

Spelling Progress Bulletin December 1963

Dedicated to finding the causes of difficulties in learning reading and spelling,
"A closed mind gathers no knowledge; an open mind is the key to wisdom".

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1. Late News

From Mr. Glendon F. Wegner, Supt. of Schools, Lompoc, Calif, we hear that a remedial reading class started in mid November to use the i/t/a in its instruction. This follows in the same procedure that is used with considerable success in several remedial reading classes in England.

From the Windward School in White Plains, N.Y. comes the news that in January a nursery class of four year-olds will begin active instruction in the i/t/a, having learned the alphabet between September and the Christmas vacation John C. McConnell is the Director of the Child Study Center and the teacher is Mrs. Joan Kemp. The Stanford-Binet Intelligence test was given to some prior to their entrance in September and the others as soon after as practical. Plans for the future include a program for the four year old level plus kindergarten and first grade participation. They report encountering pronounced enthusiasm from the parents of the children presently involved. The teachers have difficulty in keeping to the schedule because of insistant demands of pupils for more after the end of the 15 minute instruction period. Some children are showing dramatic progress tho the director feels it is much too soon to announce levels of growth. Children in the group vary

considerably in their progress. Some are considered beginning readers and at least four are at the threshold; the balance vary from awakening interest to total disinterest.

In Akron, Ohio, in January the Summit County Public Schools, under the direction of Supt. Ralph Gillman will be starting 120 pupils in the kindergarten level in i/t/a and will continue thru first grade in i/t/a to the transition level. Next September another 120 pupils, who had kindergarten without i/t/a will start learning to read by i/t/a. 30 students in a school where they had no kindergarten, will start i/t/a in September and a comparable 30 students who had a kindergarten program will also start next September and carry thru to transition. This will give some good bases for comparison.

A private parochial school in Akron, The Elms, with Sister Paulo and Sister Kathleen started teaching five year-olds by i/t/a in mid-November.

All the above information was supplied by Mrs. Jane Rusk, Supervisor of Elementary Education, Summit County Public Schools, Akron 8, Ohio.

Mr. George Baird, Executive Director of the Educational Research Council of Greater Cleveland has classes of about 150 children who are starting with the i/t/a, but details are lacking.

Robert E. Newman, Principal of the Lower School of the Laboratory Schools of the University of Chicago has started a kindergarten class of 25 children in i/t/a. And a private school in Princeton, New Jersey, which desires to avoid publicity, is also using i/t/a.

All these are in addition to the four projects discussed in the October issue of the S.P.B.

There are also some projects started in Canada, but no information was received in time before going to press.

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2. The Reading Problem and the National Interest, by Dr. Arthur S. Trace, Jr.*

*A paper given at the National Reading Reform Foundation August 7, 1963.

It is hard to find anyone nowadays who thinks that our schools are doing a good job of teaching reading. Parents don't think so; employers don't think so; the armed services don't think so; high school teachers and college professors don't think so; and even the students themselves eventually don't think so; and, most significant of all, an increasing number of elementary school teachers and school administrators don't think so either.

Actually the reading problem is rapidly emerging as the gravest of all the academic problems which our schools face at the present time. It is more serious than the shortage of classrooms or of money, or of genuinely educated teachers and school administrators. It is even more serious than the pitifully watered down curriculum of our schools or of the hard-core anti-intellectualism in current American educational theory.

There are compelling reasons why the reading problem commands the attention of everyone who is interested in the future of our children or of the country. One of these reasons is the simple fact that reading is not merely a basic subject in school; it is *the* basic subject. If a student cannot read well, he cannot learn anything that is learned through reading. He cannot learn history or literature, or science or geography or any other basic subject. He cannot even do story problems in arithmetic if he cannot read. It has been estimated, for example, that over 70% of what a good student learns in high school he learns through reading.

In short, reading is the base upon which virtually all formal learning rests, so that if a student can read well he can learn much, and if he reads badly, he will learn very little. I should like, then, to make some observations about how the reading problem is related to the national interest and then to examine the weaknesses of the reading program which have made reading our number one academic problem in the schools.

President Kennedy has said that unemployment is our Number One economic problem, and Secretary of Labor Wirtz has stated that our ability to solve the unemployment problem is the test of our greatness as a nation.

And yet, Mr. Coullander, president of the National Association of Manufacturers, has predicted that 10,700,000 persons will be unemployed by 1970 if the economy does not grow faster than it has grown in the past 5 years. There have even been some predictions that unemployment at that time may reach 18,000,000.

However unduly pessimistic these predictions may be what appears to be happening is that an increasing number of unemployed are becoming unemployable.

A second crucial fact about the unemployment problem is that disproportionately large numbers of unemployed are young people who have dropped out of high schools to look for jobs. What many of them found, however, is that although there are lots of jobs, there are no jobs for them. Young men and women no longer in school now constitute 18% of the total number of unemployed, even though they comprise only 7% of the labor force.

This condition is further aggravated by the phenomenon of automation. There is hardly an economist or industrial leader in the country who does not think that automation will proceed apace. Inevitably, those who lose their jobs as a result of automation will in general (there are exceptions) be those with the least education, and insofar as automation will create jobs as well as destroy them they will be jobs which require more education, not less. It will not create jobs for high school dropouts or others among the intellectually unfit.

Nor can anyone fail to realize that an increase of ill-educated unemployables has vast social implications. Unemployed youths in particular become not merely wards of society but potential threats to society. Just as the education problem is related to the unemployment problem, so the unemployment problem is related to juvenile delinquency, which in turn affects the crime rate. Juvenile delinquency has already reached proportions which would give any thoughtful person cause to pause, and much — though by no means all — of it can be traced to young people who have dropped out of high school and who cannot or will not find a job.

The Federal Bureau of Investigation reports that 7% more serious crimes were committed in 1962 than in 1961, and that the number of arrests of juveniles in 1962 increased 9% over the previous year.

Thus, in an indirect way and yet a profound way the education problem is related to the crime problem, for if unemployment increases in the years ahead, and particularly if dropouts contribute to that increase, then both juvenile delinquency and the crime rate will very likely increase, perhaps to the point where almost no one can feel safe.

It will not, I think, be difficult to understand how a solution to the reading problem in the schools will do at least something, and very likely a great deal, not only to solve the problem of unemployment but to raise the intellectual level of the entire country. There can be no doubt that what President Kennedy has called our Number One domestic problem, namely unemployment, is closely related to our Number One education problem, namely reading.

In the last year or two there has been an increasing awareness that the high school dropout problem is directly related to the reading problem. Dr. Emory Stoops of the Univ. of California, describes the relationship between the reading problem and the dropout problem very simply and very truthfully. "Poor reading ability handicaps students in all subjects, poor readers tend to get poorer marks., and students with poor marks get discouraged and dropout of school."

Dr. Lester W. Nelson, Treasurer of the Fund for the Advancement of Education, has observed that "Much of the dropout problem in our schools is directly related to the reading and language

problem"; and the Council for Basic Education warns that "If we are going to salvage school dropouts, we must begin in the first grade and begin with reading."

It is by no means impossible, in fact, that the most important of all causes of dropouts is the inability to read. This is the opinion of Mr. Daniel Schreiber, director of the National Education Association's School Dropout Project. "To my mind," he states, "the greatest factor in school dropouts is reading retardation. Study after study," he goes on to say, "has shown that the average dropout is two years or more retarded in reading."

It is no small irony that as the reading problem grows to outrageous proportions, the number of reading "experts" correspondingly proliferates. The number of reading specialists, reading supervisors, and above all remedial reading teachers has increased to an incredible degree, and the demand for them continues to grow.

Even more ironic is the fact that in the past 40 years mountains of research bearing upon the teaching of reading have accumulated. By 1945, more than 8,000 pieces of research on reading had accumulated in a period of 20 years.

Since the end of World War II, "research" in reading has become so intensive that booklength monographs are published periodically which attempt merely to keep up with the bibliography of "research" in the teaching of reading.

If, then, the ability to read is so vital to the future of all our children, and if the reading problem is indeed so great that it profoundly affects the national interest, how do our experts in reading pedagogy account for it?

A few of them, in fact, stoutly insist that our students that our students are reading at least as well as ever before, and perhaps even better. Prof. Arthur I. Gates, the author of a Dick-and-Jane type of reader series, states in a new pamphlet for parents published by the National Education Association that "today's youngsters read better than comparable children in previous decades." Such statements are liable to make many old teachers, old parents, old employers, and old college professors, wince.

But most of our reading specialists have long ago given up the idea that there is no reading problem in our schools. They not only recognize it but they insist upon it. More important, they are so resigned to it that their energies are now spent not in finding out what's wrong with the reading program, but in finding out what's wrong with the children. The fact is that our most influential reading specialists are so utterly committed to the status quo in the reading program that to question the effectiveness of it is unthinkable.

It is almost impossible to understand the lengths to which our reading experts have gone in uncovering defects in our children which make them poor readers. In one book called *Reading Difficulties; Their Diagnosis and Correction*, Professors Bond and Tinker classify the reasons for reading difficulties under the following heads:

physical, emotional, intellectual, educational, visual, binocular, hearing, motor, speech, glandular disturbances, brain damage, congenital word blindness, lateral dominance, personal and social adjustment, emotional maladjustment, and effects of home environment.

The only suggestion that the reading program itself may be a cause of reading difficulties is in the term "educational," which takes up only 6 pages of the book, and which merely suggests that dull stories and too much emphasis on phonics — rather than too little — may be a cause of reading disability.

But as long and thorough as this book is, it is amateurish compared to one called *Why Pupils Fail in Reading* by Professor Helen Robinson, author of the latest Dick-and-Jane Readers. The contents of this book defy description, but some understanding of it may be had from the fact that the index to the book lists 275 causes of reading disability, and none of them have anything to do with the reading program itself, either the materials or the methods.

I have gone through many of the mountains of such "studies" explaining why our children can't read, and the conclusion has been forced upon me that our reading experts are quite content with the notion that the United States has vastly more emotionally disturbed, half-blind, dimwitted, neurotic, physically ill-formed, mal-adjusted, undernourished, glandularly deficient, and ill-treated children than any other country in the world.

I am not prepared to accept that premise. There may be as many as 2% or even 5% of our children who for one good reason or another cannot learn to read well, but there are not 30% or 50%, which comes closer to the actual number who are poor readers.

It should be clear the problem lies not with our children but with the reading program itself. The teaching of reading is now so vital to the future of our children and to the future of the nation that we cannot afford to have anything but the best of all possible methods and materials to teach reading in our elementary schools. And yet, there is every reason to suspect that the methods and materials from which our children try to learn to read are in fact, very nearly the worst.

There has never been a time, therefore, when we need to examine more carefully the reading problem in our schools than now. And if we examine it closely, indeed if we scrutinize it, as I have done and as I know that many of you have done, what do we find? The best term, perhaps, to describe the present reading program in our elementary schools is "Programmed Retardation." But "Programmed Retardation" in the teaching of reading is actually a three-headed monster. The first head of this monster is vocabulary control, whereby almost all of the words in the English language are kept out of the student's readers, the second is the look-and-guess method of teaching reading whereby a full knowledge of the sounds of the letters is carefully withheld from the student until it is too late to help him; and the third head is the contents of the Dick-and-Jane type reader which deny the students the opportunity of reading anything in their readers that is worth reading. I should like briefly to consider the threat of each of these three heads of this beast called "Programmed Retardation."

Vocabulary control is such a deadly feature of the reading program in American schools today that no one can understand fully what our reading program is like without also understanding what vocabulary control entails.

In the early decades of this century as American pedagogical science became increasingly scientific, our reading experts were horrified to learn that the words in one reader did not correspond very closely with the words in a comparable reader of another series; furthermore in counting the words in these readers, they even discovered that some readers had a larger vocabulary than other readers. This phenomenon led them to conclude that wouldn't it be nice if the authors of the readers all used the same words, and wouldn't it be nicer if all the students learned the most frequently used words first.

As a result, numerous word lists were compiled by our professional word counters, and it was determined that only 300 or 600 of the most frequently used and least interesting words should be used in the readers in the early grades., and that only one or two new words should be introduced on each page, and that furthermore each new word should be repeated at least ten times thereafter.

The fact is that publishers and authors of the Dick-and-Jane type readers and other reading experts have begun to be embarrassed by the fact that the vocabulary control apparatus of the Dick-and-Jane type reader appears to assume that all our students are feeble-minded. This dilemma has now led them to make one of the most specious arguments which they have yet made in defense of the status quo in reading instruction, namely that students read other books besides their basic readers. Prof. Arthur I. Gates, for example, in a recent NEA publication entitled *Your Child and Reading*, tells parents this:

"The basal readers are used to teach certain basal skills, including the ability to learn new words in any and all reading. However, reading of all kinds of material from the earliest possible moment is the heart of the modern program. American children from an early stage read widely and learn far more words than are taught in the basal readers."

"Several studies have shown this. One study demonstrated that fourth grade pupils could read and understand at least 8,000 words, and sixth graders 12,000."

"Since such studies obviously do not test all the words that children know, it is safe to assume that today's children have a reading knowledge of many more words than the above figures indicate."

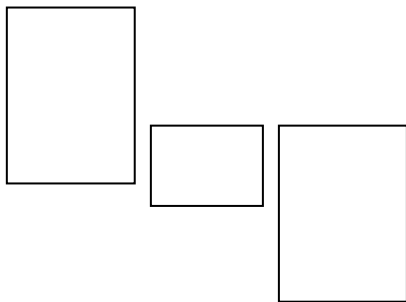
Now let us apply a modicum of logic and common sense to these observations. If our average fourth graders are quite capable of reading and understanding 8,000 different words as Prof. Gates thinks, and as I think, and as European educators think. and as American educators in the last century thought, then what are these fourth graders doing with a fourth grade reader that has less than a 2,000 word vocabulary in it; in fact, what are they doing, with Prof. Gates' own 4th grade Dick-and-Jane type reader with 1500 words in it. And if a sixth grader can understand 12,000 words, then

what is he doing with a Dick-and-Jane type 6th grade reader with considerably less (c.3800) than half that number.

The plain fact is that not the authors nor the publishers nor anyone else can argue against the bald fact that in the early grades the Dick-and-Jane type readers assume that, students will learn only about 300 words a year and less than 1000 a year in the upper elementary grades. In what way is this not a programmed retardation?

