The Construction of Reading Material for Teaching a Foreign Language

ъY

MICHAEL WEST, M.A. (Oxon.)

Hon. Reader in Education, Dacca University.

WITH AN INTRODUCTION BY

SIR PHILIP HARTOG, C.I.E., D.C.L.

PREFACE

Mr. West has invented a new method of teaching children to read, and to read rapidly, in a foreign language. He has explained the principles of his method in his book on Bilingualism,* which Sir Michael Sadler has justly characterized as a "book of creative power." In order to make it possible to apply his method to the schools Mr. West has designed a series of Readers, which give evidence of great resource and ingenuity. He has gone further than most inventors, for in the present work he has explained in detail how he has overcome the inevitable difficulties which present themselves in the construction of such Readers. The present book, like Mr. West's larger book, and his Readers, will be full of interest to all teachers of foreign languages who have retained the freshness of mind necessary to enable them to take up new ideas, and to put them into practice.

The subject is one of immense practical importance to India, and to those other countries where the mastery of a second language is of vital interest.

I think that every one acquainted with Indian schoolboys and students must have been struck, as I have been struck, by the very narrow range of their information and ideas compared with the range of youths of the same age and status in other countries. That narrowness is due to no want of intellectual capacity. In Bengal, the Province of India which I know best, I should say that the average of intelligence is very decidedly high. But the average of general information is as decidedly low, at present, and this lack of knowledge gravely retards not only the progress of individuals but the intellectual, industrial and economic progress of the country as a whole. In a University address the Earl of Balfour once said "He has only half learned the art of reading who has not added to it the more refined accomplishments of skipping and skimming." I would go further. The power of rapid reading or "skimming" is indeed something much more than an accomplishment; it is an absolute necessity of everyday

^{*} Published by the Government of India Central Publications Branch, Calcutta, 1926.

life for the man of business and affairs, as well as for the scholar. The amount of printed matter presented in the form of newspapers, articles and books, is so immense, that if we have not the power to see at a glance what is of importance and interest to us with a view to reading that carefully, at the moment or at some future time, we can never cope with the demands of a busy life, and we shall be left behind by better trained competitors. From what I saw of certain initial experiments at Dacca and from the perusal of Mr. West's works I am convinced that they will yield to the teachers of India a powerful instrument for the development of their pupils.

But that is not all. I am, and always have been, an advocate of the teaching of the mother-tongue as an instrument of general intellectual development. I am certain from what I have seen and heard that that instrument is very imperfectly used in India at the present moment. Lip-service is often rendered by public speakers and others to the subject; but enquiries made at various times into the status and intellectual attainments (and, shall I add, pay) of the teachers of the vernacular in the high schools, of the real capacity of the pupils to write clearly and well in the vernacular, of the standard of examinations in the vernacular as compared with that in other subjects, have convinced me that enthusiasm for the teaching of the mother-tongue has not yet translated itself effectively into action. All this should be altered; and Mr. West's methods ought to assist in an indirect but important way in the change. The Calcutta University Commission pointed out the excessive amount of time devoted to the study of English in the high schools in relation to the results attained. Mr. West's methods might very materially help to diminish the amount of time required for the teaching of English and to increase the amount available for the teaching of the mothertongue, and other subjects.

I may be sanguine, but I believe that if these new methods are applied, and applied intelligently, they will effect nothing less than a revolution in Indian education.

P. J. HARTOG.

CONTENTS

Sec	tion.		P	age.
1.	The Problem of Bilingualism	• •		1
2.	The Significance of the Conclusions	• •	• •	1
8.	The Question of Practicability	• •	• •	
4.	The Purpose of this book	• •	• •	3
5.	Aims in the construction of Reading-books	• •		4
	Problems of Illustration	• •	• •	5
7.	The Order of the Letters	• •	• •	7
8.	Pronunciation Signs	• •		8
9.	"New words" and "New usages"	• •		11
10.	Prevention of Verbal Reading	• •		11
11.	Grammar	• •	• •	18
12.	The Difficulty of Reading matter		• •	14
18.	The Selection of Material	• •	• •	17
14.	The Technique of Construction		• •	23
15.	The Teaching of Speech and Writing	• •	• •	26
16.	English Syllabus for Secondary Schools			29

The Construction of Reading Material

for Teaching a Foreign Language.

1. The Problem of Bilingualism.

We have discussed elsewhere 1 the linguistic needs of those bilingual peoples whose mother-tongue is one of the minor languages. We have endeavoured to show that the excessive time and energy devoted among such peoples to the study of English (or some other major language) leads to neglect of the mother-tongue; that the mother-tongue is irreplaceable in respect of the spiritual things of life, and that its neglect must have most serious consequence on the emotional development of a people. We have analysed the need felt by these peoples for a major language, and have found that their essential need is to be able to read the language as a source of knowledge. Such passive use of a language is far easier to attain than an active use; it is also the natural and most effective preparation for subsequent study of the active use. On these grounds we have advocated that the teaching of Reading should be emphasised in the first stage of teaching a major foreign language in schools.

