folsom stated that while almost half our high school students were studying at least one foreign language in 1928, by 1955 only 20% did so. The standard educationist reply to similar statistics is that more children go to high school today, and that the new ones are too stupid to take academic courses. But about the same percentage of children attended high school in 1928 as in 1955, so the argument has no merit. I will not go into the low value our educationists place on the intellectual abilities of poor children, except to call attention to the fact that all Russian children learn at least one foreign language. Do American educationists seriously claim that our children are less able? The more I learn about education, the less am I willing to believe that all but a minority--15% according to one leading

educator--of our children cannot absorb solid subjects. True, only a minority learns them easily, but many more could learn them with effort, and if they were skillfully taught.

Skillful teaching can be had only if one grants teachers full professional status, and in return demands that they be as well educated as other professional people. We have allowed our teachers to become little more than employees of administrative educationists who, under our scheme of things, occupy the best paid and most influential positions in educational officialdom. It is they who presume to speak with the voice of education; rarely does one hear from a classroom teacher except through anonymous letters to editors and critics.

Most of the pedagogic errors and monstrosities that infest our schools originate in administrative directives coming from persons high in the hierarchy of educational officialdom who have themselves rarely had any classroom experience. Seldom is the real expert--the teacher--consulted in the matter of curriculum planning, pedagogic methods, and selection of textbooks. He is simply handed the newest products of progressive theory based on the very latest so-called "psychological research" and told to apply them in class.

In the words of one teacher who finally quit in disgust: "One year it was bundles of wooden sticks and red and blue poker chips--millions of them!--to replace the multiplication table and give the children a sense of learning by doing. Another year it was a series of readers, so arranged that children could be

taught to read without the boring and unlikelike process of learning the alphabet! Yet again it would be a revised social studies curriculum, according to which students were to spend weeks on 'Orientation to School,' 'My Family,' and 'Our Neighborhood,' while ancient history was resolutely dropped from the course of studies altogether."

The subordination of American teachers to their non-teaching administrative superiors is in glaring contrast to the professional independence of teachers abroad where educational administrators are unknown. European school principals are invariably themselves experienced teachers who keep their hand in by giving a few courses to the upper grades. The highest job in a European university--that of rector--goes to a professor elected to this office for one year by his colleagues on the faculty. It would be inconceivable to anyone abroad that an ex-athletic coach be set to direct the affairs of an educational institution. The idea that schools and universities need public relations staffs strikes European educators as utterly ludicrous. I confess I myself cannot help wondering why a tax-supported school should need such a staff; is this really a necessary expense? Nor do foreign educational systems engage hordes of testers, guidance personnel, record keepers and the like, who increase the cost of education here without making it noticeably more efficient. One may well wonder just what qualifications are possessed by all these people who manage our schools and our teachers.

Well, they usually possess high academic degrees but these may well have been acquired in a wholly unacademic way, by learning how to manage school plants, purchase supplies, disburse pay, and deal with personnel problems; nowhere in the world can one find such strange "original research" as will get one a doctorate in Education in this country. "The Junior Hostess Volunteers at the USO Lafayette Square," "A Comparison Between the Readability of Digest and Original Versions of Articles," "An Evaluation of Innovations in Elementary School Classroom Seating," are but a few samples. Ex-athletic coaches turned superintendent or principal may have won their doctorates by writing a thesis on "Personality Traits of Athletes" or "School Camping in New Jersey." Curricula and teaching methods may be prescribed by people considered psychological experts on the strength of such studies as "Relationship of Playing the Pinball Game to Personality Dimension."

In the traditional American school, before progressive education took over, and in schools abroad, judgment of a pupil's educational progress is the responsibility of the classroom teacher. Here we seek to eliminate his "subjective" judgment by "objective" machine-processed tests. These can never, in my opinion, do as good a job as can a teacher who remains with his class for long periods of time, and thus gets to know each pupil intimately. At best, mechanical tests measure isolated abilities, while the traditional essay-type or problem-solving examination gave a broad basis for evaluating a child's real achievement.

