Let's read: A linguistic approach. By Leonard Bloomfield and Clarence L. Barnhart. Pp. [vii], 466. Detroit: Wayne State University Press, 1961.

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I wish this book had not been published in this form. It is, to be sure, a milestone in an evolutionary development, and its virtues far outweigh its defects. Yet its defects are many and quite possibly serious enough to give aid and comfort to those schoolmen who, with one accord, heaped scorn upon Rudolph Flesch's Why Johnny can't read of 1955.

Let's read is a very different work from Flesch's; it explains the nature of the problem and furnishes a systematic and soundly based method to solve it. But it will probably only confirm the conviction of many that linguists have no real understanding either of the nature of reading or of the problems inherent in teaching. One can almost hear: 'If this is all they can come up with after all these years ...', or 'Just a slightly different slant on the old phonics business ...', or 'They just don't seem to know any of the research that's been done or any of the results that have been achieved ...'.

Some of the objections that will be made to the book will not be unfounded. The work seems to be only an enlarged and slightly altered version of the original Bloomfield materials of 1937–42. Certainly little of significance seems to have been added since 1949, the year of Bloomfield's death. The tragedy is that twenty years ago these materials were not understood and appreciated, published, and thoroughly tested so that the necessary changes of emphasis and the essential improvements could have been made. But as Barnhart points out in his informative and nostalgic introductory chapter, 'The story of the Bloomfield system' (12),

Over a period of twelve years, from 1937 through 1949, Leonard Bloomfield and I offered his system for trial and experiment to the schools of education at three large universities noted for their experimental work in education, submitted it to three large schoolbook publishers and two large tradebook publishers, and offered it to various school systems. Two university presses also considered publication and for various reasons (usually after consulting a psychologist or a teacher in the reading field) were unwilling to go ahead with any experiment.

Certainly part of the reasons for the lack of acceptance was the way in which the materials were put together. The work had none of the familiar appearance and none of the apparatus that teachers and publishers had come to rely on and expect. There were no teachers' manuals, no guides for the students, no workbooks. Also there was no evidence of the years of research and experimenting under controlled conditions that lay behind the preparation of the materials then current. Generations of teachers had been told quite different things about the nature and purpose of reading, and had been trained to do their jobs in a way that made sense to them. They could point to the fact that scientific research dictated every step in the process, and they had the comfortable feeling of being members of an establishment. The teachers were bolstered by the

educational psychologists and the reading specialist who prepared the materials which the publishers then manufactured and supplied to the teachers. There was no way to break the charmed circle, and the result was a number of competing reading series, representing vast expenditures of time and money, that were as alike as peas in a pod. No one wanted to break the chain and no one could afford to break it.

From this point of view it is not remarkable, as Barnhart puts it (12), 'that a system worked out by one of the great linguists of the twentieth century could get no hearing in educational circles, and that there was only one attempt to try out his ideas of how to teach reading in the schools.' This one experiment, begun in 1942 under the supervision of the Reverend Stanley Stoga, Assistant Superintendent of Schools of the Roman Catholic Archdiocese of Chicago, is summarized in a very interesting report by Sister Mary Fidelia, which Barnhart quotes at length. Some excerpts are very much in point.

As I read the manuscript, several problems stood out. First, there were no materials prepared for group teaching in the comparatively large classes of forty or more children; second, Dr. Bloomfield furnished no models of lessons in his manuscript which would suggest to the teacher how she was to go about presenting this linguistic approach to word-attack in reading; and third, it would take a great deal of courage to leave the beaten path of conventional practices to venture unequipped and unguided on the strange seas of linguistic waters. (12)

Though severely handicapped, the experiment, on the whole, was quite successful:

The emphasis on word-attack did not in any way sacrifice the final goal of reading-comprehension. Contrary to observations that phonics is not equally effective for all children, the experiment seems to confirm the observation of the teachers that given an adequate amount of time and readiness for word-attack skills, all categories of children are capable of benefiting in word-attack skills. (15)

She concludes:

Further, if the linguist's functional approach to word-attack in reading is to be accepted as a means of contributing to the improvement of reading instruction, it is necessary that the linguist, the reading specialist, and the educational psychologist unite their efforts in cooperative research and experimentation for the purpose of preparing a program of reading instruction in which the linguist's concept of word-attack will be integrated in the present day 'reading for meaning' theory. (15)

To this conclusion I murmur a fervent Amen; it has been along these lines that I have endeavored to operate for the past several years in helping produce a series that incorporates the linguist's knowledge of the relationship between phoneme and grapheme, between spoken language and written language.¹ But

¹ Late in 1942, as a First Lieutenant in the Education Branch of the Information and Education Division of the Army Service Forces, I was instrumental in having prepared for the Armed Forces Institute, and published by Ginn and Company (1943), two books entitled *Improving your reading*. The books were designed to be used by semiliterates in the Armed Forces; they were organized so as to furnish all the instructions necessary for a literate helper to work with one or more learners. Under 'Acknowledgments' appears the following: 'In this book the ordering of words for presentation is designed to impress first on the learner the most regular representation of sounds by letters, leaving irregular spellings for

I have been working with experienced professionals in the field of elementary education and have thus been able to enlist the support and interest of a leading publisher of elementary reading texts. As Bloomfield so well knew, the linguist has a contribution to make that may well turn out to be revolutionary; but, as Bloomfield must have learned before he died, the linguist cannot do the job alone.