We have further shown, by the results of various experiments, that, given reading material constructed according to certain principles, Reading Ability can actually be acquired as the initial stage in the study of a foreign language without preliminary work in speech or writing, and that the progress of the class is, under these conditions, at about three times the normal rate.

2. The Significance of these conclusions.

Now, it is clear that these arguments, and the results of these experiments, may be of very far-reaching consequence to all peoples whose mother-tongue is one of the minor languages:—and such peoples constitute a very large majority of the non-English-speaking

¹ Bilingualism, (with special reference to Bengal), Govt. of India Occasional Reports, No. 13, 1926.

nations. The application of these principles would involve an extensive change in the teaching of the most important subject in their school-system; and, if that result, which we have predicted, were actually produced, it would very greatly affect the intellectual life of the people as a whole. It would set free energy for a popular renaissance of the native literature, and give to the mother-tongue an unprecedented importance in their education. At the same time it would bring within the reach of a vastly greater number of children—and adults—than ever before the possibility of direct contact with the literary and scientific riches of the great languages of the world.

We have, in effect, promised that any person of average intelligence may, within two or three years, and at a cost of little effort or discomfort, attain such free intercourse with the mind of a foreign people, as previously a whole school-life usually failed to effect. Either this promise is one of those vague theoretical predictions whose realization is barred by some simple, but insuperable, obstacle, (there are many such in all branches of invention) or else it is a matter of the greatest educational importance to a very large number of peoples.

It is necessary to ascertain whether there is any such obstacle in the way of the realization of this promise.

3. The Question of Practicability.

The question is of the practicability of the method in the ordinary school and for the ordinary schoolmaster. It has been claimed that, given reading material constructed according to certain principles (which are admitted to be somewhat ideal), reading ability in a foreign language can be produced in an abnormally short time. But the experiments, on the results of which this opinion is based, were conducted using material which had been constructed before any experience had been obtained of the many unforeseeable practical difficulties of such a task, before even those ideal principles of textbook construction had been fully or clearly formulated. The gain in rate of progress may be admitted, but only as the result of a laboratory experiment; for the defects of the reading material used in it were such that the skill of a teacher thoroughly conversant with the details and the theory of the system was (and would be) needed to compensate for them. Nor has any promise been made in the report of these experiments as to the results which might be achieved by other less expert persons. The conclusion arrived at in the report was that a new set of reading materials is "desiderated." 1

On the fulfilment or non-fulfilment of this desideratum must hang any decision as to whether this promise was an impracticable imagination, or a contribution to educational progress.

Thus the discussion comes down to a clear and definite issue—whether or not it is possible to construct reading material which fulfils the requirements of the theory.

4. The Purpose of this book.

In the following pages we shall not describe in detail what has been done,—for that is already available in print 2; but we shall describe the technical means whereby it has been done, and we shall discuss the reasons for many special points of treatment.

In a period of fifteen months four reading-books in English have been constructed with their accompanying materials, teaching a vocabulary of about 1,000 words. Further books are still being constructed. A series in French is under construction. Applications for permission to construct series in Welsh and Sanscrit have been considered. Suggestions for a series in German, Spanish, Italian and other languages have been received. A series in Bengali was completed and used for teaching Zenana women. The Bengali word-frequency list was at that time incomplete: the reading material is now being reconstructed with the help of the completed list and according to the technique evolved in the course of the construction of the English series.

The chief difficulty in this task has lain in the pioneer work of finding out how to do it. The vast amount of labour spent on the English series has produced relatively so little reading material, because in the earlier stages an effective technique had not been discovered. Before the present procedure was evolved the production of the first draft of a story was a slow and precarious process; there were many set-backs, and many weeks were lost in the detection of errors; whereas it is now possible to produce the reading material with far greater accuracy and at a reasonable, although of course not very rapid, rate.³

¹ Bilingualism, pages 304-5. 2 The New Method Readers (New Series) Readers IA, IB, II, III; Companions IA, IB, II, III; Supplementary Readers I, II, III; Teacher's Handbook, (Longmans, Green & Co.)

³ With the present technique it is possible to complete about 50 words of material per hour, that is, about one handwritten page in a day.

We have for this reason described our technique in considerable detail in the hope that we may thus help others, who will, we trust, be able to improve upon it in their turn.

5. Aims in the Construction of the reading-books.

The purposes aimed at in the construction of these reading-books were as follows:—

- (1) To produce English reading-books for foreign children which should conform as closely as possible to the criteria set out in "Bilingualism" (pages 269-274).
- (2) To embody in a series of such reading-books the added experience gained in the use of the original series (constructed for use in the three experimental classes).¹

and

(3) To discover to what extent and in what way such reading-books could be further perfected in detail.

