An article about Unifon by John R. Malone, the designer. It appeared in the Chicago Sunday Sun-Times, May 29, 1960.

The following sidebar introduced Mr. Malone's article. We presume it was written by an editor at the Sun-Times.

G. B. SHAW'S WILL —THE BACKGROUND

Infuriated by such manifest absurdities as pronouncing *ph* to sound like *f*, George Bernard Shaw, the great Irish playwright and critic, applied his trenchant with to our alphabetical aggravations and came up with a characteristically iconoclastic solution: Invent a written language with enough characters so that each letter would designate a specific invariable sound. To this end he willed that much of his estate go toward an award for a more adequate, economical and forthright orthography of the English language. The probate court allowed $23,240 for prizes to contestants and the expense of cutting type and setting up an edition of Shaw's "Androcles and the Lion" in a doubly typeset volume—half new alphabet and half the orthodox English. This, in the proviso of Shaw's will, is to be distributed to 13,000 public libraries in English-speaking lands.

Among the ten finalists in this competition was one of the 60 Americans who were among the 467 entrants from all over the world. He is a Chicago advertising executive whose background includes wide experience as newspaperman, magazine contributor, consulting economist, Army captain with overseas service and assistant professor at his alma mater, the University of Kansas. He is working on his doctorate at the University of Chicago. He is John R. Malone, 46, whose many hobbies encompass computing equipment, the mathematics of information, communications and invention. His success in the Shavian competition has stimulated wide interest in his proposed world alphabet (described in these pages) and a nonprofit Foundation for a Compatible and Consistent Alphabet has been set up and located at 333 N. Michigan Av. Malone resides with his wife and four children in Park Forest.

MY FAIR LANGUAGE

Do We Need A New Alphabet?

By John R. Malone

Two and a half years ago, I spent one of the pleasantest evenings of my life listening to and looking at the delights of "My Fair Lady"...written over George Bernard Shaw's "Pygmalion." As I'm sure you all know, the story turns on the offorts of a phonetics professor, Henry Higgins, to change the language structure of a little Cockney flower girl to that of "upper class" Aldertion English—and the cultural transformation which this brings about for her.

Early in the show Prof. 'Enry 'Iggins sings his plaintive lament: "Oh why can't the English learn to speak?" while his precious guttersnipe, Eliza Doolittle, distrorts the noble tongue beyond recognition. I believe he knows why.

Being of Irish extraction and having something of a sympathy for the Shavian disdain of doing things the same way as others do because that is the custom of the past, the complaint of Prof. Higgins set me to thinking...right out there in the theater in plain sight of the beautiful stage sets.

And while the beautiful, lilting music-hall tunes filled the evening, my mind went back to the 6-year-old at home who was having all sorts of trouble with spelling English words. It was neither consistent nor logical as his numbers were. Sometimes he would "sound out" a word; but mostly spelling was a grab bag. Getting the proper letters for a word was pure chance.

"Why can't the English...?" Suddenly I saw clearly the answer to the professor's rhetorical question. Obviously they couldn't learn to speak because they hadn's learned to spell. And they hadn's learned to spell because they *couldn't.*They didn't have their own adequate alphabet and there weren't enough letters in the Latin alphabet with which they had been burdened. Eureka!

As the English are a hybrid people made up of Celts, Druids, Romans, Jutes, Saxons, Angles, Normans, Danes and Norsemen, their language is made up of elements of all these with remnants of Gaelic, Flemish and Plattdeutsch (a low German tongue) and spelled with the leftovers of an alphabet left by Julius Caesar before the time of Christ. This alphabet was later reimposed upon them by way of the Latin-based Christian church.

Since early Hebrew and Phoenician times, the written language has generally been related rather tlosely to the sounds of the language. And the Phoenician and classic Greek Languages were excellent examples of this. However, these languages used basically 20 to 25 or so sounds or phonemes, and their alphabets or language symbols had to be within this range. The Latin adaptation made a few ground rules for sounding vowels in one of two ways, and using same letters such as I and V for both vowels and consonants; but Latin, too, was relatively simple, using 22 letters to represent from 26 to 28 sounds.

But English! As a problem in linguistics, it is plenty tough. First, it is made up of from 39 to 44 sounds coming from some of the sources indicated above, many of which are not Latin or Greek at all. Using the already inadequate Latin alphabet of 22 letters to represent these sounds made it even touchier. To do this at all satisfactorily at laest four letters (J, U, W and Y) have been added. And all sorts of consistent and inconsistent ground rules have been made for giving different letters and combinations of letters different sounds in different words. This was done hundreds of years ago, with or without good cause, and today we are stuck with the whole kaboodle of them.