The second head of the monster Programmed Retardation is even more of a threat to our students in their efforts to achieve mastery of the printed word. The Look-and-Guess method, as we all know, is the result of our reading experts' insistence upon abandoning phonics as the basic method of reading instruction. This development meant, of course, that they had to dig up a variety of non-phonics methods to teach students to read. Now none of our reading experts have been more ingenious in hitting upon non-phonics techniques to teach an alphabetical language than Prof. David Russell, author of a leading Dick-and-Jane type reader series,: He recommends that students try no less than 7 non-phonics tricks with the hope that somehow with one of them they may be able to attack a word without being conquered by it.

The first of these tricks is memorizing the general pattern of the word; for example, the word 'dog' might look like this.



This method comes closest to the pure Chinese approach to reading English, i.e., learning the general configuration that the written word makes; but for learning to read an alphabetical language like English it is about as reliable as the flamingo that Alice-in-Wonderland used for a croquet mallet. For not only does the word 'day' and the word 'hog' and 'boy' and 'bog' and dozens of other words have the same general design that 'dog' has but this trick still doesn't give the student any way of recognizing a word he hasn't seen before.

Since, then; it isn't likely that Prof. Russell's dog trick will work, the student may then try trick No. 2, which might be called the monkey-tail trick, since, as Prof. Russell suggests, special features of a word sometimes help, such as the double t or the tail on the end of the word monkey. The trouble is, of course, that many words have double t in them and other words also have a tail at the end, like *donkey*, and *money* and *honey* and *funny* and *bunny*, even though bunnies don't have much of a tail.

Having thus been tricked by two of Prof. Russell's tricks, the student can, if he is not yet fit to be tied, try another trick, which recommends trying to guess what the word means from the context. Even Prof. Russell admits that this trick is by its very nature a guess. This is the trick which leads

mothers to inquire into the methods of teaching reading after they hear their children read *ship* for *boat* and *bucket* for *pail*. It is best called the wild guess trick,

By the time the student has tried out these three of Prof. Russell's tricks, he may have lost all confidence in his ability to read, but if not, there are still more tricks, including the picture trick, which invites students to guess the meaning of words by looking at the pictures. This trick is impossible whenever there are no pictures, and usually it doesn't work even when there are pictures. It is a highly sophisticated type of Look-and-Guess game but the student almost always loses because he doesn't know which word goes with the picture.

In the hands of the student highly skilled in guessing, then, the dog trick, the monkey-tail trick, the wild-guess trick, and the picture trick may help him read as high as 2% of the new words he encounters, but there still remains the problem of dealing with the other 98%. Digging deeper into Prof. Russell's bag of non-phonetic tricks, the student can try finding known parts of words. There is always the danger of seeing the word *hen* in *then* or *crow* in *crowd* or *bit* in *bite* or *yes* in *eyes*, but most often there is the danger of the student not knowing any part of the word, and even if he did, it doesn't usually help him much with the parts he doesn't know.

It is difficult to understand how anyone can offer these non-phonetic tricks to students as a good way to learn to read, and yet virtually every teacher's guide of every Dick-and-Jane type reader series now on the market recommends them highly.

Prof, Russell does, it is true, recommend, under certain conditions, the phonics trick. Now the phonics trick not only does the trick for 85% of the words in the English language but is also the best help for the remaining 15% of the words in English, all of which are at least partly phonetic. And yet, as we all know, virtually every Dick-and-Jane type reader series recommends that a full knowledge of the phonics of the student's language be withheld from him until the end of the third grade:

This whole procedure is very much like the procedure of a burglar who wants to rob a certain house by entering through the back door. Among his burglary tools are a sponge, a tube of tooth paste, the backdoor key, a match stick, a hair pin, a nail, and a monkey's tail Not being quite sure as to which of these tools is the most useful, he engages in 45 years of research to find out which of his tools will best open the back door. Then when he thinks he has found the answer, he approaches it in the middle of the night. He tries first to open the door with the sponge, then the toothpaste tube, then the match stick, then the monkey tail, and so on, until as a last resort he tries the backdoor key without really having much faith in it, And the door opens.

The happy ending of this parable might be that having spent so long fumbling with the lock, he arouses the residents, who call the police. The police apprehend him and haul him off to jail where he is still sitting trying to figure out why the backdoor key opened the backdoor and why his other tools didn't. The damage which the third head of the monster Programmed Retardation can do will be evident to anyone who takes the trouble to examine what is in our Dick-and-Jane type readers.

Nothing distinguishes European readers or American readers of the last century from our Dick-and-Jane type readers so much as the fact that European educators and earlier American educators were concerned first of all with *what* students should read in their readers, and then they asked, "How should students learn to read these selections?" whereas our modern reading experts first ask the question, "By what methods should children be taught to read?" and then they ask "What can children learn with these methods?" Anyone who examines European readers or American readers of a century ago knows that students can learn a great deal from their readers, but the answer to what children can learn from the Dick-and-Jane type reader is, "Nothing of any consequence."

"There might be some, though not much, justification for our reading experts permitting the method to determine the content of these readers if the methods were good methods, but they appear to be the worst of all possible methods, namely vocabulary control with all its intricate rules and the Look-and-Guess method with all its profound illogicalities.

Poetry, of course, has virtually disappeared from our Dick-and-Jane type readers because no recognizable poem could possibly pass the rules of vocabulary control. In the Scott Foresman Dick-and-Jane Readers, there is no poetry at all in the readers for the first five grades, and the few poems that appear in the sixth grade reader would not strain the brain of a slow kindergartner to understand or a first-grader to read. Furthermore, with 4 or 5 exceptions, the names of the authors who contributed to the Dick-and-Jane sixth grade readers might just as easily be chosen at random from any telephone book, so far as their contribution to literature is concerned.

Many people are now asking why students cannot any longer read the famous words of our great American patriots in their readers. The answer is simple. Our great American patriots violate the rules of vocabulary control. Benjamin Franklin and Daniel Webster and Thomas Jefferson and Abraham Lincoln introduce too many new words on each page and they don't repeat them often enough.

One of the newest primers of the Dick-and-Jane readers tells us the sort of thing our children will be reading in the sixties if our reading experts continue to have their way. It features the antiseptic threesome Sally, Dick and Jane, and stars Mother and Father, who behave like candidates for the all-American clown. In one episode Father thinks that a dummy which Dick made is Dick himself. In another, they are all playing blind man's bluff, and Mother, who is the blind man, thinks she has found Sally and her teddy bear, but it turns out that she has found Father, who has the teddy bear. In another episode, Father is pushing Mother in a little red wagon and Mother is waving streams of crepe paper in the air. In still another episode, Father comes out to the garage to get his car to go to work and finds the driveway cluttered up with Dick's and Jane's toys. Father then decides to go to work in Dick's toy car. He asks Dick and Jane if they want to ride in the toy car with him, but Dick and Jane apparently think he is acting so nutty they won't have anything to do with him. Finally, Father gets Sally and Tim, her everlasting teddy bear to ride with him.

In an anti-climatic outburst the selection ends with these well-controlled vocabulary words:

"Oh, oh, oh!" said Jane.
What a funny father we have.
What a funny mother!"

These stories do, of course, help adjust students to life, if their fathers and mothers are fools, and they also help adjust them to the lunatic asylum if ever they should be committed there. The Dick-and-Jane readers for the early grades turn out to be comic books in hard covers, but they aren't even very funny.

The extent to which the quality of the selections in American school readers have deteriorated in the past 50 years is almost beyond belief. Whereas authors of the 19th century American readers used to deliberate whether it would be better to include the best English authors or the best American authors in their readers, the authors of our Dick-and-Jane type readers are deliberating how they can somehow concoct some kind of life-adjustment story to amuse the kiddies when they have to draw from a list of 1,000 or 2,000 pre-chosen words without introducing more than two or three new words on each page and of repeating these new words five or ten times in the rest of the book.

President John Adams during his long and distinguished career as statesman had *The New England Primer* as his constant companion. We are fortunate indeed that the Dick-and-Jane primer is not our president's constant companion today.

Yet there can be no doubt that what children read in their readers has a profound effect upon their thinking and upon their education. A spokesman for Scott, Foresman & Co., stated recently that he did not think the contents of the Dick-and-Jane readers would be changed very much because he said his company gets "Thousands of letters from youngsters addressed to Dick and Jane each year." He also says that Dick and Jane get valentines and that he doubts that anyone ever sent Mr. McGuffey a valentine.

Children are, of course, prone to believe that what is in their basal readers is important, or at least good. But when the selections in their readers are in fact very important and very bad, their whole understanding of what is good, or not good, important or not important, becomes warped.

It may be that the only valentine that William McGuffey ever received was the Memorial Resolution of the National Education Association in 1878, which was one of the highest tributes ever paid to an American educator. When the National Education Association presents a similar memorial resolution to the authors of the Dick-and-Jane type readers, then we will know that we are indeed lost.

Henry Ford and William McKinley and Mark Twain and a host of other eminent Americans as well as thousands of less eminent ones did acknowledge their indebtedness to the McGuffey Readers after they became adults. But it is hard to imagine that anyone who has recently achieved a position of eminence today could acknowledge with a straight face his indebtedness to the Dick-and-Jane

type readers he read as a child. It is more likely to be the high school dropout on relief who says. "Everything I am today I owe to Dick and Jane."

After having examined some 150 Reader series from France, Germany, the Soviet Union, Italy, Yugoslavia, Hungary, and other European countries, I can say in all seriousness the comparison between these and our Dick-and-Jane type readers is in every important respect, scandalous. The only people who profit from these readers are the authors, the publishers, and the remedial reading teachers.

Yet there are a number of good reasons for thinking that the Dick-and-Jane type readers with all their various programmed retardation features have had their day. One reason is that there is a rapidly increasing awareness all over the country that the reading problem is becoming more acute. Secondly, the Dick-and-Jane type readers have become the disgrace of the educational world and the laughing stock of the nation; third, the proponents of the Look-And-Guess method are on the run and fourth, new reading materials are now appearing which for the first time in 40 years challenge the student's intelligence rather than insult it.

But the main point of all these observations is that if leaders in business and industry think that the way reading is taught in the schools will in the years to come have no effect upon business or industry, they are wrong; if labor leaders and government leaders think that the way reading is taught in the schools will have no effect on the strength of labor or the quality of people in government, they too are wrong; and if Negroes think that the way reading is taught in the schools will have no effect upon their welfare, they are also wrong. And finally, if anyone at all thinks that the way reading is taught in our elementary schools will have no effect on the future of the student or the dropout problem or the unemployment problem or the crime problem or the national state or local economy or on the very future of this country, he too is wrong. Clearly, the reading problem in American schools has now become everybody's problem, no matter how high he may be in government, business, industry, education, labor, the professions, or any other major area; no matter whether he is a parent or a teacher or a school administrator or a member of the local school board:— or whether he is charged with the increasingly heavy responsibility of choosing the textbooks from which our students must learn to read.

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3. Why Johnny *Could* Spell, by G. W. Stevenson*

A schoolteacher, in describing to me some of the frustrations of her calling, cited the case of one of her pupils who spelled "curley" "k-u-r-l-y" as a particularly horrible example. But was it? "Kurly", after all, is a more sensible spelling. It showed that the boy had a logical mind and a sense of phonetics. He was trying to write "Curley" the way you say it, which is the way it ought to be written. The kids who win spelling bees are merely excelling at a memory exercise. This boy showed a real grasp of language and the ability to apply a principle to his material. His principle, alas, is valid for almost any language but English.

It doesn't take a Czech or a Turk more than a couple of weeks to learn how to read and write his own language as well as any professor. When Sequoia gave his people their syllabary, the entire Cherokee nation became a literate people almost overnight. Our own spelling, on the other hand, bears so little relation to the language it purports to represent that it has to be learned almost word by word, like Chinese. The process takes years. Except for some difficult sounds, a rich store of idioms, and some vagaries of accentation, English is not a hard language. Its grammar has much of the simplicity of Hawaiian and the efficiency of Chinese. The great stumbling block to foreigners (to say nothing of us) is the crazy way it is written.

That a language of the international standing of English should be afflicted with such a wretched orthography is unfortunate. An earlier generation had to suffer the cumbersome inflections and irregularities of Latin, but for all its awkward construction, Latin was at least spelled reasonably. English, conversely, is an efficient language spelled inefficiently. Some such practical phonetic alphabet as the one I've proposed might be useful as an auxiliary method of writing English for international use. There is no reason why we shouldn't have more than one way of writing our language. The Japanese have two or three.

How did our spelling become so chaotic? What got us into this fix? Why, for instance have we lost the good old teutonic letters þ thorn, and ð edh (they are still used in Icelandic), though we still have their sounds? English was written as it was spoken in the time of Alfred the great, and it still was by Chaucer. What happened?

The fact, that due probably to its heterogeneous ancestry, English underwent drastic sound shifts and grammatical levellings in a fairly short time (up to, say, the time of Shakespeare) probably accounts for some of it. The language simply got ahead of its spelling. Classical scholars with their passion for Latinizing everything also wrought much of the damage. The affectation of retaining foreign spellings has done its share of harm. Grammarians, etymologists, and lexicographers like Samuel Johnson did the rest. They tried to standardize our spelling along etymological, rather than phonetic, lines, and many of our etymologies are phony, at that.

Now to those concerned with the practical use of our language, etymology is of no value whatever. When I want to show my niece how to focus my camera, the fact that focus "really means" fireplace is of no help to her. I can't teach her how lenses work by talking about fireplaces or teaching her Latin.

It is fortunate for etymology that etymological spelling was not always used, for if it had been, much of the research on the development of our language would be fruitless. It is only because the contemporaries of Chaucer and Alfred wrote as they spoke that we know what their language was like. There were no tape recorders in those days. Let us hope that future etymologists can unearth a few tapes!

How can we get out of this mess? Turkey abruptly junked the Arabic alphabet [1] and started over, about 30 years ago. But Turkey is a compact, medium-sized nation whose people were largely illiterate, and did not have a large literature. The change there was feasible. For English such an abrupt change would be as hard to make as suddenly changing over to the metric system would be. Perhaps our spelling could be reformed gradually. Perhaps the phonetic alphabet could be used for just certain purposes (in international correspondence and technical literature, for example) and could flourish side by side with the conventional system until the latter slowly died out like the old German script. English spelling is one case where it is literally true that everybody's out of step except Johnny. He can read, all right. We just can't write.

[1] The Arabic alphabet, a sort of phonetic shorthand, is an admirable one — for Arabic. But it doesn't fit Turkish, which is totally unrelated to Arabic. Writing Turkish in Arabic letters was about like writing English in the Cherokee syllabary.

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As better tools
Improve everyone,
A good alphabet
Makes learning fun.

Leslie De Mar

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4. Language Engineering What it could do for us, by Ivor Darreg.