When an author saves time by leaving the faults of his book unremedied, the reader loses it by stumbling over its imperfections. In the case of a novel, which takes far longer to write than it does to read, a few days saved by the author may cost the reader at most a few minutes. But in the case of a reading-book, which ordinarily takes far less time to edit than it takes the child to study it, a few minutes saved by the author may cost the child an hour or even a day. (It might be a sound principle—though one not always applicable,—that the author of a school-book should take at least as long to write the book as the child will take to learn it!)

A great part of the loss of time of a child in studying appears to be due to the absence from his textbook of those little refinements of convenience whose elaboration is so conspicuous in more material inventions,—such as a motor-car. Here vast trouble and expense are devoted to eliminating every minor loss of time or comfort of the passenger, as for example in the perfect fitting of a window, the exact curvature of the seat to give just the support needed, the exact placing of the controls for handiness, etc. In a textbook it is otherwise: the questions do not quite fit the text (because the text has not been fitted back on to them 2), the pictures do not illustrate just the point which needs illustration, 3 the vocabulary is awkward to get at, and does not give just the right meaning. 4

¹ See Bilingualism, Chapters 9 and 10. ² See page 24 below. ³ See page 7 below. ⁴ See pages 11, 25 below.

This may perhaps be due to some fear of "making things too easy." Or perhaps adults demand a higher standard of comfort for themselves than they do for their children.

We propose to attempt to apply to a child's reading-book these adult standards of time-saving and comfort,—to build the book from the point of view of its 'passenger,' so as to foresee and eliminate every needless loss of time or of convenience, to omit nothing which might give a greater return in learning-effect for the same expenditure of energy on the part of the learner, to leave no superfluity which merely adds to cost in time or money.

6. Problems of illustration.

The application of these principles is exemplified in the problem of illustration.

Pictures are used in a book for two reasons:—

1. To make the book appear attractive,

- and
- 2. To assist in the fulfilment of the purpose of the book.

In a school-textbook we are not primarily concerned with the first purpose: we are not here making a book to decorate a drawing-room table, but one which shall, as cheaply, easily, and efficiently as possible, impart certain knowledge or skill. Pictures add greatly to the cost of a book, not merely by their own cost of production, but also by the area of paper which they use. The first element will not greatly affect the price of the book¹, for the prime cost of the pictures is divided by the number of copies printed, which, in the case of a school-book, is large; but the cost of paper is multiplied by the number of copies. It was decided therefore that every picture in these reading-books must be able to satisfy the following conditions:—

- 1. It must not be a mere decoration, but help forward the purpose of the book.
- 2. It must not be any larger or more complex than the sufficient fulfilment of its purpose demands.
 - (i) "Every picture must help forward the purpose of the book."

The purpose of a reading-book is to teach a child the art of gathering ideas from printed matter. The only evidence of the effectiveness of reading is the ability of the reader to reproduce, or to answer questions on, the substance of the passage read. Pictures illustrating the substance of a passage in a reading-book tend to

¹ We here refer, of course, to line-drawings such as are most ordinarily used.

act as a substitute for reading, and thus invalidate this evidence. Such illustrations are therefore not to be used.¹

It may be asked, 'What, then, is the purpose of such pictures as 'The Bells of London' and 'White with snow' (Book IB, pages 41, 75)? The answer is that church-bells and snow are ideas which are unfamiliar to children in tropical and non-Christian countries, and such probably constitute the majority of our readers. (The picture on page 82 of Book IA is rendered necessary by the absence of the word Ran).

Another example of apparently purposeless illustration is the very copious illumination of the Practice Sentences in the early part of Reader IA. The child when he begins the study of a foreign language inevitably does a good deal of reading aloud. In reading aloud there is always a danger of interpreting the printed words into sounds without any thought of their meaning. (In this connexion the unintelligent reading of our second Experimental Class may be recalled). For this reason the child must constantly be reminded at this stage that every sentence has a meaning,—even the disjointed practice-sentences. This is done by illustrating the meaning with a picture at frequent intervals.

It will perhaps appear strange that, in spite of this strict economy of pictures inside the book, there should yet be an elaborate picture-cover outside. A child taking up a story-book written in his mother-tongue looks at the chapter-headings, glances through the book, sees what it is about, and decides whether he wants to read it. But he cannot do this with a book written in a foreign language: hence we have provided a pictorial Table of Contents in order to inform the child of the general substance of the book and to encourage in him a desire to read it. By doing this on the cover we use up a page which would otherwise be wasted. (The child does not, of course, know till afterwards where each of these pictures 'belongs' in the text, so they give no illegitimate help to him.)

(ii) "The picture must not be larger or more complex than the fulfilment of its purpose demands."

It follows from this requirement that the pictures must be made as small as possible. Some experiment was required to attain this object. It was found that if the pictures are reduced by photography there is always some loss of clearness. The only safe and efficient

¹ Such illustrations have actually been used on two occasions,—but only as the tail-piece of a book, where they do no such harm; and, since it is already a broken page, they waste no paper. ² Bilingualism. page 287: Learning to read a Foreign Language, (Longmans, Green & Co.) pages 35-36.

method was found to be to draw the pictures as small as possible and reproduce them of the same size.