In the olden days every scribe or clerk had his own feelings about spelling because there were few dictionaries and no printers. A big stew pot of inconsistent rules grew up to cover the sonorous, expressive collection of words from all Europe and elsewhere, which became known as "English." Only a people so patient and stubborn as the English would have even tried to make a pattern of spelling out of such a mixed-up situation. But "muddling through" solved it...in a way.

Then the typesetters were bropught to English shores by William Caxton, the first English printer. From Hallond and Flanders, he brought them

and their type fonts to put “Reynard the Fox” into print—the first English typeset work. At that time, they used a Latin alphabet with 24 letters and had no fixed rules for setting up English. So these Dutch and Flemish printers made their own rules as they went or tried to use the continental rules if they could be stretched. Many times they resigned themselves to imitating the script given them, and which they could neither read nor understand.

Since printers determine usage for their own convenience, we have been left a legacy of accidental spellings by semiliterate printers made firm about the time Columbus was fitting out the Nina, the Pinta and the Santa Maria to make his first trip to “Cathay,” about the time of Henry Tudor in England.

Finally came the dictionaries and these really helped the printers freeze both their mistakes as well as the Latin-type alphabet into the English language...“That’s why the English can’t learn to speak!” I said to myself.

In the beauty of that evening at the theater, the writer was struck by the notion that we *did* need an adequate English alphabet, as Shaw insisted. We needed an alphabet which was consistent from word to word, from sound to sound, consistent with the spoken tongue, as well as consistent to the sound structure of the language. We needed an alphabet as consistent to English as Latin is to Italian or Spanish. But such an alphabet had to have as many characters as we had spoken sounds so we wouldn’t have to have ground rules (two letters to make a third, new sound, for example).

In short, what was needed was a simple, alphabetical teratment of the 40 or so sounds of our language, a letter for each sound. A further need, in order to be practical, was that the alphabet had to be sufficiently compatible to the existing one so that the words inscribed in the new alphabet could be easily read or used by the users of the present 26-letter Latin-English alphabet.

With such an alphabet the young son at home could learn to spell the way he learned to count. All he would need was a start, a knowledge of which letters represented which sounds, and he could go off a-running, as I had seen him do on his own as, for example, “HE WUZ HERT. HIZ LEG WUS BROKUN.” Letters could be consistent—just like numbers!

“My Fair Lady” was beautiful, and I remember something about “With a Little Bit of Luck”—but the Shavian *virus alphabeticus* had bitten me. Today I don’t know which had the more lasting effect on me, the music of the evening, or the language problem.

Investigation of the many scholarly works in the field of linguistics in the weeks that followed showed that the standard English of radio, television and movies uses 40 standard sound packages or phonemes, 16 vowel sounds (like a, e, i, o, and u) and 24 consonant sounds (b, c, f, ch, g, h, j, etc.).

The dictionaries turned up something else which gets to the heart of Prof. Higgens’ problem—and the problem of most of the world. It showed that we use at least 140 spellings for these 40 sounds, an average of 2½ ways to write every sound we speak, and from one to nine different ways to spell a single sound. For instance, the long U sound as in “soup” has eight different spellings. Nor are the rules for how to sound a letter regular or general.

Thus a new learner of English, whether he be a child or a foreign-born adult, is confronted by a fantastic memorizing problem. In almost every

word he must learn how each particular sound shall be represented.

Only when one looks from the outside in, does this problem show itself. A Spanish or German child, for instance, rarely has to learn "spelling" as such. Once he is shown the pattern of sounds and letters, he can always figure out the spelling, or read the letters, because the pattern is consistent, stable and repetitive. But not English. Quote the rule and you can be quoted back more different kinds of exceptions than the rule covers.

So American children spend a good part of their schooling learning to spell their own tongue and reading it back. Is it any wonder they never get to the point of learning another language (for good manners and cultural appreciation) or get to the calculus in high school as do their German or Russian counterparts? And of course, vast numbers of us never become confident masters of our written and printed English.

Two examples may demontstrate the foolishness of our spelling. Shaw once pointed out that you could easily justify "ghoti" as the spelling for the word "fish," as follows:

Gh as in cough
o as in women
ti as in nation

Or look at the different ways "ough" is pronounted:

uf as in tough
oo as in through
oh as in dough
aw as in thought
ow as in bough
off as in cough

Probably you can add several more. The history of "ough" is a tale in itself.