"EVERYBODY TALKS about the weather, but nobody does anything about it." Thus runs the famous remark by Mark Twain. Well, much the same could be stated in respect to language. A truly appalling amount of time is devoted in schools to the teaching of grammar and syntax, in both one's native tongue and in foreign languages. In the case of the English language, years have to be spent learning how to spell — and even the most highly educated individuals never quite complete the job. Nowhere is custom more hidebound and unyielding than in language. Language study is mostly memory training and habit formation — learning endless rules by heart and engraving in one's mind the habit-patterns corresponding to these rules. Often there is no reasonable or logical explanation, and even when there is, teachers and books are reluctant to divulge it.

In their fixity, arbitrariness, and capriciousness, language, custom, costume, and folk art exhibit a surprising similarity. An Indian war dance or an eighteenth-century French court ceremonial are not too far removed in this respect from the conjugation of a Spanish verb or the declensions of Latin and Russian nouns.

Still, we speak of a science of comparative philology — the amassing and correlating of information about different languages, the classification of them into families, the deduction and reconstruction of hypothetical Proto-Indo-European and Proto-Semitic word-forms. More recent scientific inquiry has led to the establishing of a psychology of language, a theory of signs (semiotic), statistical studies of language (chiefly applied to the written form), semantics, and general semantics. Besides these, work has been done in phonetics: this study of speech-sounds, besides its obvious utility in language learning, has also been valuable in correcting speech defects and removing foreign accents.

But the scholarly disciplines just mentioned are *passive* — they are, literally, "of academic interest" — what bearing can they have on the problems of our modern world? Out of scientific laboratories and industrial designers' workshops come new products and new techniques many times faster than society can absorb them; governments and their rulers have now maneuvered the peoples of the world into a position where any minute they may all be blown sky-high and abruptly cease to exist; mass communication media such as radio, television, records, newspapers, and magazines bombard us all day every day with enough words, music, and pictures to spin us dizzy.

There are more people to hear from and to talk to than ever before in history, but less time to do it in letter-writing is a lost art. Libraries have grown to tremendous proportions, but those who need the information they contain haven't the time to go there, nor the time to read such books as they do take out. And it can even stump a trained librarian to try locating the available information on a given subject. Students take notes; business offices, factories, and stores file data away by the ton — but can they find it when they need it later? Very often not; it's a standing joke how inefficient the efficiency experts' systems can be.

Edison said, or at least, it is claimed that he said, "There is too much talk going on in the world already; I don't want the responsibility of inventing the telephone!" Whether this remark he authentic or apocryphal, most of us can feel some sympathy for his position when the telephone rings at 3 a.m., or when we have just spent a futile half-hour dialling the same number and getting the busy signal. ... There was a time not so long ago — especially in the movies — when the importance of an executive was judged by the number of telephones on his desk, and by how many conversations he attempted to carry on at once.

If you have ever been in a room where several radio sets, tuned to different stations, were all going at the same time, you may have some idea of the way communication — or perhaps we should say attempts at communication — have multiplied in this modern age. This raises the question whether the human organism is equipped to stand such an avalanche of information. Have we not here the explanation for the increased incidence of nervous breakdown? It is hardly necessary to say much about the many attempts of people to get away from this contemporary hustle-bustle.

Fortunately, though very much belatedly, engineers, communication specialists, mathematicians, and others are becoming aware of the situation to which we have just been alluding, and are now trying to do something about it. Having established themselves in neatly pigeonholed and fenced-off specialties, it is not easy for persons in the various fields involved to reach across these divisions and work together — as will have to be done in order to effect language engineering. Nevertheless, an excellent start has been made.

One fruitful approach has been the *mathematical theory of communication*, and *information theory*. This has been pursued energetically of late because there are only so many long-distance radio channels available, wire lines and co-axial cables are expensive, yet there are more telephone calls, telegraph and teletype messages, radio and television network programs, picture facsimile transmissions, etc., than ever before, so it becomes an urgent dollars-and-cents matter — we might almost say, "a \$64,000,000 question" — to learn how to transmit the most information possible over the available facilities. Thus the Bell Telephone Laboratories and similar organizations find themselves in a field very close to language engineering.

The theory of transmitting information is complicated by the fact that most communication channels contain significant amounts of *noise* (noise is defined in a very general sense; for the purposes of modern communication theory, noise can be error-producing disturbance in visual as well as audible communication, e.g. the "snow" on a television screen), and one must deal at every step with the problem of recovering the message at the further end with as little alteration by noise as possible. Everyone who uses a telephone is familiar with the necessity for repeating phrases or sentences when the line is noisy — this of course slows down the effective rate of communication. In the visual case, even a punctuation mark or a space can cause serious changes in the meaning of a message: a play was written several years ago about the consequences which ensued when a man in a large city obtained a pair of theater reservations and sent a wire to his fiancée, who lived in the suburbs, reading: HAVE GOTTEN TICKETS. En route, "noise" on the telegraph line inserted a space, so that what the fiancée read on her telegraph blank was: HAVE GOT TEN TICKETS. It can be imagined what happened when she came to town with eight of her friends!

Equally important with the theory of transmitting information is the theory of handling and *storing* information. Electronic computers, for example, have to possess facilities for both temporary and permanent storage. Intermediate steps in the solving of a problem need to be held for a fraction of a second, or occasionally, a few minutes; while such data as logarithm, multiplication, and function tables are often wired in as an integral part of the instrument. Then, if the rate at which the machine performs calculations is slower or faster than the rate at which information is fed into the apparatus or the rate at which results can be delivered from the apparatus, storage facilities are needed to match these differing speeds. Any modern business, and any contemporary scholarly pursuit, is very much concerned with the problem of storing information. Card drawers and filing cabinets fill up all too quickly and take up floor space. Basements, warehouses, closets, and attics become cluttered with old magazines, books, papers, and transfer boxes. Despite a policy many people follow of destroying files over ten years old, and despite recommendations for weeding out no-longer-essential records, the accumulation problem has become gigantic, stupendous, and colossal.

The invention of the printing-press, followed later by the typewriter and duplicating machines, as well as photographic reproduction processes and now sound-recording, has created problems just as fast as it has solved them. Recently, microfilm and magnetic-tape data storage systems have been developed in the hope of saving space — but special equipment is needed both to file the information in the first place and to look it up later. To use a tape playback or a microfilm reader takes time. Both these systems have the disadvantage of being inflexible, in that it is very difficult to insert a new entry between two previous entries that it belongs between. A card catalog is very flexible in this respect, thus calling attention to the shortcomings of the new systems. There is room for much invention here.

So far, the engineering approach to these and similar matters has rather ignored what should be the most obvious place for engineering improvements: the spoken or written *language* in which the information to be transmitted and/or stored is first expressed. Only very recently is this being recognized. The main purpose of this paper is to encourage progress in that particular phase. An example will be relevant here: A logical development in the business field would be a *robot stenographer*. Several years ago, it was figured that the average dictated and typed business letter — a letter that seldom filled more than half a page — cost 58¢ to produce. The cost now might be 85¢ or even \$1.25. The usual approach to economy is the use of form letters and form paragraphs. This, naturally, makes communication less personal — and despite the arguments of the advocates of impersonality, less effective and less profitable in the long run. A form paragraph or form letter has to be sufficiently general to cover a variety of cases, and that very fact makes it less informative in any specific case. Thus the time and money saved by sending such a letter may be wasted later because the other correspondent will demand more specific information and another letter has to be written.

The time consumed in producing a business letter is not just dictating time, but transcribing time also, besides other delays inherent to such an indirect process. Yet the correspondent who types his own letters, even though he be an expert typist, is held down to typewriting rate, which is considerably slower than normal talking speed. So a number of inventors have attempted a machine which would turn spoken words into written words.

Obviously, this is a needed invention. Many of you will wonder *why* it was not perfected long before this. The main reason is the unphonetic spelling in such languages as English or French. For example, the words *hear*, *here* are pronounced alike. On hearing such a sentence as *Have him hear*, the machine might print *Have him here*, which would make just as good sense, so far as any memory circuits built into the robot stenographer would be concerned. Much thought and many man-hours have already been expended in trying to devise a machine which would follow most of the rules and exceptions of English spelling, but this writer, for one, fears that the typing from such an apparatus might look something like this: *The steemschipp wit deepar Phrighday for the Straights of Jibrawler frum Berth Phifftean in Knew Yoroc*. Even an inexperienced schoolgirl can spell better than that.

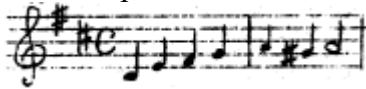
And, how on earth would the best of machines know when you were pronouncing a capital letter? Clearly, this is a case where the alphabet should be fitted to the machine's requirements, rather than the other way around! Fortunately, we have an immense amount of data accumulated by phoneticians, linguists, language teachers, statisticians, and phonemicists. There already is an International Phonetic Alphabet — there has been for almost a century. (This would be the place to say that the machine should only be concerned with the sounds of words — to know how to spell, it would have to incorporate expensive equipment just to deal with *word-meanings*.) The successful development of *this* machine might very well be the extra pressure needed to put over spelling reform. The chief obstacle to even the limited use of improved spelling has been economic; now the chief recommendation of this device using reformed spelling would also be economic.

A visible-speech machine has been developed which produces patterns corresponding to every conceivable speech-sound spoken into the microphone. One can readily learn to read these patterns, and it is even possible, through another mechanical device, to convert the visual patterns back into understandable speech. However, the patterns leave something to be desired in the legibility department. They do not make efficient use of the eye's shape-recognizing ability; they are not aesthetically satisfactory; and, worst of all, if they were printed in the smallest practicable size, they would still use many times the amount of paper used by alphabetic writing systems. A Swiss inventor has devised a machine which analyses spoken sounds into bands of frequencies, much as the visible-speech apparatus first mentioned does, but instead of the line-patterns, this latter machine operates a kind of pen to produce characters bearing a surprising resemblance to shorthand. However, this is only part of the task. Shorthand-style characters would have to be transcribed. Nevertheless, the fact that people without special intellectual endowments can be taught shorthand should reassure us that average business people could learn to read machine printing done in a phonetic (or rather, phonemic) alphabet. Indeed, the learning task would be cut in half, for one would only have to learn to *read* it — the machine would take care of the *writing*. Phonetic printing would not shock the eye as much as the code-system on the Stenotype machine, which turns a name like *George Smith* into SKWBORPBLG SPHEUT!

The symbols used on such a machine as we were discussing would have to be co-ordinated and evolved by lettering experts and type-designers. This is another chance for the extensive researches into legibility, recognizability, and Gestalt psychology to bear fruit. It must be remembered that the alphabet of capital letters used today is substantially identical with that used over 2000 years ago in Roman inscriptions, and not too far removed (in the case of such letters as A B E H I M N O K T V) from the forms used in Greek inscriptions some centuries earlier. Surely in all this time we ought to be able to come up with improved symbols for written communication! But not only have we clung to ancient forms for letters used to spell out words; modified (this term is too courteous — one might well say "scrawled" and "hastily scribbled") forms of these letters have been pressed into service for musical and mathematical signs, as well as commercial abbreviations. So haphazard has this use of signs been that when new letters were needed, existing letters of the alphabet were subjected to much-too-slight modifications, as G was made from C, and the numerals were allowed to take forms too close to those of the letters: Zero (0) and O, one (1), I, and l, for example. The customary handwritten forms of the small letters are very confusing, and a number of new words have from time to time been created by misunderstanding someone else's handwriting.

The ambiguity of written characters has produced such results as the extra silent *h* in Spanish *huevo*, the dots over small *i* and *j*, the avoidance in a number of languages of double *ii* and *uu*, the capitalization of the English word *I*, and the mistaking of an abbreviation-sign for the letter *x* in such French words as *doux*, *beaux*, *radicaux*. In mathematical notation, it has made the learning of mathematics unnecessarily difficult. For example, the multiplication sign X of arithmetic is seldom used in algebra, a dot \cdot being used instead. Exponents and subscripts are in small type often too hard to read. There are several division signs, where one sign should do. Special symbols were proposed for the numbers now known as *e* and *i*, but the printers of the time refused to obtain special types for the new characters, and considerable ambiguity has resulted since. In the new field of symbolic logic, there has been great disagreement about what set of symbols to use, so that one has to learn several ways of saying the same thing in order to become familiar with books by different authors. It is well known that musical notation preserves ambiguities that have kept thousands of people from learning to read printed music, to say nothing of severely straining the eyesight of those who write, read, and engrave conventional musical notation. Yet the toughness of the problem is shown by the failure of inventors so far to come up with a thoroughly better system.

By "thoroughly better system" we intend to imply that the new or "improved" musical notation schemes so far invented appear to introduce as many new disadvantages as they do improvements. For example, take the notes



in conventional musical notation. In the most successful other system, the Tonic Sol-Fa notation developed by Curwen in England in the 19th century, this passage would appear somewhat as follows: Doh = D | d r m f | s fe s – |

In translating (or transliterating, if you prefer that term) conventional musical notation into Tonic Sol-Fa, there have been both gains and losses. Let us list them. (Our non-musical readers will please bear with us; the principles here being discussed are equally valid in other departments of Language Engineering.) Among the gains, then, are:

- 1) Tonic Sol-Fa is more legible than conventional musical notation;
- 2) It uses familiar characters, the ordinary letters of the alphabet and punctuation marks, and is thus easier to learn and quicker to learn;
- 3) With only the slightest modification, it can be written on an ordinary typewriter and printed with ordinary types, which means that no special music-printing equipment or music-writing skill is needed;
- 4) Tonic Sol-Fa saves a substantial amount of paper, because it takes up less space;
- 5) Since singers and even other musicians are almost always taught the sol-fa syllables in the elementary stage anyway, this knowledge might as well be put to good use — common sense and the ideas of efficiency which prevail in other fields would dictate that;
- 6) It simplifies the learning of modulation (in the musical sense, this means the process of going from one key and/or mode to another);
- 7) It has been shown under practical teaching conditions that pupils first trained in Tonic Sol-Fa are better equipped to learn the conventional musical notation than those not so trained.

Sounds like a sales talk, doesn't it? Now let us list the losses:

- 1) The conventional notation presents a graphic high-and-low symbolism corresponding to what are called high and low pitches, notes are placed high or low on the staff;
- 2) In Europe and countries under European influence, the syllables do, re, mi, etc. are assigned fixed pitches and numerals 1, 2, 3, ...8 take the place of the English "movable" syllables — since music is international, this creates serious confusion and argument;
- 3) Tonic Sol-Fa is only for vocal music, it breaks down when applied to instrumental music such as piano compositions;
- 4) chords are difficult to represent;
- 5) Tonic Sol-Fa is suitable only for music of a certain period — modern music based on non-diatonic scales or repudiating the key-system is quite impractical in Tonic Sol-Fa notation (though it must be admitted that if a new series of twelve syllables were invented, this obstacle might be overcome);
- 6) persons whose time is limited or who otherwise do not progress from sol-fa to staff notation are condemned as illiterate by musicians using only conventional notation.