It is a principle of the series that every illustratable new word shall be illustrated on its first appearance. This is done, not in order to supply the meaning of the word (for that is done in the Companion), but rather because it is found that the visual image of the picture with the word written on it is of the greatest help to the child in remembering the word. In these pictures it is extremely important that there should be no possibility of n istake nor blurring of the mental image. For example, if, in illustrating the new word To Fly (II-8), the artist were to include the man following as well as the man running away, the child might form a wrong or confused memory of the word as meaning Pursue; if the artist does not include the pursuer, the child may form a wrong memory of the word as meaning To Run. In practice the requirement is extremely difficult to fulfil: it means that many of the pictures have to be drawn, discussed, and redrawn several times.

Another danger of these New Word pictures is that of unduly limiting the idea by the picture. Thus if Cook (IB-15) is illustrated by a picture of a Chef, the child may think that the word means only a man-cook. For this reason the word Water (IA-12) is difficult to illustrate. The only solution is a row of pictures each contributing something to the meaning.

7. The Order of the Letters.

The general principle on which the first reader is constructed has been explained: ¹ the letters of the alphabet are introduced in the order of their relative commonness in the first two hundred words. In practice it was found that the use of this letter-order gave rise to a deficiency of nouns (presumably because most of the very common words are not nouns). To correct this, the letter-frequency order of the nouns was studied and the letter-order of the book was modified accordingly. The idea subsequently suggested itself that a better order would have been obtained if the frequency count had been weighted by the 'credit-index'2 of each word in which the letter occurred, thus:—

	1	·	<u> </u>		1	<u> </u>	· · · · · · · ·	· · ·	<u> </u>		ì	í		1	1				<u> </u>	i	t	<u> </u>	
Word	Credit	A	В	C	D	Œ	F	G	11	I	J	K	Γ	M	И	О	Р	Q	R	s	T	U	v
About	172	172	172					4 •					••		•••	172	••	- •			172	172	
After	158	158	• • •			158	158	• •	••	i		••			••	••	••	••	158		158	••	
		į				:			i i								į						e

¹ Bilingualism, pages 278-283.

² See Bilingualism, Glossary.

The difference is, however, very slight, affecting only four letters, B. K. L. R.—but these were the letters whose order one felt most need to change.

8. Pronunciation Signs.¹

The child first learning to read his mother-tongue has merely to decipher words, now seen for the first time in print, but previously encountered in speech. A child learning to read a foreign language makes his first acquaintance with the sound and the sight of a new word simultaneously, when he first meets it in the reading-book and the teacher pronounces it for him. The problem is to make this 'bond,' between Perception of the printed word and the Pronunciation and Sound of the word, as correct and secure as possible. Irregular spelling tends to mislead the child into a wrong or blurred memory of the pronunciation.

Irregularly spelt words are of course avoided as far as possible in the early stages; but it is not possible to avoid them altogether, for many of the commonest words in English are irregular. In any case the child has got, sooner or later, to learn how to deal with irregularities.

A complete system of phonetic printing throughout would include many words in the phonetic type which cause no trouble whatever. Moreover, in regard to the troublesome words, such a system merely postpones the problem.

Some children are much more easily worried by irregularities of spelling than others: often the more intelligent and rather logically-minded child is the worst sufferer. Again, an irregularity which will cause great trouble to one child will pass quite unnoticed by another.

What is needed is some instrument which can be put into the hands of each individual child, to be used by himself, and to be used only when he needs it, which will enable him to deal with those irregular spellings which actually trouble him personally. This must obviously be some system of supplementary signs or accents which may be added to the normal spelling of the word.

Several systems of this kind have been invented.

(i) Phonoscript.²

Small flourishes are added to the letter, or the form of the letter is slightly altered; thus:—

¹ The Pronunciation Signs which I have adopted will be found in the Companions: see also pages 4 and 5 of The Teacher's Handbook.

² Hayes, Alfred E., The Phonoscript System, (G.P. Putnam's Sons, Ltd.).

φ means o as in Moon φ ,, ..., ... Come.

But these additions are too minute to be added by a child to ordinary printing; the system does not therefore comply with our requirements.

(ii) Dr. Craigle's System.1

Each letter or combination of letters is allowed a certain normal sound equivalent; simple diacritical marks are added where the sound is abnormal. Thus:—

S—son houses sure vision

- This system has two disadvantages,—
- (1) We have shown that it is not necessary or desirable to mark every letter phonetically throughout: but, in this system, if we do not mark a letter, we thereby imply that the letter has a certain 'normal' sound.
- (2) Each diacritical mark has a different meaning according to the letter to which it is applied. The child is therefore required to learn as many different uses of the symbols as there are irregular uses of the letters, including, in some cases, as many as four or five representations of the same sound. This number of different uses of the symbols is far in excess of the total number of letters in the standard phonetic alphabet; and these little diacritical marks with their varying meanings are very much more difficult to learn.