Abroad, elementary teachers still take the same class through four or more years; in secondary schools professors teach two or three related subjects to the same class through several grades. To do this, teachers must of course possess a more rigorous professional education than is commonly possessed by our own teachers. We fool ourselves if we think mechanical tests can take over the job of measuring educational advance. We merely clutter education with a new lot of non-teaching specialists--the testers. Nothing can nowadays be done before the testers have had a go at it. Now that we finally have a federal education act which recognizes the importance of adequately educating our talented children, we cannot get on with the job but must first let the United States Office of Education undertake a so-called "talent inventory," giving employment to lots of testers.

I cannot see what all this testing is supposed to get us. We know our children ought to be better educated; to keep on testing them will not alter that fact. Nor is it clear to me how one inventories talent by making children answer yes or no to such statements as: "My parents treat me as if I do not know right from wrong," or "Dad always seems too busy to pal around with me," or "If you don't drink in our gang, they make you feel like a sissy." We would do better to use the money wasted on such tests to educate more good foreign language, mathematics and science teachers, of whom we have far too few; incidentally, we could do with fewer testers!

The work of testers, guidance personnel, and a host of other administrative functionaries could be done a hundred times better if we insisted that our teachers be as well educated generally and professionally as they are abroad, and if we then gave education back to them. We have gone overboard on mechanical aids and on so-called objective tests of the multiple choice type which appeal to us because they seem so businesslike and make school take on the aspect of an efficient business office. But nothing can replace a really good teacher. We had better face up to the fact that we must get them, pay them well, and treat them as professionals if we wish to educate our children properly.

American education is top-heavy with administrators; it lacks the scholarly leadership under which foreign educational systems attain high scholastic achievements. School reforms will not be generated from within a bureaucracy run by non-teachers whose intellectual parochialism and lack of classroom experience prevent them from recognizing our educational deficiencies. Nor will the present leadership of our public schools permit outsiders to criticize our schools with impunity; still less take heed of warnings by critics. As is the case with most administrators who control large bureaucracies in this country, the men who manage our schools tend to look upon public education as a personal domain in which their rule is absolute.

For the past ten years I have been keeping a record of all major criticisms of American education and of the reaction thereto of

"professional" educationists. In reading through a mass of material pouring from the pens of individuals and professional organizations, one is struck by the monumental self-righteousness which pervades educationist reaction to criticism. One can find no evidence of an awareness that, in view of the present state of American education, the critic might just conceivably be sincere, and have a well-reasoned case to present for school reform. All criticism is contemptuously dismissed, even when it is voiced by anxious parents or by citizens' committees formed to induce their local schools to change curricula or teaching methods. All are patronizingly told to leave such matters to the "experts"; any citizen who becomes too insistent is likely to be subjected to personal vilification and this is, of course, also the lot of those who criticize education in general.

For anyone who wishes to inform himself on this subject, I recommend a series of articles by Howard Whitman which Colliers published five years ago, beginning February 5, 1954--the first was entitled "Speak Out Silent People." They are well worth reading, if for no other reason than the documentation they contain on the extraordinary difficulty experienced by the American public whenever it tries to induce local schools to abandon progressive methods considered harmful to the children.

One such campaign was fought to induce the schools to return to the phonetic method of teaching children to read; parents were getting tired of having to take over the teaching job themselves.

Another, over report cards which did not measure a child's scholastic achievements but limited themselves to such vague statements as "normal growth is taking place." Still another over getting the schools to reinstate script after they had quietly decided to teach children only to print. That one gave rise to great bitterness. One indignant member of a parents' committee remarked: "We found out what many other parents have found out when they tried to make their voices heard by school authorities. We found that schools no longer belong to the people... The 'professional educators' have taken over, and public be damned."

These are but a few of the many cases where educationists put up determined resistance to citizens' committees demanding abandonment of progressive teaching methods in their schools. Yet leaders in education are forever praising the principle of "local control over our schools" as the chief glory of American education. They are forever invoking this principle when proposals are made to end the present educational anarchy in this country by setting voluntary national standards for high school diplomas and teacher certification which would give communities a yardstick with which to measure school performance.

In the light of the cavalier treatment meted out to parents and other citizens worried over educational shortcomings, one cannot help wondering how sincere educationists <sup>really</sup> are in their professed devotion to the principle of local control over education. Do they really believe in this principle so strongly that to them

even a voluntary national standard smacks of federal tyranny? Or, is not their hostility to such standards merely part of their general intolerance of criticism, whatever kind it may be, and from whatever source it may come.