For any other proposed musical notation to date — and there have been many indeed — a similar table of advantages and disadvantages which tend to cancel each other out could be compiled. Also, the objection could be raised that not only is there a tremendous investment in printed music which it would cost a great deal to scrap, but the conventional notation has been engraved in the minds of musicians quite as much as it has been engraved on the plates. Associations have been formed, to break which there would be tremendous resistance. Many persons call the notation music as much

as they call the sounds music; that is how firm the association is. So, if any of you contemplate inventing a new music-writing system, think long and hard before you announce your system to the world! Too many man-hours have been spent in vain already. Do not make the mistakes of your predecessors. The problem is not impossible, but it certainly is extremely difficult.

Also, it must not be forgotten that the cost of recording music as disk, tape, or other records which can be automatically converted back into sound without any symbol-encoding and symbol-decoding processes is being steadily reduced, while the cost of printing music in symbol form is, if anything, rising, so that, musical notations are not so necessary as before, and may well tend to become specialized for special purposes. Though it may horrify "classical" musicians to say this, playing by ear may become more common. Other surprising trends are possible. This is emphasized here because it would be a waste of time to engineer a new musical notation for 1960 (and after) that was based on music as played, written, and taught in 1860.

The problem of writing down music has been discussed at such length because it is a good example of what Count Korzybski called the "map-territory" relationship. Throughout the field of language engineering, the problem will be encountered of making a system of symbols correspond to something else which is symbolized, and do so in such manner that one may confidently manipulate such symbols, then transfer the result of such manipulation to the domain of the things symbolized, and still have one's conclusions workable and valid.

In most of the cases to be considered here, this will be a problem of making visual symbols correspond to audible symbols, or vice versa. Also, in most cases, there will be the problem of encoding of the second order, i.e., symbols of symbols of things. For example, written words stand for spoken words, which in turn stand for objects or actions or relations. In mathematics, the third and higher orders will be encountered. Obviously, this greatly complicates the job of making the map represent the territory adequately.

You may have been wondering: Is this concept of engineering languages, and parts of languages, only for the distant future — in a word, Utopian? No; we can readily show that there have been some successful examples of language engineering already accomplished.

Acronyms have been a prominent feature of 20th-century life. The Russian Revolution transmogrified the Russian language by bringing forth many such words as КОЛХОЗ *kolkhoz* from the initial syllables of two long words, and ГЭС, РСФСР from the initial letters of words that would stretch across this page, as even the English equivalents would do. German followed suit with Gestapo from the initial syllables of *Geheime Staatspolizei*, while French has such examples as l'SF from *télégraphie sans fil*. All these we have imitated with such alphabet soup as radar (*Radio Detection and Ranging*), *Unesco*, and the recent *Piqsy*. While these acronyms are not entirely logical and systematic in their formation, they definitely imply conscious direction.

Better still in this department, we have the international chemical nomenclature. Ask your nearest chemist about the prefixes and suffixes -one, -ate, -al, -ose, per-, hypo, meta-, para-, etc., and he can come up with an internationally-accepted precise chemical meaning for each. This system was well engineered, and it is an excellent safeguard against confusion, present or future. The same carbon compound can often have two or more names within the system, each calling attention to a different aspect of its molecular structure.

In telephony and electronics, there have been many names systematically formed. However, this is not usually done with the finesse and precision of the chemical terminology. Examples are *maser*, *modem*, *voder*, *pentode*, *balun*. Earlier terms are being overhauled: *condenser* becomes *capacitor* to

avoid confusion with the entirely unrelated *condenser* on a steam-engine or refrigerator; while *micromicrofarad* becomes *picofarad* to save space and time.

Unfortunately, the spoken forms of these words do not display anywhere near the precision and accuracy that is displayed by the written forms. Language engineering should imply phonetic engineering also, but so far this has been sadly neglected.

Most of the so-called artificial languages, whether or not they were intended as international auxiliary languages, have been works of art and of trial-and-error rather than examples of language engineering. The best of them display a certain measure of logic and system, it must be admitted.

If they are to be a posteriori — to contain words taken from existing languages which are to retain a recognizable shape — then inevitably they will have to be unsystematic and contain irregularities. The saving grace of most of these schemes is that they are phonetically spelled.

The best example of a truly systematic artificial language is of course symbolic logic (which is generally considered along with mathematics). However, it is most unfortunate that it cannot be spoken in its present international written form; it can only be spoken about by translating each symbol into a makeshift jargon of ill-chosen ordinary-language words. The present writer has endeavored to solve this urgent problem by constructing a spoken code of internationally-pronounceable syllables for mathematics and symbolic logic, which is called *Numaudo*.

Here we have the converse of spelling reform: instead of changing the written symbols to fit an existing sound-system of spoken words, the mathematical and logical symbols are retained in exactly their present conventional written forms, but a new set of syllabic sounds is associated with them (rather as in musical sol-fa).

Another kind of engineering approach to language is seen in the translating *machines*, similar to electronic computers, now in the developmental stage. The text to be translated has to be structurally dissected by the machine, and thus intensive research work is required to determine the structure of the input language and to build information about this structure into the machine. Not only that, but information about the structure of the output language has to be supplied, so that the machine will construct the translated sentences correctly. With spoken language, the difficulties will be much greater, but language engineers should succeed in meeting this challenge.

The foregoing account barely scratches the surface. Language engineering is a wide-open and most promising field, with many imperative problems to be solved if we are to keep the communication channels functioning. As spelling reform is a branch of language engineering, it is quite likely that readers of this journal may enter language engineering in various capacities.

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5. The Stupidity Problem, reviewed by Helen Bowyer.

This bit of realism from the *Easy Chair* of John Fischer is one of the most engaging with which he graces the editorial pages of Harper's Magazine. There is hardly a point at which the Bulletin staff demurs and certainly not a turn of phrase in which it doesn't delight. So we'll briefly deal with some main portion of the articles content before touching on the specific reasons for our review of it.

It appeared way back in September, 1962, and we waited hopefully for the reader response. Rut when it came in the form of the usual letters to the editor, we found that they all dealt with what Mr. Fischer had said or implied — there was not one which went into what he had left unsaid. [\[1\]](#) So there was nothing else to do but for the Bulletin to take over that, with renewed thanks to Mr. Fischer for making that obligation so interesting.

According to the psychologists, he notes, intelligence seems to be parcelled out among human beings in line with a fairly consistent pattern. If you round up a hundred typical Americans off the streets, getting a fair sample of the whole population, you will find that about 46% of them would have something close to normal intelligence — that is to say, an intelligence quotient between 90 and 109. Another 20% would be quite bright, with I.Q.'s ranging from 110 to 139, and one or two would be really brilliant with I.Q.'s of 140 or above. On the other hand, 20 people would have to be classed as fairly stupid, since their I.Q.'s would fall between 70 and 89, and two or three would barely have enough sense to come in out of the rain.

These figures are based upon the standard *Stanford-Binet tests*, and as Mr. Fischer suggests, should probably be taken with a moderate amount of salt. There are some types of mind they seem incapable of measuring. They work best in gauging ability to handle language, figures and abstract concepts, but they tell little about capacity to handle colors, shapes, sounds and human relationships. Consequently, a person of real talent and high social value — a painter, sculptor, mechanic, or a woman with the warm empathy to run an orphanage, might score low on the conventional I.Q. scale. Moreover, some educators wonder if these standard tests don't exaggerate the native brain power of people who come from comfortable middle class backgrounds, while underestimating that of those from poor families and laboring class traditions. Then too, experiments in the New York schools seem to indicate that an individual I.Q. is not permanently fixed, that it can be raised quite a few points by special educational efforts and motivational stimuli. Conversely, anyone confined too long in a dull and unstimulating environment may grow stupider.

If these limitations are kept in mind, however, the general conclusions pointed by the I.Q. figures seem sound enough. Some people are born a lot brighter than others and will stay that way. No amount of special training and stimulating will convert an I.Q. mind of 70 into an intellectual giant.

Mr. Fischer cites our high school dropouts as a case in point. Most of them leave school not because of economic problems, but because they cannot keep up with the not very demanding work. The Federal Bureau of Labor Statistics has reported that 80% of the dropouts are lagging by at least one year and the connection with low I.Q. is pointed up by the findings of the National Education Association that 25% of the selective service registrants fail in the Army's mental tests.

In that fairly recent past when almost any willing adolescent could find a job of sorts, dropping out was perhaps the best thing that most of the stupider young could do. Better for their souls that they

should herd sheep, dig ditches, pick cotton, "hi'st that bale or tote that load," than that they should sit as dumbbells in a class of their agemates, or still more humiliating, in a class of their juniors, who more or less knew what their teachers and their text books were driving at. But now their muscle has become almost obsolete, Anything it can hi'st, a machine can hi'st better. Practically any job involving repetition of the same motions can be done faster and better by a mechanical or electrical device. So the muscle-worker is out of luck. The unemployment rate for 16 to 19 year-olds is twice as high as for adults. A few may still get jobs as messengers, gas pump operators or dishwashers, but many others drift straight from the classrooms to the relief rolls or to crimes.

For as our society is now organized, we can't find much use for most of these young dullards — a situation unjust and miserable for them and costly and dangerous to the rest of the community. Right now, Mr. Fischer realizes it is not only unfashionable but almost indecent to admit that this 22% of stupidity exists, Our educators presumably know all about I.Q. distribution, yet they keep right on talking about slow learners, culturally deprived children, underachievers — almost any euphemism to avoid admitting that there are a lot of children unable to absorb the kind of education we are trying to push down their throats.

We are even a bit uneasy about giving special attention to unusually talented pupils. In recent years there has been a good deal of talk about the gifted child, yet in the great majority of high schools, the really bright youngster is still bored, underworked and educated far below his capacity. Americans are not yet ready, apparently, to search out the high potential student — at whatever age their talent begins and whether they come from slum or suburb — and to say; "This percent have the possibility of becoming future William Faulkners, Robert McNamaras, George Gershwins and Alfred Sloans. They represent an invaluable national asset. Therefore it is vital to the public interest to give them the very best teachers and equipment and push them to the limit of their capacity. The second raters will have to get along with what is left."

Undemocratic? By our traditional habits it may be so, but in the not so distant future, it may prove to be the only possible way to run the kind of society we are developing.

A field still open to the dropouts, could we Americans change our attitude to it, is personal service. Both the efficiency and the tone of American life could be vastly improved if this came to be regarded as an acceptable way of making a living. For we have the curious spectacle of millions of people on relief while at the same time millions of households are looking for desperately needed help — help to care for elderly relatives, tend the children and assist with the heavier chores. If such help could be found, countless women, many of them highly educated, could be freed for teaching and other understaffed professions; innumerable old people would not have to be condemned to nursing homes; any number of business men could save the energy now dissipated in shoveling snow, putting up storm windows and tinkering with balky plumbing. "It might be" Mr. Fischer climaxes, "even become possible to get prompt and courteous service in the average hotel and restaurant — but no, that is carrying the fantasy too far."

Such work demands no great intelligence and only a minimum of training. Yet it is scorned by nearly all the people on the unemployment rolls. "That isn't our kind of work, they say, and relief officials ordinarily will not require their clients to accept any job opening outside their customary trade.

No doubt there are many other and better ways to find useful work for the lower I.Q.'s and to persuade them to do it. My main point is that nobody seems to be thinking about such things

because nobody is yet willing to admit that the stupidity problem needs solving. The steps taken by the Kennedy administration to fight unemployment — new factories for distressed areas, retraining for technologically displaced workers, general stimulus for the economy — may be fine for their own purposes, but they ignore the special problem of the dullard. This is not only dangerous but expensive. When you condemn people indefinitely to idleness and public charity, you condemn them also to frustration and bitterness — to the kind of discontent which may have a lot to do with the crime rate — assault and thievery — and political unrest.

It ought not to be beyond human ingenuity to create worth while jobs for these people, if we only set our minds to it. If we tended our forests, for instance, as carefully as the Germans do, we would need many millions of hours of not very skilled work and we would increase enormously the value of a precious national asset. We might even set a hundred thousand men to work cleaning the litter off our streets and the beer-cans out of our trash-clogged parks and streams. And we might as well start now to devise an educational system which will candidly train every youngster for the level of work which fits his intelligence instead of pretending that each is potential college material."

[1] Let us repeat here that there is hardly a thing this editorial says with which the Bulletin is not in accord. But now for some of the things it left unsaid.

Perhaps if that top 5% of our national intelligence which has given us William Faulkner, Robert McNamara, George Gershwin, Alfred Sloan would organize themselves into a voluntary leadership of the next 20% of their fellow citizens, we could quickly open up these areas of employment for our duller youth — at least for a little while. But with machines and electronic devices abolishing jobs at the rate of 40,000 a week this year, and — so a highly responsible business source prognosticates — at the rate of 80,000 a week next year, isn't it probable that the young under I.Q. will be shouldered aside by those a little higher up the intelligence ladder, those perhaps between 90-100? There is scarcely a job, whether in the forests, in cleaning up parks and streams, or in the kitchens and yards of private homes which couldn't be done, better by this higher level group. But what even of this group the second year from now? — a year about which the business source just quoted, confessed itself wholly unable to hazard a prediction. Suppose its abolition rate should also double and reach 160,000 a week. And have we any assurance that it wont?

Where is it going to end? Dr. Robert M, Hutchins, longtime head of Chicago University, faces unflinchingly up to what he sees as the probable truth, It is going to end in what for most of us will be a workless world, be we stupid, average or bright below that one or two in a hundred who measure 130 and up. The May before Mr. Fischer's September editorial, *School and Society* published an article in which Dr Hutchins warned that that workless world was, "rapidly coming into existence" and offered his solution of what we were going to do in it. How, that is to say, we are going to fill the forty or fifty hours a week we now put in on the job and going to and from it.

Wouldn't we be wise to take him seriously enough to look at least the possibility of that world squarely in the face? And do it now? Particularly, as in all probability, it would be upon its much earlier than upon the U.S.S.R.