(iii) The System of Prof. J. J. Findlay and W. H. Bruford.2

Diacritical marks are added to the letters, each such mark always representing the same sound. The variety of symbols is greater than in Dr. Craigie's system, but the total amount which has to be memorized is, of course, less; and it is not necessary to mark every letter.

(iv) The system of H. V. Groves.3

This seems to be of much the same nature as Prof. Findlay's system; but, owing to the cost of the special type required, the Editor of the journal in which it has described was unable to print a specimen.

The first system tried by the present writer was that of Dr. Craigie, and this was used for some months. Eventually the complication and difficulty of remembering the meaning of the signs, and of their

¹ Craigie, W. A., The Pronunciation of English (Clarendon Press, 1921).

² Findlay, J. J. & Bruford, W. H., Sound and Symbol, 1917.

³ Groves, H. V., Phonetics without Symbols, "Modern Language," February, 1926.

absences, became such that the system was abandoned, and all the material in which it had been used was thrown aside. The writer then consulted Prof. Daniel Jones as to the choice of a simple system in which each mark should indicate one sound only. He suggested a most ingenious system of marks, each mark being reminiscent of the corresponding symbol of the International Phonetic Alphabet, so that the transition from the one to the other would be very easy. Thus the circumflex accent was used for the sound Λ (as in Up) and a small cross for the sound α (as in Cat).

Unfortunately this system could not be used because of an unforeseen objection, which applies also to all the systems described thus far. Any system of this kind, to be really useful, must be capable of becoming popular. Hence it must be possible for any printer to print it, and the printing of it must not add appreciably to the cost of the book in which it is used. The intention in devising the above system was that, in printing, the signs should be added as separate type above the ordinary type. But, when a printer was consulted as to the feasibility of this, he pointed out that it would be difficult for a child, with these small signs set far above the letters, to know to which letter a sign was intended to apply; and he was of opinion that it would be necessary to make a special matrix embodying the letter and the sign. Since each sound in English may be spelt in two or three different ways, it would be necessary to have at least 21 matrices for the vowels alone.

It was necessary therefore to devise a new system which would comply with the following conditions:—

- 1. The signs must be fairly large, so that the eye may readily associate them with the letter above (or below) to which they refer.
 - 2. The signs must require no special type.
- 3. The signs must be so simple that the child can learn to form them quite easily; or else they must be something with which he is familiar already.

The suggestion required was found in a book entitled "Phonetics without Symbols" by G. C. Bateman. In this book the vowels of French are replaced by numbers from 1 to 16. All children of almost all mother-tongues are acquainted with the Arabic figures. We proposed to subscribe the figures instead of substituting them for the letters (as is done by Bateman). One other modification was necessary:—the sign 12 might mean the twelfth sound, or a diphthong of the first and second sounds. We therefore eliminated

¹ W. Heffer & Sons, Ltd, Cambridge, 1925.

the distinction between \mathfrak{g} and \mathfrak{e} and between \mathfrak{a} and \mathfrak{a} , both of which are too fine to be perceived by the ear of a foreign child, thereby reducing the vowels to nine. Thus all double numbers represent diphthongs. In the case of consonants v is used for voicing, e.g. Houses: a dot is used, as by Dr. Craigie, for silencing, e.g. Caught. Other cases are met by using explanatory letters, e.g. Enough, Giant: z is used for the sound of s as in Measure; s for soft c, e.g. City; \$ for sh, e.g. Sure.

9. "New words" and "New Usages."

It will be recollected that in these reading-books there are sixty running words of text for every new word introduced. 1 Now there are certain slight changes of form or of meaning in a word which certainly do not involve the same effort of memory as a new word: Example, Boys run: water runs. If each case of this kind were noted as a new word, the books would be expanded to an inordinate length, and the difficulty of passages would vary widely according to the proportion in them of such pseudo 'new words.' If, on the other hand, such words are not noted in some way, they will come upon the children as unexpected and uncomfortable obstacles. The difficulty has been dealt with by bracketing such words: they are thus pointed out to the child (and to the teacher), and their meanings are given in the Companions: but they are not computed in calculating the size of the vocabulary, on which depends the length of the lesson and of the book. Such bracketed 'new words' are called "usages."

There is no difficulty in deciding what should or should not be included as a 'usage': we have to point out every difficulty which the child is unlikely to be able to guess for himself. If we are in doubt whether the child will, or will not, be able to guess the meaning of a certain modification, it means that the child himself may be in doubt in his guess: hence all doubtful cases must be included.

The distinction which does present difficulty is that between a usage and a new word. Are, for example, *Hang* (suspend) and *Hang* (strangle) two new words, or one new word and a usage? Certain rules have been framed which need not be detailed here.

10. Prevention of Verbal Reading.

In the Second Teaching experiment we did not discover until

¹ Bilingualism, pages 270, 271. See also page 15 below.

the tenth lesson that the boys were reading purely verbally and were not really understanding what they read. This proved to be largely due to their inability to read their mother-tongue: but the system of English teaching was also at fault.