Of this intolerance there can be no doubt. It is glaringly manifest in the avalanche of words with which educationists seek to demolish criticism and the critic. I have most of it in my large collection of material documenting the educational history of our country for the past half century. There is so much of it that it overflows a large bookcase. When one has the educationist counterpane all in one place and so can absorb it, as it were, in one gulp, one is struck with its sameness. It almost seems as if a central strategy board had issued directives on "how to deal with the critics!" Allowing for differences in the personalities of writers and in their writing style, one finds virtual unanimity among them that, barring the need for more money, there is nothing wrong with our schools--they are "the best in the world." Consequently, all criticism is unjustified and all critics are "enemies of the public schools."

In order to "prove" that our educational system is inferior to none, educationists will try anything. Now that they are faced with so much evidence brought in by critics that European education is better than ours, they are redoubling their efforts to convince the American people that national school systems cannot be compared because each reflects the mōres and culture of its particular

society. A favorite gimmick is to show how inappropriate European education proved to be when it was applied to backward peoples in European colonies; how little meaning an Indian child would get from learning about the Norman Conquest or an African bushman about Louis XIV. I can only say in reply that for myself, I do not consider us as far removed from European civilization as Indians or Congolese. Nor am I comforted when educationists tell me that our education must be excellent since so many students from backward nations come to the United States to study at our colleges and universities. Possibly free scholarships have something to do with this. However, I am quite willing to concede that schools in Outer Mongolia are worse than ours. What of it?

I find educationist attempts to convince us that no drastic reforms are needed in our school system utterly unconvincing. What is more, I don't believe they can make it stick. Not even by pouring their wrath on the critics. It is surprising how far gentle school men are willing to go to demolish the disagreeable disturber of the educational peace.

As to his motives, the party line is that these are always suspect unless the critic is paid handsomely by some Foundation, in which case he will not be vilified and can get away with a fair amount of real criticism. The free-lance critic, however, is fair game; it will be hinted that he may be part of a sinister conspiracy engineered by forces of the left, the right, or of both the left and the right--at any rate sinister. Or perhaps he is an unadjusted,

lonely person who doesn't get along with people, who has had an unfortunate childhood that leaves him full of frustrations which he takes out by trying to destroy the schools (it is axiomatic that the purpose of all criticism is "to destroy the schools"). Or perhaps he criticizes to make money. In one of the nimblest reversals of factual truth, a critic was once accused of criticizing to gain prestige!

I dislike getting personal but what I say has been so thoroughly misrepresented that I should like to go on record on a few points. I speak about education as a private citizen; my official duties give me no access to secret educational information-- everything I use is available to the public and can be found by anyone taking the trouble to look for it. Nor does anyone order or pay me to talk about education. Sometimes fees are offered; I have made it a rule to ask that these and royalties from my book be turned over directly to specified charities. My concern with education is a wholly private and volunteer activity. If anyone takes the position that this concern with education interferes with my official duties, I challenge him to prove it. A social critic, of course, is fair game for everyone.

Angry educationists are forever demanding that I stop meddling in matters of no concern to me and that I stick to my trade of building reactors. Such reasoning shows a profound misconception of the rights and duties of democratic citizenship. It would have us all become what the Greeks called idiōtēs--private

persons who take no interest in civic matters. Our educational bureaucracy is in this respect no different from other bureaucracies and pressure groups who seek escape from all criticism by branding the inside critic as a disloyal traitor to the organization, and the outside critic as a troublemaker without qualification to judge what the bureaucracy does. Unless we scotch this attempt to make of criticism a modern kind of lèse majesté, we shall assuredly lose control over the powerful organizations that increasingly control our life. These organizations tend to forget they were set up to do a specific job and that when they fail to do it satisfactorily, they must expect to be criticized. In particular, no public agency can conduct itself indefinitely in a manner which harms the nation as a whole without being castigated in public.

Having called a critic's motives into question, educationists invariably proceed to declare his facts are wrong or at least suspect because he has not documented each of them (which would be rather difficult to do in a speech but this is conveniently forgotten). They claim he cannot really say anything worth listening to about education unless he has personally inspected every school in the country, sat in every classroom of every school, and listened to what every child in every classroom of every school has said. This is held to be the only "scientific method" of establishing facts--an obvious aping of the scientific methods of the exact sciences when they seek to ascertain the laws of nature. It is as if educationists were not aware that much can be learned

by reading books and official documents, statistics and examination questions; by comparing the products of our schools with those of others, by a hundred methods involving thought, reasoning and judgment, and by drawing on a fairly broad knowledge of the world.