It is due to no particular merit of hers that she is not yet faced with the nightmare quandary of millions of youth out of school and out of work. It is just that she has so far to go to bring her agriculture, industry, transportation etc. up to scratch, she can use every bit of automation she can lay her hands on and still find a good job for every lad and lass who should be working. As of now that means all youngsters of 16 and up who feel no great urge to continue their daytime schooling,

So great indeed, is the demand for manpower that even the 18 year-old graduates of the standard 11 year school are encouraged to put in a couple of years in productive work before going on to university or other form of higher education. So she may not only have much more time to foresee and adjust to this workless world — she may have the immense advantage of watching the crash efforts of our country and other highly industrialized lands who staved off, too long, the hard, realistic, long-range thinking which even the automating of the elevator should have evoked.

Dr. Hutchins answer to his workless world is an immense expansion of adult education. The absorption of these hours now spent on the job, in science, mathematics, the humanities, the fine arts — the diverting to the development of the mind, the emotions, the aesthetic sense, the time, energy, attention to tasks of which automation is about to relieve us.

If he is right, then again Russia has the advantage over us. As long ago as 1958 when our then Commissioner of Education was heading a group of outstanding colleagues through a 7000 mile tour of Soviet schools, universities, ministries, etc., he wrote: "Everywhere we went in the U.S.S.R. we were struck by the zeal and enthusiasm which the people had for education. It is a kind of grand passion with them."

Today adult education is so much a part of the average Soviet citizen that it is impossible to define its boundaries. This would require outlining the cultural life of virtually all persons between the ages of 25 and 60, from the high Communist Party officials to people in remote areas who are just emerging from primitive patterns of life. Writing of her third educational tour of much of both European and Asian Russia, Elizabeth Moos tells us, "As the working day is shortened (in some fields to 6 hours, in others to 7) Soviet officials feel it more and more necessary to provide cultural and educational activities, The All-Union Society for the Dissemination of Scientific and Political Knowledge is responsible for supplying lecturers, arranging programs, and general supervision of such adult education activities as Peoples Universities. These are organized which have been established in many parts of the Soviet Union with the cooperation of the Ministry of Education and the Ministry of Culture. The staff in these universities is made up of professors from the higher schools, teachers from the secondary schools, writers, artists and musicians.

There are no admission requirements. Anyone interested is welcomed... The courses are designed for cultural enrichment and chosen according to public demand... I noted among the subjects: Automation, French Literature, Interior Decorating, Astronomy, Archeology, African Culture. There are no age limits; pensioners and old people take courses, join in choruses and other activities. Concerts, opera and theater performances are widely patronized by workers. Trade unions have blocks of tickets for their members at reduced rates.

Reading books seems to be a major leisure time occupation. Elevator operators and taxi drivers read serious books, fiction and non-fiction, whenever they have few minutes free. On a Leningrad street, I saw the woman driver of a huge truck sitting at the wheel and reading while the truck was being unloaded. It was a new edition of Pushkin's *Eugene Onegin*. Books of Soviet and Russian authors and translators of literature from all over the world are published in enormous numbers. They are sold very cheaply. Mobile libraries go to remote farms and villages, to construction sites and housing projects, bringing books for readers of all ages."

Suppose that we should wake up soon to the rapidity with which a workless world may be coming into existence here, could we organize such a transition to it as the Soviet Union already has under way? Not unless we first made our spelling as phonemic as hers. With a third of even those of our

young who enter high school destined to leave it unable to read beyond fifth grade norm — when that! — we can safely figure that an appalling proportion of our adult population can do no better. Moreover, the effect which their inability to get meaning out of print has had on their hearing-understanding vocabulary would shut them out of participation in such Peoples' Universities as those in the U.S.S.R. Quite possibly, also, it has lowered the I.Q. which they brought to school at the burgeoning age of six. Just as disastrously it has warped the personality of many of them to the point of indifference or actual hatred of anything approaching cultural enrichment.

Of course we need not have had any large block of our population in this condition. A wun-sien-wun-sound orthography has been ours for the taking since before the birth of the oldest illiterate or semi-illiterate in our land. And few things could be simpler — or more inexpensive — than to introduce it into our schools now. Why don't we? Why do we ignore the enormous educational advantage our great world rival has over us? Where is our patriotism? Where is our American self respect?

Particularly as this stupidity-illiteracy-automation quandry of ours is complicated by another giant problem which will probably hit us sooner and harder than the U.S.S.R. This is the population explosion. Before our present first graders reach their half century mark, their world will be swarming with 6 billion people, of which, presumeably, the United States will have its proportionate share. More serious yet, as I have heard geneticists warn, this population explosion may well be also, a stupidity explosion. All reliable statistics so far show the duller half of the population proliferating faster than the brighter. Till fairly recently, the great deathrate among the former has kept Mr. Fischer's "fairly stupid" down to something like 22%. Now that medicine, sanitation, philanthropy, has so nearly equalized the deathrate among all sections of our population, the higher birthrate of the duller may bring who knows what increase in their percentage of our population?

Suppose that in the lifetime of our younger adults, this percentage should reach 30 instead of the present 22. Almost one person out of three without the mental ability to learn to read beyond third, fourth or fifth grade norm. And cut off by automation from any chance of the simple jobs in which their kind have passed most of the time till lately. How would we handle the problem they would constitute? Especially (another especially) as most of them would be living in the cities. With agriculture mechanized in large tracts which require few field hands, life is likely to grow more and more urbanized. With all the problems of housing, health, noise, transportation, accident, delinquency, crime greater and more complex than now. It is quite likely that here again, we are at a disadvantage as against the Soviet Union. She has such enormous reaches of land still to bring under cultivation, and the masses of her people are so much closer to the soil than ours, she may be able to stave off general urbanization much longer than we. In any case, every one of these problems, stupidity, education, automation, population explosion, urbanization is intensified for us by the chaos of our spelling and lightened for her by the phonemicism of hers.

This is a problem that should worry our legislators as well as our educators.

6. On Czechoslovak learning

Dec. 9, 1963

Dear Mr. Tune: When our country can spend billions of dollars on the flight to the moon and other satellites, there is no reason that it could not manufacture typewriters that would write in fonetic spelling and sell them at cost to the American public, and print books in fonetic systems for the children in schools to save them from the trouble of learning how to spell thousands of words in our language. Let me tell you my experience in life. My folks came from Czechoslovakia before I was born. We lived on a 40 acre farm in the woods surrounded by Czechoslovak people. They could not speak English. Before our school age we were taught to repeat the Czech alfabet. One day father bot us a Czech primer. We were already asleep. When we awoke, he was gone to work and the booklet was there. We found the alfabet in it. I went to repeat the alfabet pointing to the letters as I named them and I thus learned the letters and the sounds. Then I started to read the lessons. They were lesson one: ba, be, bi, bí, bo, bu, bou. Lesson two: ca, ce, ci, cí, co, cu, cou, Thus the lessons were all thru the alfabet to the last: ža, že, ži, ží, žo, žu, žou. Then came part II which had short sentences. I had a little help from father that started me to read the short stories. I read the booklet to the end without any more help. I needed no teacher. I was not learning to spell words as I had to when I went to school and studied English. And there is no word in the Czech language that I cant read or spell now. But after all my learning thru the grades and thru the Normal School in Mankato, Minn, I still cannot read and spell many words that are in the English language. But I was always ahead in my classes in reading which I ascribe to the fact that I had learned as a boy to study the Czech reading. But, I remember many of my classmates could not spell their English lessons and were brutally whipped by the teacher with an oaken ruler over their backs. So they provided padding for their backs and were heros that they could stand such beating. I pitied them and want to help the future children to be saved from such torments by the teachers. There is no excuse for any nation not to provide a fonetic spelling for their language. The English people ot to be ashamed of their spelling.

Yours truly, Martin Vikla., Lonsdale, Minn.

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7. Two Years of the Initial Teaching Alphabet in England by SIR JAMES PITMAN, K.B.E., M.P.*

Presented at the 28th Educational Conference by the Educational Records Bureau in the City of New York: October 30th, 31st, and November 1st, 1963.

(This paper is in two sections: In the first section Sir James reports certain findings and experiences of the current researches and suggests ways in which they have a bearing on the assumptions postulated in the second section. In the second section he deals with the future teaching of reading while postulating, for the purposes of argument, that teachers of the initial stages of reading will, in the course of the next few years, generally make use of the new medium known as Pitman's Initial Teaching Alphabet (i.t.a.) instead of Traditional Orthography (t.o.) — to which, however, a transition will be made by the children when fluency has been achieved and when learning success has been assured.)

* Sir James Pitman is a member of the committee supervising the research being conducted by the University of London's Institute of Education and the National Foundation for Educational Research in England and Wales. He is the designer of the Initial Teaching Alphabet and its spellings. The Initial Teaching Alphabet and its spellings provide a medium combining absolute consistency in word and sentence patterns with absolute reliability in character-to-sound relationships to furnish effective clues for relating the printed word to the spoken word. Its major goal is to teach children to read more effectively in our traditional alphabet. Sir James is the Member of Parliament for Bath.

I

So far there have been two interim reports of the research into the use of i.t.a. in Britain: the first [\[1\]](#) was made in this very room at your Convention last year; the second [\[2\]](#) was presented at Miami Beach to the Convention of the International Reading Association. The author of both reports was Mr. John Downing, the research director, and both have been published and widely read.

The research was planned to cover some 2,500 child beginners. In the event 2,808 i.t.a. children have been recruited and as will be disclosed later a further 1,000 are being recruited.

Thus by the end of July, 1963, the research had recruited 2,808 children between 4 and 5 years old; they were introduced to the new medium in six termly intakes, the first intake having now completed their second year at school;

September, 1961	*432
January, 1962	165
April, 1962	164
September, 1962	1,313
January, 1963	424
April, 1963	<u>310</u>
	<u>2,808</u>

Fig. 1. The number of children included in the schools, arranged according to dates of intake into the schools.

*At the September, 1961, intake sixteen experimental schools and thirty-three control schools were effectively participating in the experiment.

An estimated further 1,000 were recruited to the experiment at the September, 1963, intake, in order to improve the matching between individual children in the i.t.a. group and the t.o. group.

Since the second (Miami Beach) interim report, [\[3\]](#) the relevant children have undergone by October of this year, further tests as shown in Figure 2 on page 31.

Perhaps the most significant indications from those further tests arise from the comparison of the results from the 165 and 164 children in the January and April, 1962, intakes with one another and with the results from the 432 children of the September, 1961, intake, all three groups having been tested after completing the first year of being taught with i.t.a. The criterion was provided by the Schonell Graded Word Reading Test, the words being, of course, printed in i.t.a. for the i.t.a. children.

It needs to be pointed out that as yet no wholly satisfactory test has been devised for comparing success with i.t.a. and success with t.o.: though so far as the lowest levels of success are concerned (from the failure to read more than 4 words out of 100 up to being able to read 49 or less), it is probable that the Schonell Graded Word Reading Test furnishes, at any rate in part, a sufficiently reliable measure of reading attainment.

Moreover, children of 5 and 6 are very young for such testing and it needs to be pointed out that just as it is possible that the fact that a man knows only 4 men out of a roomful of 100 men is not a measure of how many men he knows in total, and will be an entirely unreliable foundation upon which to infer the degree of his acquaintanceship, so a child's knowledge of 4 words out of 100 on the Schonell will not be an accurate measure of his total reading vocabulary. Caution must be exercised over interpreting the graduations of the Schonell results. They are statements of standards of reading ability, not of the number of words in the child's reading vocabulary. As such a statement, they are probably very reliable, particularly at the lower levels of achievement.

While in course of time the results of all these series of tests will accumulate to complete the ascertainable facts concerning the child and his progress, the interim results which may most conveniently be ascertained and published, and which are of most value, are those from these Schonell Graded Word Reading Tests.

After eliminating those children in the intake who were found to have a prior ability in reading, and needing to accept a number of drop-outs, the September, 1961, intake of 432 became 345, the June, 1962, intake of 165 became 106 and the April, 1962, intake of 164 became 143. The total of 761 children thus became 594 who were so tested, all of them after completing the first year of being taught with i.t.a. The similar total of children in the control t.o. classes was 1,073, all similarly tested after the completion of the first year.

If then the results of these three intakes by this Schonell test are merged (total 594) and compared with the 1,073 children tested after the first year of being taught with t.o., the comparison is as shown in Fig. 6 on page 35 (the t.o. children being tested in t.o.).

The results of the intakes of September, 1961, and January and April, 1962, are given in Figs. 3, 4, and 5 on pages 32, 33, and 34. These results thus, both when merged and when separate, confirm one another.

The consistency of the results for both the t.o. and the i.t.a. children of all three intakes, as shown in Figs. 3, 4, 5, and particularly 6, is worthy of note. Consideration of Fig. 6 is especially worthwhile in indicating both this consistency and the overall superiority of the i.t.a. results over the t.o. results,

and their high degree of superiority at every stage from that of less than 5 to more than 85 but less than 90. It will be seen moreover that the improvement has been at the lefthand side of the scale, where it most matters. Greater earlier success and greater satisfaction at the levels nearest to failure are much more important than the small loss among those who have tasted success and satisfaction — and will read anyhow. (Fig. 7 is, as explained in its caption, a reissue of the results for the September, 1961, intake, but after a further half-year of school. This, and the consistency of the three groups, provides trustworthy support for both of the propositions advanced by Mr. Downing last May (see the first quotations (a) and (b) on page 7), and thus for my own assumptions.

I am no scientist. The responsibility of the research is not mine but that of Mr. John Downing, and I would have preferred to contract out of what is his proper territory. However, your most admirable and commanding Dr. Ben Wood has insisted that you should be given some up-to-date facts as a basis for evaluating the most up-to-date results from the British research, and Mr. Downing has very kindly supplied me with the data given above — and helped me with the wording. It is his prerogative to draw, from any presentation of the results of his work, the prestige and honour which he so richly deserves, and so I make no apology for restricting the objective data to that which he has available and has kindly given me.

Yet further data from the more recent tests is not ready and I feel it is reasonable that I should now pass from the objective to the subjective evidence (albeit objectively regarded). But before doing so, you may be interested to have this information about Mr. Downing's plan of testing during the next year or so (See Fig. 8 on page 37).

The results of all these tests will be released by Mr. Downing in due course.

Subjective evidence, objectively regarded

During the school year which has just begun, a very considerable number of further i.t.a. classes are being formed by local education authorities on a completely voluntary basis, including classes in areas controlled by authorities which have not hitherto participated or even been invited to do so. These new classes are distinct from the 1,000 children mentioned above, who joined in as final intake in the main research, and will be outside it. So, too, outside the research, will be the new classes in schools which originally participated. They will be conducted as ordinary classes, but using i.t.a. instead of t.o. and adopting the procedures normal for the adoption of a new discovery as part of the day-to-day routine practice.