In the early stages much of the reading is necessarily aloud, and such reading tends to create the bond 'Sight of word—Speech,' with no intervention of idea. It is particularly easy to read in this way in a partially known foreign language.

If, in the early part of the course, sentences are provided with nothing depending on their meaning, there is nothing to prevent the child from treating them as meaningless. Thus the child at an early stage forms the habit of reading without understanding.

One method of preventing this has already been noted, namely intermittent illustration of the meanings of the practice sentences. But this is rather an encouragement to intelligent reading than an actual compulsion. The only way of ensuring that a child shall read with understanding is to require from him some response which he will not be able to make unless he reads and understands.

For this reason the Question Mark is introduced in Lesson 3, and in every subsequent lesson some exercise is provided which demands a response of some kind from the child,—the marking of sentences as true or false, answering Yes or No, selecting the right answer from three alternatives, numbering items in a picture to correspond with its descriptive sentences, silent drill, etc.

These meaningful exercises simultaneously serve another purpose. In the series as a whole we have set at the end of each reading-book which carries the vocabulary forward, a Supplementary Reader which introduces no new words: the purpose of these Supplementary Readers is to exercise the child in the use of the vocabulary thus far attained, and to prove to the child the increase of power and enjoyment which he has achieved. The beginner is less able to make use of his newly attained powers, is more liable to become discouraged than the child who has made some progress. Hence such exercises in use, and such proof of achievement, are needed more frequently in these early stages than they are later.

For this reason each lesson in the first book repeats the plan of the series as a whole: the vocabulary is carried forward a short distance; the end-exercise of each lesson contains no new words,

¹ Bilingualism, page, 287.

but serves as an application of the words just learned, as a test of ability to read with understanding, and as a proof of increased reading-ability and power of enjoyment of the language.

11. Grammar.

This subject has attracted more attention from enquirers interested in the method, (e.g. the listeners to wireless lectures on the subject given in Wales) than any other point. The question asked is, How is grammar dealt with in a system in which the child begins to read continuous matter after only a few days' or weeks' acquaintance with the language? and, How would grammar be dealt with in those languages which are more systematic than English?

Let us consider the mental process of a child encountering a new point of grammar, for example the formation of Comparatives. He knows the word Rich; he now meets the peculiar word Richer, a known word, with an unknown appendage. Let us suppose that, instead of meeting the word Richer, he met the phrase 'More rich,' the word More being unfamiliar to him. It is obvious that we should introduce the word More as a new word. We therefore treat the suffix '-er' as a new word. It will not be necessary to point out Poor-er, for both parts of the word are now known to the child; but Big-g-er must be pointed out as a usage, otherwise the child may say "Big I know, but what is Bigg?" In fact regular inflexions on their first occurrence are treated as new words; slightly irregular forms of inflexions already known are treated as usages.

Grammar is thus broken up into its component units. It is taught just as it comes to be needed: it is generalized just in so far as it naturally generalizes itself. It is learned very much as grammar is learned by a child in acquiring his mother-tongue,—as a number of specific word-habits.

It is doubtful whether it would be desirable to apply this unsystematic method to a more systematic language than English. It may effect an economy of time to teach some parts of the French regular verbs systematically at an early point in the course:—such, at least, was my decision in designing the French series of readers. But there can be no justification for introducing a word (e.g. Impératrice,—3000th) out of its order in the Wordfrequency List merely to illustrate a point of grammar which will not be needed until later. The worst offenders of all in lumber-

ing up a child's vocabulary with words of low frequency are the grammar books:—how many of the words in the Latin Gender Rhymes did we ever use in our Latin proses, or ever meet in our reading?

12. The Difficulty of Reading matter.

The difficulty to the learner of a foreign language in dealing with any passage of reading matter depends upon three factors:—

- A. The 'Density' of New Words: that is, the number of new words introduced into a given length of text.
- B. The 'Density' of the Questions: that is, the number of questions to be answered on a given length of text. (The smaller the number of questions the greater the difficulty, because the beginner possesses very little power of 'skimming').
- C. The Size of the 'Unit': that is, the length of the section which the pupil is required to peruse before he looks up from the book and gives its substance.

In reference to this last point we have suggested 1 that ideas gathered from reading a foreign language are more 'evanescent' than those gathered in the reading of the mother-tongue: that, although the same number of ideas may be gathered at the moment of reading, in the case of a foreign language a smaller proportion of those ideas is recalled in a review made after a short interval. This supposition has since been confirmed by experiment. 2 It is clear that where the answers to questions are underlined in the process of reading there can be no evanescence, since no factor of memory enters into the process; but, where the reader is asked to write the answers (already underlined) after the completion of his reading, there is an element of memory, and we shall therefore expect to find some evanescence. The amount of such evanescence may therefore be measured by subtracting the percentage of correct written answers from the percentage of correct underlinings. By doing this, in the one case where the text and questions are in the mother-tongue, and in the other case where the text and questions are in a foreign language, we may observe whether such evanescence is, as we have supposed, greater in the reading of a foreign language. It will be observed from the table given on the next page that Evanescence is about two and a half times greater in the foreign language.