When I find a statement of mine, based on official sources and subjected to a careful check by experts--such as my remarks on Dutch education--being airily dismissed as wholly erroneous by some educationist who claims to know all about Dutch education but who does not bother to support this accusation, I am sorely tempted to draw up a bill of indictment on factual errors committed by educationists. So far I have not yielded to so ignoble an impulse and I hope I shall continue to resist the temptation.

But I cannot let the third attack on the person of the critic go by unanswered; this is the educationist argument that, unless he is part of the public school system, a critic is not qualified to speak on education.

In The House of Intellect, Jacques Barzun calls this viewpoint a "superstition that understanding is identical with professional skill," which he brands as denial of intellect, and so it is. The attitude of educationists that they alone possess knowledge and wisdom in all things concerned with the learning process is not convincing, coming as it does from people whose own education--general and professional--is rarely impressive.

To carry on my assigned task in nuclear propulsion, I need intelligent and well educated men. Though a great many of our best

college graduates and officers apply, only a small percentage show enough promise to be accepted. We then have to take time out to set up courses teaching these very bright young people fundamentals they ought to have learned at school and college; that indeed are taught such young people abroad. Obviously, all this holds up our work. Similar developmental projects suffer from the same scarcity of qualified people. The schools do not supply them; their products are unsatisfactory. The failure of the schools to turn out the kind of products this nation sorely needs today gives me a right to criticize them.

Angry educationists often threaten to tell me how to build nuclear submarines. My reply is that if they have as thoroughly studied nuclear physics and engineering as I have education, if they can devise better ways to build these ships, we in the naval reactor group would gladly welcome their advice. We are deeply appreciative when people take enough interest in our work to think up new ideas. So far we have not received any from educators.

Compared to nuclear physics and reactor technology, education is a fairly simple subject. Any intelligent layman can obtain a thorough understanding of its problems, principles, and the performances of different national school systems. As to what our schools teach, how they teach it, how they are organized to do this job and what they accomplish in twelve years of schooling-- these are matters which one can quite well grasp without having first taken the required number of courses on Education at a teachers'

college which constitute almost the sole qualification demanded of American educators.

In truth, the critic's lot is not a happy one. Yet he has a useful role to play in a democratic society; he is an important part of the democratic process. He finds the facts we need, but rarely have the time to discover for ourselves, and on which we base our decisions on national issues. He alerts us when the bureaucracies now dominating life start marching ponderously down a dead-end street of error, and so gives us a chance to put them back on the right road before it is too late. One hopes that present warnings of educational critics will be heeded before it is too late for us to catch up in those areas where Russia has forged ahead of us, because of her greater wealth in trained professional people.

It should never be forgotten that it was critics who first called attention to the Russian educational menace; educationists didn't get around to checking on Russian schooling until last summer, but scientists and engineers reported what was happening in Russia in 1953, and in that year I myself began to speak of this danger. I never thought that by calling attention to this ominous development I would become an "enemy of American education"; or that comparing Russian schools with ours would make me the favorite <sup>bât noir</sup> bête noir of educationists who see fit to call me hysterical, a lover of Russia, a warmonger and a jackass. At that I consider myself fortunate since I have not yet been put in a class with

Dillinger and other professional murderers. This has happened to another critic whose sincerity and scholarship I admire.

Comparisons with foreign school systems are painful to American educationists, and one regrets that. But it cannot be maintained that they are not relevant. It is through comparisons that critics try to demonstrate our deficiencies to the American people so they can do something about them. Fifty years ago, medical and legal schools in this country were a disgrace and a scandal. Two famous studies comparing them to similar schools abroad were written under the auspices of the Carnegie Foundation. They created a furor and inspired such drastic reforms that we soon got professional schools as good as those of Europe. Today's critics hope that by comparing general education here and abroad, they will bring about a similar upgrading of our public schools.

Educationists will doubtless continue to fight reform and hold it up as long as they can. As I said at the beginning of this speech: I anticipate that the campaign will go on for many, many years. As long as I am able to stand up and express my views, I shall keep on fighting for schools that will really "educate" our children--all of them.