Some education authorities have even had to be discouraged from yet trying out i.t.a., and in others the number of schools has had to be restricted. This is partly because of organizational difficulties in providing sufficient facilities for instructing practising teachers in the new approach to teaching, and (more limiting still) because of the past-summer shortage of suitable books. Printing numbers of the books designed for the main research were only barely adequate and allowed no margin for the general use of i.t.a. which has now followed. There has also been a delay in the preparation and supply of new apparatus designed specifically to exploit the new teaching situations created by i.t.a. — in which the methods of look-say may be, and indeed ought to be — deliberately combined with those of phonic and syllabic teaching.

It is estimated that 5,000 children will participate in these non-research classes in this school year, of which over 1,000 children actually started in September in England, Wales and Scotland. (This will make a total of 8,800 children since the research began who will have learned through i.t.a.) This estimate of 5,000 children during the current school year has been based upon the thirty-three authorities (and their schools) which have actually applied for books, have nominated teachers and arranged to have those teachers trained in the use of i.t.a., as shown below —

Bedfordshire	Burton-on-Trent	Hertfordshire	Oldham	Surrey
Belfast	Caernarvonshire	Keighley	Oxford	Walsall
Birmingham	Cheshire	Lancashire	Rochdale	Wigan
Blackburn	Dewsbury	Leicestershire	Southend	Willesden
Bolton	Dundee	Lincolnshire	Staffordshire	Wolverhampton
Brighton	Exeter	London	Stoke-on-Trent	
Bristol	Harrow	Newcastle-under-Lyme	Stockport	

Most of these authorities have conducted, or will shortly be conducting, lectures and courses for the training of their teachers.

Meanwhile in America, the earlier small beginnings in several private schools have been supplemented by considerable accessions this school year. Six hundred first-grade children in the Lehigh project, under the direction of Dr. Albert J. Mazurkiewicz and supported by a \$48,000 grant from the Fund for the Advancement of Education, started this September. So did the ablest 125 children under the Greater Cleveland Educational Research Council. A small remedial class in New York is typical of a number. Some 300 children between the ages of three and six are expected to start shortly under Dr. John Rosenbloom of the University of Minnesota. In addition, small units in Chicago; Akron, Ohio; Media, Pa.; Lompoc, Calif., and Syracuse, N. Y. and others have started, or will shortly be starting.

In Canada, one major city has already started and at least four of the Provinces, including six other major cities, are considering starting with i.t.a. in some of their schools. In Northern Ireland 50 children are learning to read using i.t.a. In the Republic of Ireland two State E.S.N. (Educationally Sub-Normal) schools and one high-class private school, all near Dublin, have begun to teach with the help of i.t.a.

The spread of the use of i.t.a. and the fact that teachers involved in the research decide freely to go on using it instead of reverting to t.o. is very encouraging. Now that no more children are needed for research purposes, one might imagine that some teachers and authorities would return to the old medium. But they do not. As practical educators they are already convinced. Not only has not a single reversion to t.o. taken place, but many teachers and administrators are making enthusiastic use of their experience gained in the research classes to give lectures and help run courses for those in charge of new i.t.a. classes.

Some comparisons

Last May at Miami Beach [\[4\]](#) Mr. John Downing reported that, *subject to confirmation by later results*, it would be:

"clear that (a) children can learn to read more rapidly when their beginning books are printed in Pitman's i.t.a., and hence that (b) the use of the traditional alphabet and spelling for beginning reading does seriously retard children's progress into the world of books."

Mr. Downing also listed the following five findings of how the i.t.a. children are superior in achievement to the t.o. children:

- "1. Young children get through their beginning reading program faster when their books are printed in i.t.a.
- "2. They can recognize more words in print when they are in i.t.a.
- "3. They can accurately read continuous English prose more readily when it is printed in i.t.a.
- "4. They can comprehend more continuous English in print if i.t.a. is used.
- "5. They can read faster when the medium is i.t.a."

He reported too that in the control (t.o.) classes the findings have shown that the conventional alphabet and spellings of English cause reading difficulty and:

- "1. delay progress in the reading program;
- "2. frustrate the recognition of words in print;
- "3. impede the development of skill in reading continuous English prose;
- "4. cut children off from words within their range of comprehension;
- "5. reduce their speed of reading."

He further suggested the following:

"The impediment caused by the conventional alphabet and spelling appears to go beyond erecting barriers to success in these various aspects of reading. Head-teachers of the experimental schools have reported that i.t.a. 'not only accelerates progress and raises reading standards but it also brings with it certain other advantages:

- '1. it raises the young beginner's level of self-confidence;
- '2. it increases enthusiasm for reading and interest in books;
- '3. it allows children to be more independent in their work;
- '4. it results in a marked improvement in creative writing;
- '5. it permits children's thoughts to flow more naturally in writing."

I have Mr. Downing's permission to assure you to-day that all the evidence that has since become available has confirmed what he then wrote, and that not a single piece of evidence has conflicted with it.

The transition state

Two large questions remain to be discussed: (1) Has the transition to t.o. continued to be made as effortlessly by the "laggards" in the September, 1961, intake — i.e., those who by February, 1963, had not reached the transition stage — as it was made by the quicker learners? (2) When those who still must be considered as laggards eventually do achieve fluency in i.t.a., will the transition be as invariably successful as it has been with the rest of the i.t.a. group?

No further tests of the transition stage have been organized for the September, 1961, intake subsequent to those in February, 1963, which were reported on by Mr. Downing last May. [\[4\]](#) Testing at more frequent intervals has been shown to be superfluous, because doubts about the transition stage have largely disappeared. Whereas at the outset all teachers feared that the transition would present a forbidding hurdle, they are now so confident that fluency in i.t.a. is synonymous with fluency in t.o. (whether upper case, lower case, or cursive handwriting) that additional or intermediate testing of success in the transition no longer seems to be necessary; in any case the progress of the children across the transition stage is indicated by the teachers' records to t.o. books issued to children who have completed the i.t.a. teaching course (see Mr. Downing's report at Miami Beach). [\[4\]](#)

All the subjective evidence confirms (1) the previous objective findings that the transition appears to be automatic and effortless; and (2) that it is equally true for the laggards when they eventually attain fluency in i.t.a. No evidence at all has appeared to indicate the possibility of the contrary.

i.t.a. and remedial teaching

When it was originally conceived, the research was concerned with initial teaching only, but the enterprise — and possibly the desperation — of remedial teachers led many to originate their own small experiments or field trials. Indeed, the extent to which this has happened amounts to another unsolicited testimony to the success of i.t.a.

During the School Year 1962–63 i.t.a. was used in 57 schools and centers for remedial teaching, and there is no doubt that this number will increase to 200–300 during 1963–64 as adequate teaching material becomes available.

The objective data is limited to scattered reports on small groups of children; the information has been passed to the University of London Institute of Education but has not yet been collated. A report, however, by John Downing and Keith Gardner, was published in *Educational Research* [\[2\]](#) in the November, 1962, issue, and was followed up by a further report by John Downing in *The Reading Teacher* of March 1963. If only there had been the money and staff to enable London University's Institute of Education to extend its research to this special field, there would be a great deal more published evidence of i.t.a.'s success in rescuing the apparently hopeless slow-starters and in developing the reading and linguistics of backward readers. Plentiful evidence could also be supplied of the great improvement in attitude to life and to society which follows the mastery of reading — not to mention the change in society's own attitude to its newly literate members.

The reasons which led the committee to limit the research to initial teaching should, no doubt, also apply to my report to this meeting, and therefore the value of i.t.a. must stand or fall on its merits as a medium for initial teaching rather than remedial teaching. But on this score I have no fears either, that it will, I am confident, prove to offer at least as spectacular and beneficial an improvement for remedial as for initial teaching.

Future progress reports

It is understandable that teachers and educators generally are impatient to have the results of the research, stage by stage, almost before the statisticians have been able to calculate the percentages! John Downing has met this demand and disclosed his interim findings with commendable promptitude, even though this kind of piecemeal dissemination is clearly not what a research worker normally desires. He has very kindly furnished me with the above important, if limited, third instalment of information. Although your Convention provides a very appropriate occasion for this kind of report, I am sure you will agree that such occasion should not determine a report's precise timing. Moreover, it is only right and fair that the next and most comprehensive release of information should be in Britain, and that our own Minister of Education, with whose sympathetic interest this adventurous research was planned, should be accorded the opportunity to participate in the occasion. He might well decide that this might be the moment for a review of future policy on teaching reading in which might also participate all those in authority over the schools for which he, together with the Secretary of State for Scotland and our 181 educational authorities, are responsible.

Defence in depth

Throughout my life-time struggle in this field I have become used to opposition which might fairly be described as "defence in depth." The teaching of children's reading is a subject that stirs passion and emotion. Little children and their welfare rightly touch the deepest chords of genuine solicitude. Thus the traditional, both in teaching reading and in the medium in which it is to be taught, is defended to the last ditch — which is reached only after a "phased withdrawal" from previous defensive ditches. Let us examine some of the standard objections to i.t.a.:

DITCH 1. i.t.a. is unnecessary and harmful, because children will find it equally difficult to learn to read in such a novel and obviously imperfect and provisional medium as they do in t.o. If, however, the findings of earlier research are mentioned and if one claims that only by further scientific enquiry will these alleged demerits, or the merits of i.t.a., be disproved or proved, it may or may not produce a concession, but too often it amounts merely to a failing-back, in an orderly withdrawal, to the next ditch.

DITCH 2. That even if it should be admitted that it could be easier for a child to learn in the new medium, it is next argued that the child will then need to unlearn the new skill and to learn afresh to read in t.o.; that the process of unlearning will be harmful and that in any case he will lose more time in the lengthy transitional processes than he could possibly have gained earlier in the initial stages. Here again, it may eventually be conceded that a priori reasoning, existing evidence, and future research may together be capable of supplying the necessary proof, but should this proof (impossible as it may seem) turn out to be to i.t.a.'s advantage, even then a series of four further defensive ditches are taken up.

DITCH 3. That even if i.t.a.'s success in the transition should be admitted then the damage to the child's spelling would be devastating and permanent.

DITCH 4. That even if good spelling, as well as reading, could be achieved with i.t.a., the child would anyhow have become literate in time and therefore will gain nothing from an easier way of learning, nor by learning to read and write earlier and more effectively by a given age.

DITCH 5. That children who fail to learn to read are anyhow so unintelligent (for how otherwise have they failed?) that reading ability for them would make no real contribution sufficient to justify the great disturbance to the more intelligent majority.

DITCH 6. That the reading ability acquired through i.t.a. may recede at a later stage, or that such children will at least fail to make the further progress which they would have made had they learned with t.o. from the beginning.

Those who have observed children learning with the new medium are convinced that the *a priori* reasoning and the findings of earlier researches have been more than confirmed by their own experiences during the current research; this is certainly true of the first two of these six defences in depth. Their own experience has also convinced them, even though objective documentation is not yet to hand, that the third line of defence (spelling) has already crumbled.

accordig to mie calcuelæþions from unescæ sorses ov infor-
mæþion, ic reckon that with sum 7 million children joinig scool
every yeer in the igglisþ-speckig wuold,¹ and spendig sæ ten yeers
in scool, and with at leest 20 per sent ov them trubld, as ic am
convinsd, hie readig disabilitis which cood mæst speedily bec
ævercum, thær must-thærfor bec sum 15 million children nou at
scool hoo or in dier need ov help which cood bec speedily and
cheeply given.

The tiem has nou shuerly cum for aull infant scools to accept
and applie in the classroom what has been discovered in the back-
(class)room ov reserch. The need is ækwally cleer and much mor
pressig for remedial readig in juenior and secondary scools.
teæchers ov the yugger children mæ pardonably tek thær tiem,
næig that remedial teæchers will læter hav opportuenitis to rescue
the failuers. but what about thæs yug peopl hoo or nou in thær
fienal yeer at scool and hoo still cannot read properly—thæ alen
must amount to suml. 5million out ov the 15 million? wuns thæ
hav left scool thæ or not liekly to cum back, even to niet scool,
and thær remains only a þort and preþius tiem in which to rescue
them. ic næ thæ follæ behiend jeneræþions ov backward readers,
but thæs children ar your and mie responsibility. can wec afford
sugh wast ov hueman capacity when wec hav reason to helpev that
the rescue need tek only a fue weeks or munþs, sertenly not as
much as a heol scool yeer? can wec bec comfortabl in contem-
plætig unnessary hueman sufferig on sæ grand a scæl—re-
memberig that from thæs millions will cum (or ælredy hav cum)
meny recroots for the criminal classes, and that meny others
will led inadekwæt lievs and, to a græter or smauller ekstent,
becum a lieability to the rest ov us?

At what point then does the onus of probability and proof change? At what point should an open-minded neutrality on the remaining points take the place of emotional opposition? Is even one of the three remaining lines of defense tenable? Is it really conceivable that any of the 33 per cent of the i.t.a. children who can read 50 words or more in the Schonell Graded Reading Test will ever fall behind the mere 1 per cent of the corresponding t.o. children who reach the same standard — much less behind the 99 per cent who have not reached it? Is it likely that with their skilled reading in t.o. they will be less, rather than more, amenable to improved comprehension, or faster reading, or both?

[1] Source: *Current School Enrollment Statistics*. UNESCO 1962. The figure does not include any English-speaking children in Africa, India, etc.