¹ Bilingualism, page 305 et seq.

² Indian Journal of Psychology, I/4, Oct. 1926.

		Moti	11	FORE		% DIFFERENCE, UNDERLINING AND ANSWERS.		
	Number of Cases	% correct under- lining.	% correct answers.	% correct under- lining.	% correct answers.	Mother Tongue	Foreign Language.	
B. T. students 1924-25	29	92.5	92.5	90	83.75	0	6.25	
B. T. students 1925-26	11	97.5	90	96.25	83.75	7.5	12.5	
Dacca Inter. 1st Year 1925-26	19	92.5	87.5	90	87.5	5	2.5	
Matric. Class X	25	90	81.25	85	61.25	8.75	23.75	
Class IX (A good school)	41	90	88.75	81.25	72.5	1.25	8.75	
Class IX (An average school)	15	90	82.5	66.25	56.25	7.5	10	
Total	140 MEAN.	91.45	87.45	84.49	74.0	4.0	10.49	

A. The Treatment of New Word density.

The maximum density compatible with ease and enjoyment was originally fixed at 1 new in 50 running words. But in addition to new words there are new usages which also act as slight obstacles to ease and enjoyment. To allow for these individually would be very complicated, especially as they vary greatly in difficulty. Hence they are allowed for in mass by lowering the new word density to 1-60.

We have argued above in reference to Book 1A that the beginner needs at frequent intervals some materials which merely exercise him in the vocabulary already gained and encourage in him a sense of progress and achievement. This need is still felt, though in a less measure, in Reader 1B, and is met, in the early part of that book, by 'bunching' the new words, so that, though one section is a toilsome piece of reading, the next affords a clear run. In the second part of the book the 'clear runs' are made less frequent but rather longer,—since the child can now read faster. The centre story is practically free of new words, as a half-way rest-house.

When Reader II is reached the child should possess some power of rapid reading; hence the incidence of new words is here made as regular as possible throughout.

¹ Bilingualism, pages 270-271.

B. The Treatment of Question-density.

The highest question-density is reached where there is a question only and no text. In the picture-exercises provided in the earliest lessons this condition is achieved. Later, as a transition, a picture and a question are given, with three alternative answers, the task being to mark the correct answer; the two rejected answers provide that situation of having to pass over certain words and pick out the required idea, which constitutes the essence of true reading. In the next type of lesson there is a picture, with sentences describing it, each sentence being preceded by a question. The task is to underline in the sentence the word or words which answer the question. This procedure, underlining the answer in the text, is precisely that employed in all the subsequent reading-books, and is used also in the stories at the end of Book IA. But in Book IA the task is made easier in two ways:—first, the question-density is extremely high, ranging from 1-6 in the descriptions to 1-24 in the stories; and secondly the questions are interspersed with the text, each individual question being followed by that portion of the text which gives its answer. In Reader IB and the subsequent books several questions are set upon the one section; for this reason the questiondensity at the beginning of Book IB is made higher than it is at the end of Book IA. The density is gradually decreased through Book IB; and in Book II no further account is taken of the matter. —The very low densities used in training for high speed reading 1 are a matter for a very much later stage of the course, and could of course only be used in 'supplementary' material, viz., matter containing no new words.

C. The Treatment of Evanescence.

The beginner learns to overcome the disability of Evanescence by reading and reviewing units of gradually increasing length.

The units of the stories in Book IA average 75 words each. In Reader IB the units gradually increase in length. This increase can, of course, only be carried to a certain point (about 360 words) in the reading-books, though in the supplementary material there is no such limit. The reason for this restriction is that the child has to learn all the words of a section before commencing to read the section: it is comparatively easy to obtain a temporary memory of six to eight words, which will be finally impressed on the mind by meeting them each three or four times 2 in the reading of the

¹ Bilingualism, Chapter 7.

² Learning to read a Foreign Language, page 28.

section. But, since there is one new, word for every sixty running words, in a unit of 600-700 running words there would be ten or twelve new words to learn; this would involve considerable effort on the part of the child and would cause a long break in the continuity of the reading. For this reason, in and after Book 2 a unit is generally made that portion of reading matter which contains about six new words.

13. The Selection of Material.

The most important factor in determining a child's pleasure (or otherwise) in his reading book, is the selection of material.

We have before us seven lists of stories selected as favourites by various groups of English and American children (numbering in all several thousands). A series of three reading-books intended for English children contains not a single story mentioned in any of those lists. A series of four English readers intended for Indians contains one only. Nor does the type of stories used in these books approximate in any way to the type of story preferred by the child at the age for which the book is intended.

The selection of stories for reading-books in a foreign language presents two special problems:—

(i) The Age Discrepancy.

When, in the early stages, the vocabulary is very small, it is difficult to find stories mentally 'old' enough for the children which can be told within the vocabulary available. In actual practice this difficulty is not very serious if the child begins the study of his second language at a fairly early age. Thus if the child starts his foreign language at the age of 8, he attains a reading vocabulary of about 760 words by the age of $9\frac{1}{2}$ -10 and with these words, selected according to their frequency, it is possible to tell the stories ordinarily chosen as favourites by children aged 9-10.2

(ii) The Choice of Local Colour.