Suppose our number system was as inconsistent and variable as our spelling. In such event "13" might sometimes mean 4 (1 plus 3), 31 (30 and 1), 3 (1 times 3), 1/3 (1 divided by 3) or even .3 (1 decimal place before the number 3). In such a case it would be virtually impossible to depend on pricing, clocks, time-tables, contractors or to work mathematical problems.

In view of the logic, clarity and consistency we use in our language of numbers, it becomes hard to explain why we put up with such haphazard, inconsistent, incompatible spelling and orthography in English! (Orthography is defined as the "art of writing words with the proper letters, according to standard usage.")

This would not be so bad, except that the world has given tacit consent to the use of English as a world lingua franca, a common language, in spite of its bad spelling. At least 79 nations now teach English in their schools with varying degrees of success. In the schools of more than 50 countries, English is now a cumpulsory subject. But blocking the desire of those eager multitudes to learn the English tongue is an Orthographic Curtain, whose breaching takes not hours and weeks, but years of tedious learning.

The economic cost of breachnig this orthographic curtain is great—especially in those underdeveloped and overpeopled nations to whom Engisnh is the key to the technology, science and modern industrial development that will enable them to lift themselves up from misery and degradation.

The English language is the open sesame to knowledge and today more science, literature and technology are published in English than in all other languages combined. Yet relatively few

people in these underdeveloped areas have the time, opportunity or money needed to provide them with a knowledge of this indispensable tongue. Thus, aren't we making the membership fee for entrance into the Brotherhood of Man a little too stiff by keeping to a costly spelling? Does the haphazard alphabetical setup and the jerry-built spelling structure justify the world's deference to English as a common language?

Fortunately it is culture, commerce and technology which push forward a language through its very usefulness. The world's imperative today is to do business with the hundreds of Englsh-speaking travelers, traders and builders roving the globe. In the Orient English is catching hold because it is practical for typewriters, bookkeeping machines and various other devices. English, of course, has been adopted as the interntational air language at airports around the world.

But the cost of teaching the world English as presently written may become prohibitive. Puerto Rico is a case in point. After many trials and bad policy decisions from America, the government of Luis Munoz-Marin in 1956 went back to Spanish all the way through school, with English becoming a special subject taught for only 45 minutes a day.

Whether other nations, now testing English, will follow the example of Puerto Rico depends, it seems to me, upon how well we reorganize our alphabetical treatment of English. Fortunately for us in the East-West struggle, Russian is not much easier, and her culture has few roots in the West.

Besides the commercial and selfish urges for peoples elsewhere to learn English, there is another reason which impels people to learn the language. English actually is an easy and simple language to learn, once you get over the spelling hump. It has positional rather that inflectional grammar—that is, you have to learn relatively few forms for nouns and fewer for verbs.

You need not change the form of the nouns with case endings, etc. Verb forms are relatively more simple than any in tongues save some Oriental languages. But the basic problem is to get over the big spelling and alphabetical hurdles.

What about the cost of change? Think of the equipment and the books set in type! Think of the volumes already composed in the gerrymandered spelling of the past! Why teach a language one cannot use in the libraries, in learned journals or in commerce?

These are all good questions. Twenty years ago we would have had to defer to them. But today, in a shrinking world, they can be answered.

First, the cost of change. Photo-composing type machines are rapidly replacing typesetting machines and metal foundry type. Also, through use of photo platemaking and photo-offset printing, typewriter-like composing machines are being utilized more and more as the means of setting up large areas of printed material. The cost of resetting or recomposing the millions of words in contemporary English could be done in overseas areas to help build up the graphic arts industries in such countries as India, Africa and South America, just as Germany and America are helping to do in Taiwan and Japan at the present.

The cost of such transliteration would be small indeed compared with the benefits that would accrue to the world by getting a common language.

And why not convert in a form of English which will help you gain access ot the knowledge of other nations as well as to their contributions to knowledge? Much of the conversion during the next decade or so could be handled through the United Nations Educational, Scientific and Cultural Organization or the International Documentary Center.

And for those who can already read English, it takes less that 45 minutes to retrain yourself to read this—even an older dog can learn this new trick.

Within a fetw weeks it is possible to teach most 5- or 6-year-olds to write English with this alphabet. There are no rules or exceptions. It is ideal for teaching Ensglish to adults from non-English countries. Once confidence and facility is attained, the problem of converting to the older spelling forms is relatively easy, because of the compatibility feature, and memory devices built into this alphabet.