Fig 2

TESTS GIVEN BETWEEN MAY 4TH AND OCTOBER 31ST, 1963, TO CHILDREN IN EACH INTAKE IN BOTH EXPERIMENTAL AND CONTROL SCHOOLS

Intake	Group tested	Date of testing	Test
Sept. 1961	All children going up into Junior School	July 1963	Reading Comprehension Test (NS 45) in t.o. (318 i.t.a children tested)
		July 1963	Raven Intelligence Test (358 i.t.a. children tested)
	Children remaining in Infant School		No test given
January 1962	All children (less absentees) (i.e. 396 t.o. children and 165 i.t.a. children, less absentees)	May 1963	Word Recognition Test repeated (Schonell)
April 1962	All children (less absentees) (i.e. 228 t.o. children and 164 i.t.a. children, less absentees) Selected Schools	Sept. 1963	Word Recognition Test repeated (Schonell)
		Oct. 1963	Intensive Reading Test (Neale Analysis of Reading Ability Form C)
Sept. 1962	All children (less absentees) (i.e. 1313 t.o. and i.t.a children less absentees)	June 1963	Word Recognition Test (Schonell) first time administered
January 1963	No test given to this intake in the period May 4 to Oct. 31, 1963		
April 1963	Selected Schools	July 1963	Intelligence Test (Raven)
		July 1963	Social Adjustment Assessment

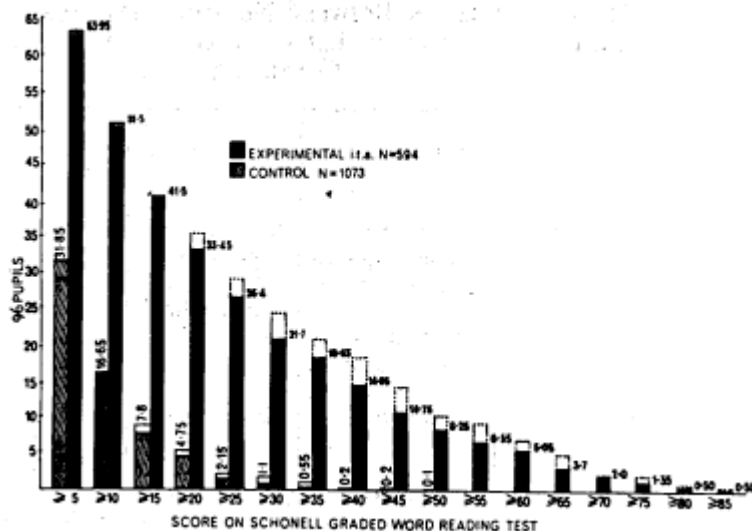


Fig. 6. Reading Attainment in control and i.t.a. schools of children of all three intakes tested respectively in June, 1962. December. 1962. and April, 1962, on the Schonell Graded Word Reading Test. (The standard version of this test was administered in the traditional alphabet and spelling to the control and in i.t.a. to the experimental group.) The results have been merged in a single total covering all three intakes. The graph shows also the changes as between the previously

published results for the September, 1961, intake (see Fig. 3) and those for the three intakes (Figs. 3, 4, and 5) thus merged.

The degree by which the percentage of the merged total is higher than the percentage for the September, 1961, intake is indicated, so far as is practicable, by the hatched section: the degree by which it is lower by the white section. The degree, and the distribution, of the change among the t.o. control children is very similar but cannot be here shown because the proportion is a small one on an already small proportion.

Each column represents the percentage of children with a score equal to or greater than the one indicated.

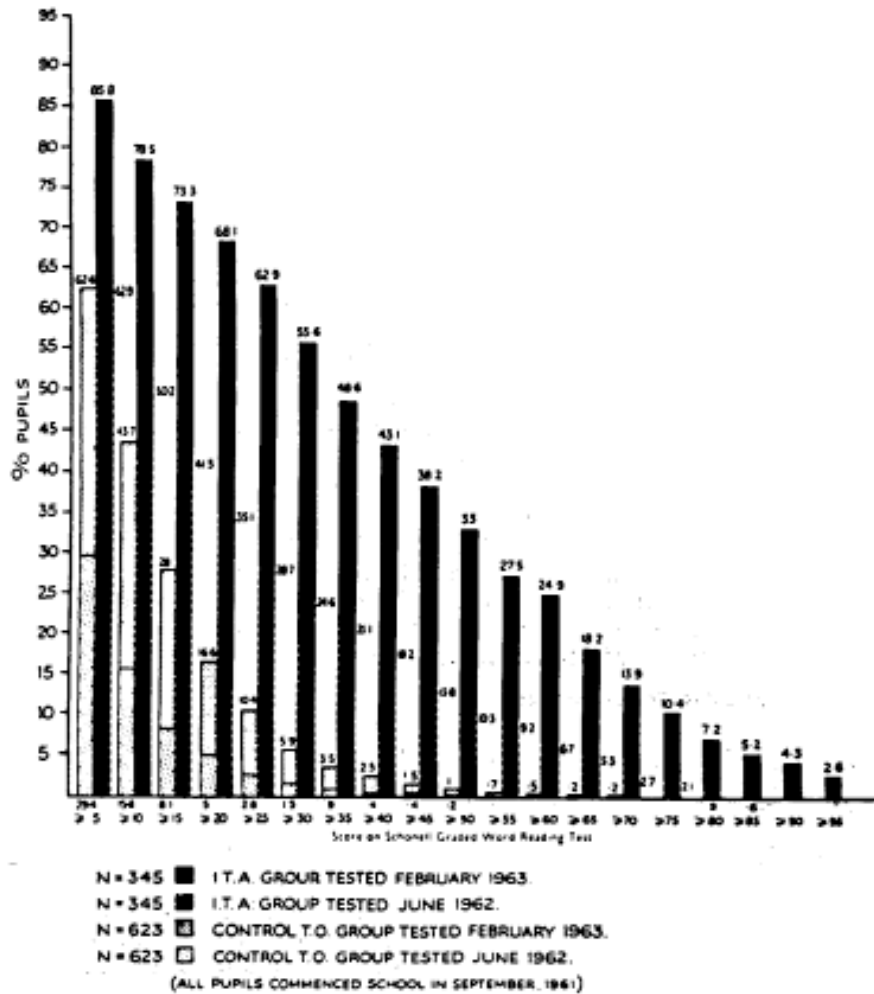


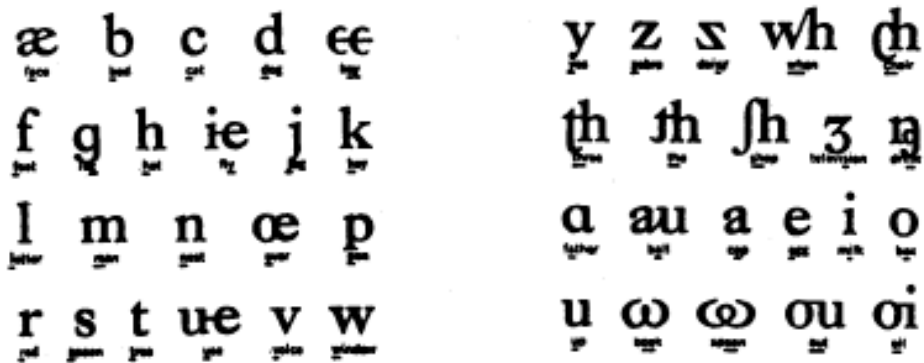
Fig. 7. A re-issue of the corresponding results for the September, 1961, i.t.a. children when tested after a further term-and-a-half — i.e. after four-and-a-half terms. This (Fig. 8 in the Revised Miami Beach report) is reprinted here as a convenient indication of the accelerated progress made by the i.t.a. children of the September, 1961, intake and which the children of the two later intakes may now be expected to have made.

TESTS TO BE GIVEN BETWEEN NOVEMBER 1ST, 1963, AND JULY 31ST, 1964, TO CHILDREN IN EACH INTAKE IN BOTH EXPERIMENTAL AND CONTROL SCHOOLS

<i>Intake</i>	<i>Group to be tested</i>	<i>Date of testing</i>	<i>Test</i>
September 1961 January 1962	All children going up into junior School Children remaining in Infant School All children	Immediately prior to leaving Infant School	Reading Comprehension Test (NS 45) in t.o. Test yet to be decided
April 1962	All children	Nov./Dec. 1963	Intensive Reading Test (Neale Analysis of Reading Ability, Form A)
September 1962	All children	Jan./Mar. 1964 Jan./Mar. 1964	Intensive Reading Test (Neale) Word Recognition Test-repeated (Schonell)
January 1963	All children	Nov./Dec. 1963 April/July 1964 April/July 1964	Word Recognition Test (Schonell) Repeat above test Intensive Reading Test (Neale)
April 1963	All children	Jan./Mar. 1964	Word Recognition Test (Schonell)
September 1963	Selected Schools All children	Nov./Dec. 1963 April/July 1964	Intelligence Test (Raven) Social Adjustment Assessment Word Recognition Test (Schonell)
January 1964	All children	Jan./ Mar. 1964	Intelligence Test (Raven)
April 1964	All children	April/July 1964	Social Adjustment Assessment
All Intakes	All children moving from Infant to junior School	Nov. 1963/July 1964	T.O. Reading Comprehension Test (Neale) Intelligence Test (Raven) Social Adjustment Assessment
All Intakes	All children	Nov. 1963 /July 1964 Termly Tests	Maintain record cards of reading primer reached

Fig. 8. This list of the intended future tests, in relation to the respective termly intakes, forecasts the amount of information which will be coming forward from time to time. The delay between testing time and time of publication of the results is of the order of four to six months.

Fig. 1. Augmented Roman Alphabet



- [1] J. A. Downing. — *Experiments with an Augmented Alphabet for Beginning readers in British Schools*. Presented at the 27th Educational conference sponsored by the Educational Records Bureau in the City of New York, November 1 and 2, 1962.
- [2] J. A. Downing. *Experiments with Pitman's Initial Teaching Alphabet in British Schools*. Presented at the 8th Annual Conference of the International Reading Association, May 1–4, 1963.
- [3] Ibid.
- [4] Ibid. These results showed that not only those better i.t.a. children, who had "done the transition." could read in traditional orthography at a higher rate, with greater accuracy, and with greater comprehension than could the better children who had been taught in the traditional medium, but also that the less good i.t.a. children, who has not yet attempted the transition, at any rate in class, were no less excelling their t.o. control opposite numbers in *all* these respects. A further such comparative test, as indicated in Fig. 8 has been planned for November–December.
- [5] *New Experimental Evidence In the Role of the Unsystematic Spelling of English in Reading Failure*.

8. Chinese Language Reform, by Ralph Nader.*

*Reprinted from The Christian Science Monitor, July 12, 1963.

(Ed. note: the italics are ours, not the Monitors.)

The recent appointment by the Chinese Communist Government of a high level committee to study the written language reform again focuses attention on this formidable problem and the important issues involved. A number of difficulties have arisen to prompt an official reappraisal of the ideograph simplification program launched in Feb, 1956.

At that time, Peking decided to face squarely a language situation that has impeded mass literacy for over 2,000 years. Chinese is the sole, major non-phonetic system of writing in the world. It is composed of some 70,000 ideographs or characters instead of an alphabet. These characters often are massive structures of strokes that, except for a calligrapher's fascination, are clumsy and unwieldy.

Peking's Language Reform Committee counted the strokes of the 2000 most frequently used characters and found only 28% to have less than eight strokes, with the rest containing from nine to 27 strokes. A knowledge of about 3,000 characters is needed for reasonable reading fluency of newspapers and journals.

It is obvious that the application and time required of a Chinese child or adult to learn how to read and write is much greater than their counterpart's task in learning a Western language. But mass literacy is a chief goal of the regime and essential for trained manpower and rapid economic development. This has led to the official policy of simplifying the written language without as yet doing sudden and drastic violence to a linguistic tradition and pride conceded by part time poet, Mao Tse-tung himself.

A kind of free-wheeling simplification has been going on since the Jinsu period nearly two millennia ago. After the Chinese Revolution of 1911, several unsuccessful attempts to reduce the number of strokes were made in the following four decades. The strongest opponents of these proposals were the tradition-bound officials and scholars *who obviously had a vested interest in their revered characters.*

The rapid changes of the Communist regime were reflected in the flowering of many kinds of informal shorthands. It was at this point in 1956 that Peking began officially promulgating standardized lists of simplified characters with an average stroke reduction of one half. An experiment showed that students could write simplified characters almost three times as fast as they could write the more complex characters.

By July, 1959, 517 simplified characters were considered 'adopted' and thereby required usage in all publications. This number was far under official expectations which in 1956 predicted 3,500 simplifications within three years.

A part of Peking's language reform policy has been the belief that the fundamental and eventual solution is *the adoption of a phonetic script or alphabet and the abolition of the ideograph system entirely*. Character simplification is considered a stopgap or prolonged transition period. A similar view was held by the eminent educator and language reformer, Dr. Hu Shih, earlier in this century.

Accordingly, the Communists in 1956 promulgated for discussion and experimental use a new 30-letter Latin alphabet. About the same time, a Romanization Journal, Pin-Yin Bao began publication and in articles and opinions treated problems of alphabetization.

Even contemplating such a changeover would be unthinkable were it not for the existing situation. Along with impeding language learning, ideographs cause formidable problems for typewriters, linotype machines, message transmission by telegraph, indexing and cataloguing systems. Anyone who has tried using a Chinese dictionary quickly comes to grips with these impediments. Furthermore, the ideograph is a hindrance to scientific terminology — the most rapidly growing part of all languages.

But a number of factors render the likelihood of Romanization, at least within the next 20 years, very small. First, the numerous dialects in China are so dissimilar as to preclude the standard pronunciation necessary for a workable alphabet. The regime is using every way possible to spread the official Mandarin dialect, but the process is slow. Actually, *a common phonetic alphabet is seen as a device toward this one common national language*, and so there exists a vicious circle.

Another reason, according to Fred Fangyu Wang of Yale's Institute of Far East Languages, is that the characters carry more signals than would just the sound expressed by letters. The same sounds often have many different inns which, if alphabetized, can be understood in context only with difficulty.

Thus, the sound "ma" (first tone) can mean: mother, frog, an interrogative particle, or the verb, to stroke. These words, written as characters, are immediately distinguishable. This partially explains why Chinese who know both characters and Romanization can read the former at a much faster rate.

By the same token, Romanization is much easier for teaching illiterates though it remains more difficult to use once learned. This dilemma divides China into two classes — the literate and the illiterate or semi-literate. Many of the former object to any changes.

In the past four years, no simplified characters have been introduced. Recent publications show that even official simplifications are not used as consistently as they were before. This is partly due to a scarcity of new type but also indicates a discernible switch to a greater use of traditional ideographs. Another evidence of the slowdown in reform has been the suspension of the Romanization Journal,

Pin-Yin Bao. Items appearing in the mainland press show considerable confusion and a multitude of shorthands are circulating in a kind of chaotic currency.

No one knows what policy changes will be recommended by the appointed committees. But Mr. Wang offers this forecast. He does not believe that Peking plans to abolish ideographs entirely as this would entail Romanizing the vast amount of classical writings — a task not only stupendous in effort but probably structurally impossible to be Romanized and still be understood. Even the colloquial *bai-hwa* used in speeches and newspapers can be difficult to read when Romanized.

In the next decade, he expects to see a continuation of efforts to (1) nationally standardize pronunciation, (2) limit the number of characters in common usage, and (3) reduce the number of strokes.

A development that will make the ideograph less cumbersome to transmit is taking place, not in China so far as is known, but in the United States. The Radio Corporation of America, under an Army contract, is nearing completion of an electronic typesetting machine capable of a remarkable rate of 100 characters a minute. Other advances in machine translation, typewriters and telegraph transmission are in process.