In teaching English to an Indian child, we may either tell English stories in an English setting, or we may tell Indian stories in an Indian setting. The choice of the first alternative produces stories so unfamiliar in the details of their social environment as to be unintelligible (e.g. Peter Pan). The choice of the second alternative provides stories which the child would understand and appreciate in his vernacular, but the stories are spoiled for him by being translated into a foreign medium which destroys their flavour; or, if the

¹ Bilingualism 238-240, 262-263. ² See page 20 below and New Method Reader II.

English medium be adapted to convey the local colour, the purity of the child's English is contaminated by the introduction of a number of 'half-caste' words. The idea of those who insist on the use of "Indian stories" in English reading-books for Indian children is doubtless that such hybrid material is more intelligible to, and more popular with, the children. Our experience is otherwise. There is however a means of avoiding this dilemma.

There are certain great stories of the world, the favourites of children in many languages: such stories have a colour of their own, and can survive in any setting. They are independent of the local differences of men, because they embody some great common factor of mankind. Such are the stories which we must use. But in selecting them we cannot trust our own judgment, for our present tastes are the tastes of the adult, and our memories of our own preferences in childhood are not necessarily representative of the majority, nor of the present day.

The Child's taste in reading. 2

It is of course useless to attempt any investigation of the pre-

¹ Learning to read a Foreign Language, page 53.

² The three chief books on the objective study of children's taste in reading are:—

- (1) Uhl, W. L., The Materials of Reading, 1924. This attempts to determine what qualities in a story (Humour, Style, etc.) chiefly appeal. The author also shows what percentages of children and teachers selected certain favourite stories in certain grades. He supplies an excellent list of "Superior Selections" viz: stories most frequently mentioned by children and teachers in each grade.
- (2) Terman, L. M. and Lima, M., 1924. Children's Reading. The results are derived from the answers to a questionnaire issued to parents for examination of their children and to University students (for personal memories). It contains an excellent discussion of the types of literature preferred at given ages, and a descriptive list of books suitable for children of various ages.
- (3) Jordan, A. M., Children's Interests in Reading, 1926, (An excellent book, originally published in 1921, now revised).

ALSO:

Anderson, R. E., Reading tastes of High school pupils. Pedagogic Seminary, XIX, 438-460.

Dunn, F. W., Interest Factors in Primary Reading material, Columbia, 1921.

Leonard, S. A., Essential Principles of teaching Reading and Literature, 1922, Ch. III.

McConn, C. M., High school students' ratings of English Classics, English Journal, 257-272, 1912.

Olcott, F. J., Children's Reading, 1912, 19-28.
Willett, G. W., The Reading Interest of High school pupils, English

Journal, 1919, 474-487.

Hall, G. S. and Smith, T. L., Aspects of Child Life and Education, 1912, page 53, 'Psychology of Day Dreams,' and page 84, "Curiosity and Interest.'

Kimmins, C. W., Children's Dreams, 1920.

ferences of Indian children at the ages with which we are concerned, because they can read almost nothing in English except their text-books, and they read very little in their mother-tongue. We must therefore take the preferences of English or American children as our guide, making such allowances as are obviously necessary.

The easiest error to make, and the most fatal is, not to select an unpopular story, but to select a popular story and put it at the wrong age. A good story which is too old or too young for the class is probably even less enjoyable then a rightly placed tale of second-rate merit:—moreover it is a good story spoiled, for it might have been used successfully elsewhere. The greatest need of the textbook writer is of some guidance as to the ages at which certain types of story either become, or cease to be, popular.

This point is well discussed in Terman & Lima, (see the Bibliography above) and their objective evidence as regards American children is adequate; but we thought it desirable, since the point is of such importance, to verify their conclusions by an examination of some English schools. Three schools were examined, a good Elementary school, a large Central school, and a first grade Preparatory school. The boys were asked to write their three favourite stories and their age on a slip of paper.

Girls were not included because we are not primarily concerned with girls, and because girls read boys' books far more than boys read girls' books.¹

The results of this enquiry, supplemented by Terman & Lima, are shown below:—

- Age 8. Fairy tales are a safe choice at this age; also stories of 'Children in other Lands.'
- Age 9. Fairy tales of a more complex type may be used; but the interest in fairy tales is now fading. Stories of the child's own environment, e.g., A Visit to the Fair, and tales of Boy Scouts are more popular.
- Age 10. Fairy tales are now definitely out of favour. Stories of adventure and travel are preferred. There is some interest in mechanical inventions.
- Age 11. Henty's books and books of the same type are now popular; also animal stories.
- Age 12. School stories are first commonly mentioned at this age (though Terman puts them at age 11). Biographies are popular. Detective and mystery stories are much favoured.

¹ Terman & Lima, op. cit., page 72.