So far this alphabet has been tested in teaching children. It is also being used in a test class of Puerto Ricans. In each case the rate of learning is surprising. It is very much like teaching a person to ocunt by means of Arabic numbers.

It may take a generation to get general concurrence for this type of alphabet for English, but given the long history of humanity, this is a relatively short time, and the economies possible with it are great. For instance, from 12 to 25 percent fewer characters are needed to write a given piece of material in the simpler 40-character alphabet. The cost in reduced learning time for youngsters should enable all nations to upgrade their school systems, whether in America or abroad.

Many technical developments, such as machines for computing, accounting, check reading and for bibliographic listing and cataloging await adoption of this type of alphabet. So does the dictating typewriter, which takes the spoken word and types it out directly.

It is hardly needed to point out the commercial and political value in having a world speak English as its commosn tongue. But the value is greatest to the poorer nations which would thereby have access to American English techniques and scientific competence. The people of these countries could then live freely in our world, via the use of our methods and devices.

Now let's look at the alphabet itself a moment. For technical reasons all the letters have been designed with the same width, as typewriter letters generally are. To do this, some of the letters have been basically redesigned so that never again will I, l, or #1 be confused. There is no "lower case" or small letters as such. There is simply a flattened version of the same design. In this way needless configurations are eliminated.

First we have added 11 vowel symbols to the A, E, I, O and U (and we have dispensed with the Y vowel usage). We have turned the 16 new vowels into five basic families, called the A, E, I, O and U families. The old letters are used to designate the "short" sounds of the letters as they are today: as cat, pet, bit, hot and but.

Then there are added five new "long vowels" for each of these as shown in the following chart. Each of these long vowels is characterized by a full width horizontal member Δ, Ɨ, ±, O̲, U̲ to help you remember.

Then there is an aw Ʌ, a ligatured er as in herd Ɜ, a double o as in look Ɵ, an ou as in couch ɷ, an oy as in boy Ɔ, and a ue sound as in due Ʊ.

Here is the way the five families look:

A: A Ä Ʌ
E: E Ɛ Ɜ
I: ɪ ɪ
O: O ɷ Ɵ ɷ Ɔ
U: U Ʊ Ʉ

In the consonant list a slash C represents the “ch” sound as in chair. The I has been broadened to distinguish it from “l” and “1”. The “ng” as in sing is one sound, so it gets one letter, Ŋ. The “sh” sound of “shirt” is a slash S, Ʃ. The voiceless “th” of “thin” is represented by Ɦ, while its voiced counterpart as in “they” is represented by ħ. The Z has been crossed in the European fashion to distinguish it from a carelessly drawn 2. The most infrequent sound in Englsih, the “s” as in leisure, is represented by a reversed Z, Ʒ.

A few reminders are needed. The G is always hard as in “get”. Only K has the hard “c” sound as found in the word “crow”. All buzzing “s” sounds, as in business and glasses, are rendered with the Unifon Z, Ƶ.

Below are the 24 consonants and what they sound like—one sound for each symbol:

B (b) Ƈ (ch) D (d) F (f)
G (g) H (h) J (j) K (k)
L (l) M (m) N (n) Ŋ (ng)
P (p) R (r) S (s) Ʃ (sh)
T (t) ħ (th) Ɦ (th) V (v)
W (w) Ʒ (zh) Y (y) Ƶ (z)

Now there is an added plus to this alphabet, besides such designed-in features as being useful to computers and dictatable typewriters. It is sufficiently broad in phoneme representation so that it can be used for transcribing Russian, Hebrew, Arabic, German, Italian and Spanish phonetically.

With a few conventions or marks it can be used for French and Portuguese. The Romanji version of Japanese can go into it very easily and consistently with the present orthographic treatment.

Other phonetic alphabets have been proposed before, but this one is sufficiently comprehensive and practical for immediate use in primary schools at home, and in English training and technical schools at home and abroad. The technological conditions are ripening rapidly; the political, commercial and communication imperatives are clear and demanding.

You can start writing this way tomorrow. You will find you can learn it easily, rapidly. Write as you speak. English will never be the same for you again—and lots easier to spell. You, American, will be considered among the most thoughtful people on earth—for you will have changed your ways so others can enjoy your movies, books, technics, riches and general cultural bounty. Best of all, you can make your speech and language habits those of the world.