The one point that emerges most clearly from the reform experience is that existing language patterns are deeply rooted in China. Conservatism of the learned class and reverence for tradition are too vague to be acceptable explanations. According to Mr. Wang, scientific research and analysis into the Chinese language has yet to be undertaken.

Reviews of New Books, by the editors.

9. The Open Court Basic Readers, by Priscilla L. McQueen and Arther S. Trace, Jr.

Of the new books designed to teach reading by direct phonics, few that have come our way seem to us to measure up to Book 1–1 and Book 1–2 of the Open Court Reading Series. This excerpt from the Forward of the Teacher's Guide to these beautifully printed, beautifully illustrated volumes will go some way to explain this eulogy.

"Because the children are taught the basic rules to sound out words the first semester of the first year, thereafter they can pronounce most words they see in print. Since a six-year old's speech recognition vocabulary is more than 10,000 words and often over 20,000, it has been thought not desirable to "control" (draw from standardized lists) the vocabulary of the Open Court Readers. Such "control" would have rendered impossible the inclusion of dozens of selections of the highest quality. Yet the selections included are wholly within the grasp of the below average student.

If this last sentence should prove widely true, these readers would obviate the need to divide primary classes into groups of bright, average and slow readers, to the silent heart break, the humiliation, the resentment, the incipient delinquency of tens of thousands of these February beginners. Only time and wide experimentation under diverse conditions could validate or reluctantly disprove this claim.

The phonic method is one developed through of trial by Mrs. Priscilla L. McQueen, editor of Reader 1–1. It teaches its 42 basic speech sounds in the order best calculated to build up a large reading vocabulary by the end of the first semester. With each sound, the children then and there, learn its commonest spellings, be there one, two, three or even four, For instance, the long sound of *i* is taught as depicted in *lie, light, tile, by*, and that of *k* as in *cat, Kit, kick*. Consonant blends are early introduced to give scope for meaningful sentences from quite early in the term. But of course, with phonics taught at this pace and with this thoroughness not much in the way of real literature can be attempted this first semester Even so, one finds little gems here and there. For instance, *w* demonstrates itself through

"Walk with me to the wishing well. Throw in a penny. Now make a nice big wish. Do you think it will come true?"

The *kwh* sound of *qu* comes with a little touch of poetry:

Kathy and Dorothy were quietly walking down the path.

"Quack, quack," they heard.

"Hide quickly and watch the baby ducks come down the path," Cathy said.

"Quack, quack," said mother duck.

"She walks like a queen," said Dorothy.

But real literature abounds in Reader 1–2. the second semester book. Its editor is Arther S. Trace, Jr., author of that *What Ivan Knows That Johnny Doesn't* which created such a furore among the more entrenched of the Look-and-Say persuasion. Some of our readers may remember our review of it in the Bulletin of June, 1962. In any case, else where in this issue, they will find a copy of a no-holds-barred speech of Dr. Trace's delivered at the last yearly convention of the Reading Reform Foundation in New York.

A few brief quotations from the Foreword to the Teacher's Guide to this second reader will give some idea of the level of its content. "The selections," it states, "were chosen after considering

thousands of possibilities and rejecting most of them either for pedagogic reasons, or else for the equally important reason that they were not good enough. A special effort has been made to exclude selections which are inane, trivial, dull or otherwise unrewarding. In fact, every effort has been made to offer the best and most rewarding selections that have ever been brought together in a reader series."

In this reviewer's opinion, both efforts — that to exclude and that to bring together — have been refreshingly successful.

Other revealing excerpts from Dr. Trace's Forward are "Since the selections are primarily children's classics, and therefore have stood the test of countless critics, parents and children, the teacher will know they are as much a delight to teach as the students will find them a delight to read..." "Among the fables, for example are *The boy who cried wolf*, *The fox and the grapes*, and several others from Aesop. *The Arab and his camel* and other fables from various countries are included. The Mother Goose rhymes are represented by *Old Mother Hubbard* and *Cock crow in the morn*. Among the many folk tales are *The gingerbread boy*, *The little engine that could*, *Three billy goats gruff*, and *How the rabbit got its tail*. The fairy tales include, among others, *The Brementown musicians*, *The shoemaker and the elves*, *Hansel and Gretel*. Classical myths included are *King Midas and the golden touch*, *The Trojan horse*, and *Daedalus and Icarus*."

"Stories from many of the major countries of the world are also included, such as *Makulu* from South Africa, *Jakata Tales* from India, *The Snow Maiden* from Russia, *King Arthur* from England, and *The Dutch Boy and the Dike* from the Netherlands... The many poems in these readers include not only a large number of American folk rhymes but also poems by such poets as John Keats, Christina Rossetti, Emily Dickinson, Walter de la Mare, Robert Louis Stevenson and Robert Frost."

Children's poems by poets of this calibre have been this reviewer's delight since toddler days. Some of our readers may have pre-schoolers who would be enchanted by those in this book. Here are a few samples to try on them:

The Elf and the Dormouse

Under a toadstool
Crept a wee Elf
Out of the rain
To shelter himself.

Under the toadstool
Sound asleep
Sat a big Dormouse
All of a heap.

Trembled the wee Elf
Frightened and yet,
Fearing to fly away
Lest he got wet.

To the next shelter —
Maybe a mile!

Sudden the wee Elf
Smiled a wee smile

Tugged till the toadstool
Topped in two.
Holding it over him,
Gaily he flew.

Soon he was safe home.
Dry as could be.
Soon woke the Dormouse —
"Good gracious me!

Where is my toadstool?"
Loud he lamented.
And that's how umbrellas
First were invented.

Oliver Herford.

The Kite

I often sit and wish that I
Could be a kite up in the sky
And ride upon the breeze and go
Whichever way I chanced to blow.

Christina Rossetti.

Hearts are like doors

Hearts, like doors, will open with ease
To very, very little keys,
And don't forget that two of these
Are "Thank you, sir," and "If you please."

Anonymous

The Swing

How do you like to go up in a swing
Up in the air so blue?
Oh, I do think it's the pleasantest thing
Ever a child can do.
Up in the air and over the wall,
Till I can see so wide,
Rivers and trees and cattle and all
Over the countrysid
Till I look down on the garden green,
Down on the roof so brown —
Up in the air I go flying again,
Up in the air and down.

Robert Louis Stevenson

Clouds

White sheep, white sheep,
On a blue hill
When the wind stops
You all stand still.
When the wind blows
You walk away slow,
White sheep, white sheep,
Where do you go?

Christina Rossetti.

The happiest "Happy New Year", the Bulletin could wish the more than 2,000,000 small Americans starting school this February, 1964, would be a school year magicked by charts, primers and readers — and dozens of enchanting story books aul printed in wun-sien-wun-sound speling — a spelling so rational, so predictable that the mechanics of reading all but teaches itself. Failing that — and alas, all but a few thousand of them will fail of it — we wish them instruction from the very start thru phonics as efficient and reading matter on as high a literary level as these Open Court Readers provide.

Reviewed by Helen Bowyer.

10. Torskript, by Victor P. Paulsen

Torskript is the name of a phonetic system of spelling that not only introduces an alphabet with 11 new letters but also introduces the Torskript typewriter so you can write to your friends with it, prepare reading lessons in it, indicate clearly the sounds of English speech by it, and teach phonetics with it. It comes with a 33 r.p.m. high fidelity record to be used along with the book so that there can be no doubt as to the sounds being discussed in the various instructional pages of the book.

The copy we received is a first edition limited to 1000 copies. It is beautifully printed — a typographer's shining example — with excellently drawn pictures of prominent persons who have figured in language reform in this and other countries. It shows the upper case and lower case letters and, what most spelling reformers neglect, the script form of the letters. I must confess that before seeing the script, I had some doubts as to how some of the letters would be written, but he makes it look easy.

It also includes the Torskript spelling of about 200 common English words, so that they can be quickly checked with T.O. (Traditional Orthography). Probably this list should be expanded to include the 1000 commonest words on the Thorndike-Lorge list.

The Torskript alphabet is in general in the same order as the Roman alphabet, whose order has been criticized as being archaic and not related to sounds. The author said he stuck to the conventional order because of the use of the regular alphabet in indexing, cataloguing and looking up words in the dictionary. This is commendable thinking, but this editor would have liked to see also a listing based upon the phonetics of Grace Barnes or Dr. Godfrey Dewey, in which sounds and their symbols are listed by cognate pairs. This arrangement facilitates learning the order and remembering the sounds for each symbol. While only 34 symbols (of the three forms) are listed, it is shown how the other seven sounds of English speech (the diphthongs and wh) are represented by digraphic letters — combinations. 41 sounds are indicated in all because Torskript includes the schwa. Your editor would have much preferred that these seven be included in the alphabet, like most other phoneticians do.

It is rather hard to classify this book. It is not written as a text-book, either for children or adults. It would be unlikely to appeal to many educators, as it is not presented in a manner that educators could use to an advantage. Typographers and printers would appreciate its fine print quality, but would they buy it? It is an excellent example of a system of reformed spelling, but would spelling reformers buy it? Most of them we have met or known are so enamored with their own system that they can't see any other system for dirt. However, if a person were interested in teaching phonetics, it might be useful. The concept of a package — a book with a hi-fi record — to indicate without any doubt the various sounds of English speech, is unique.

Published by Torskript Publishers, San Francisco, Calif. U.S.A.

Reviewed by Newell W. Tune

11. k-a-t spelz cat, by leo. g. davis*

*Published by Carlton Press, New York, N.Y. Copyright, 1963.

Another book by an alfabeteer is of somewhat different caliber. While it is not printed in quite as high style as the previous book, it is written with a particular purpose in mind and a clear idea of how it is to be used. It is a book for parents to teach their own children or teachers to use when they want to start all-out phonics drill in the basic speech sounds-vowels, diphthongs, consonants and consonant blends.

The book is well organized, contains cartoon-like drawings by the well known Ladd Fraternal, that are sure to appeal to children. The printing is adequate, altho the use of the typewriter type in Davis' special alphabet, is not up to the quality of type set printing.

In a preface the purpose of the book is made clear — a streamlined simplified spelling using different type faces to indicate all the vowel sounds needed for a streamlined system of orthography. This is intended to be an initial teaching method, from which the pupil finds it easy to learn to read in conventional print because of the close similarity between the two forms of type. At the same time, it is offered as a pattern for a permanent reform of our spelling.

The context is chosen with careful thought and arranged in a logical order. Starting with the alphabet, then drill charts of the alphabet, and two letter words, the drill proceeds on to vowel combinations and consonant blends. After some pages of sentences in two letter words, it goes on to five pages of three letter words, then words with digraphs, altho these are not indicated in the alphabet list of symbols, each of which is supposed to have only one sound. Davis calls his a 31 letter alphabet because this is all that is enumerated on page 6, yet he uses such digraphic combinations as we do conventionally by: ch, sh, th, wh, zh, ng, ou, oi, which total 40 sounds. Unfortunately, he shows no means of distinction between the voiced and unvoiced th-sounds, nor between 'awe' and 'odd', nor between the silent y in mAy, consonant-y in 'yes', and short-i in 'eny, twenty'. He uses the emphatic form of 'the' and 'a', with long-e and long-a, which gives an unnatural, stilted form of pronunciation to the text. This is unnecessary even tho Davis does not make any provision for the schwa or "indefinite vowels" as he calls it. While he was adding five new letters, he could have made a worthwhile improvement by also adding a letter for the schwa. But of course, then it would look less like conventional print and be less effective as an initial teaching alphabet.

In his alphabet he gives the names of the letters but not any key-words to show the correct pronunciation of each letter. This is regretable because the names sometimes are erroneous in indicating the sounds. He has made available a special typewriter with five new letters which are small caps of the vowel letters. But he does not show how these special letters are to be written, some of which are bound to be difficult to be distinguished in handwriting.

The book continues with instruction in such things as a beginner should know the names of the numerals, days, months, seasons, and then goes on into some modernized versions of Aesop's Fables, children's verses, and has some good articles, such as "People", "My Body and I", "The Spoiled Brat," and "Human Races." His animal dictionary, containing cartoons and a humorous description of 80 animals, is well worth reading. He lists the fonetik spelling of some 320 words, that look somewhat different in his spelling. Another 500 should be listed as there are many that might be confused, due to his choice of oo for the sound in book', and U for the sound in "too'. He also gives a "Pupil's Viewpoint", written from the unspoken thoughts of a child more advanced than one is generally accustomed to find, but intended to show the feelings of a child subjected to the confusion of our crazy spelling.

There are a few inconsistencies that should have been caught before going to the final printing. The titles of some poems and stories are in conventional spelling while others are in Davis' fonetik spelling. We wonder why?

The attractively cartooned cover contains several errors — incorrect symbols for the proper pronunciation. But these of course, would not be found out until one had made a study of his alphabet.

All in all, the book has considerable merit, but we wonder if it wouldn't have been better in Pitman's i/t/a, where all the sounds could be represented properly.

Reviewed by Newell W. Tune.

-o0o-

12. Now We Know! from the Rocky Mountain Cyclone.

The one advantage of having from three to six or ten or even twenty signs for each sound has at length been discovered. If the type-founder fails to deliver type for a particular letter, you can use almost any other type for the same sound without departing from English analogies. This is shown by the following breeze from the rocky mountains: 'The Type-Phounder's Phault'.

"We begin publication of the Roccay Mountain Cyclone with some phew diphphiculties in the way. The type-phounder phrom whom we bought our outphit phor this printing-ophice phailed to supply us with any ephs or cays, and it will be phour or phive weex bephore we can get any. The mistake was not phound out till a day or two ago. We have ordered the missing letters, and will have to get along as best we can without them until they come. We hope our readers don't looque asquance at our spelling. We don't lique the loox of this variety of spelling any better than our readers, but mistakes will happen in the best-regulated phamilies, and iph the ph's and the c's and x's and q's hold out, we shall ceep (sound the c hard) the Cyclone whirling aphter a phashion till the phonts arrive. Its no joque to us — its a serious aphphair."

-o0o-

[Spelling Progress Bulletin December 1963 p23 in the printed version]

Some gems from "Out on a Limerick" by Bennett Cerf, (Harper & Bros., 1960).

Reprinted by permission of the genial author of the above book of over 100 splendid limericks.

My stenographer's notable glamour
Couldn't quite compensate for her gramour
 She got me so ired
 That I told her, 'You're fired!'
Now I wish she were back again, damour!

A Mr. De Lyssa of Leigh
Started kissing his girl by the seigh.
 "This can't be good kissing,"
 Said the girl, "I hear hissing."
Said De Lyssa, still kissing, "That's meigh."