Perhaps the most significant differences between the educational climate of the forties and that of the sixties lies in the growing concern among the school-book publishers themselves. They have not been unaware of the anxiety that was given expression in Flesch's diatribe of 1955, and more recently (1958) in Reading: Chaos and cure, by Terman and Walcutt.² Both as citizens and as business men they are very much aware that they must help to find something new. No longer can they in good conscience keep up the illusion of competing with one another with reading series that are advertised as new but are simply applications of the same underlying research and thus show the same strengths and the same vital weakness—lack of consideration of the essential contribution to be made by linguistics.

To return to Let's read. In addition to the introductory chapter previously mentioned (9–17), Barnhart has a short 'Introduction to parents' (2–4) in which he emphasizes how highly motivated the young child is to learn to read but stresses the importance of being sure the child has achieved sufficient 'muscular skills to see the small distinctions between the letters of the alphabet'. He goes on to say, 'You can tell he has the necessary muscular coordination when you notice that he can button his clothes or see and pick up a pin on the floor.' This statement could be questioned, since I have had it reported to me that some children of ten months can perform these tasks. Be that as it may, Barnhart further states the most important factor: if a child can talk he can learn to read. Allowing for all individual variations, certainly by the time the child is five years old he can begin the kind of preparation for reading that Bloomfield suggests.

Then follows (5–8) a chapter by Robert C. Pooley of the University of Wisconsin, entitled 'Introduction for teachers'. He mentions (6) Flesch's advocacy of a return to phonics and states that though Flesch was 'on valid ground in pointing out the significance of sound in the process of deriving meaning from printed symbols', he lacked 'a command of the science of linguistics which would have provided him with an understanding of the relationship between sound and written form.' Bloomfield and Barnhart, on the contrary, 'concentrate upon establishing patterns of letters and sounds regardless of meaning, to provide the

later acquisition. This plan is from Teaching Children to Read (unpublished), by Leonard Bloomfield, Sterling Professor of Linguistics, Yale University. Professor Bloomfield has authorized the use of the manuscript for this purpose.' There follows a list of five contributors and consultants, all educationists or reading specialists. The books were attractively illustrated; they represent, as far as I am aware, the first attempt at collaboration between linguists and other professionals concerned in the reading problem. Barnhart makes no mention of the books in his chapter.

² Barnhart makes no mention of this book either. Basically, it is a rather sophisticated plea for the reinstitution of phonics.

child with a constantly growing set of sound-letter constants by means of which he converts letters to sounds and almost automatically converts sounds to meaningful words.' Pooley then points out how this approach clashes with the now traditional systems that 'induce the learner to make immediate associations between letters and meaning with the eye alone (on the theory that the meaning supplies the sounds, rather than the sounds the meaning) ...' After reviewing the difficulties that lie in the way of any wide-spread adoption of a linguistically based reading method (7), he is careful to state that 'nothing in the foregoing remarks should be construed as a claim that the Bloomfield-Barnhart system of reading instruction is proved to be better than any existing system', but sees the approach as 'a path not yet taken' and as a challenge to the 'adventurous educator' that may prove 'shorter, more direct, and more pleasant to follow than those now in use'. Those who follow the path will be pioneers and 'have the prospect of making educational history'.

Following Barnhart's chapter is the now famous essay 'Teaching children to read' by Bloomfield himself (19-42). This essay, or parts of it, as Barnhart points out (19), appeared as an article entitled 'Linguistics and reading' in *The elementary English review*, split between April and May issues of 1942. I remember the impact the article made upon me twenty years ago, and highly recommend it to any linguist or educator who has not yet read it. It is in many ways Bloomfield at his very best, and one can well understand how disheartened he and Barnhart were (16) when the article seemed to be almost totally disregarded by those to whom they felt it could mean so much. But in all fairness I must add that it is the linguist who will immediately see and be convinced by the arguments; the reading specialist will be repelled and annoyed by many of the statements. This essay is the very core of the present book.

The essay states clearly all of Bloomfield's ideas and recommendations in the area of our concern, besides giving a succinct history of writing and a detailed description and criticism of various approaches to the teaching of reading. He stresses the basic nature of English writing as alphabetic and hence phonemic, and points out various cases of patterned 'return to word-writing' in such pairs as knave: nave, knight: night, knit: nit; but he does not mention the writing of morphemes as in boy's and boys'.

In criticizing the phonics approach (27), Bloomfield points out that the advocates of the method confuse writing with speech and proceed as though the child were being taught to pronounce—that is, to speak. The erroneous assumption that letters have sounds rather than represent sounds in context, as he implies, leads to the artificial breaking up of a word into components that never occur individually. 'Learning to pronounce such things,' he says (28), 'is something in the nature of a stunt, and has nothing to do with learning to read.' He realizes the importance of a knowledge of phonetics in the preparation of reading materials but has no use for the phonetic drills of the phonics method. He concludes (28), 'We intend to apply phonetics to our reading instruction; this does not mean that we are going to try to teach phonetics to young children. In this absurdity lies the greatest fault in the so-called phonic methods.'

In his criticism of the word method, Bloomfield points out (28-9) how in

essence the child is taught 'to utter the word when he sees the printed symbols for this word; it does not pretend to any phonetic breaking up of the word that is by naming, in proper succession, the letters which make up the written representative of the word ... No attempt ... is made to take advantage of the alphabetic principle ... The word method proceeds as though our writing were word writing. Every word has to be learned as an arbitrary unit ... In order to read a new word, the child must learn the new word character; he can best do this by memorizing the letters which make up this new word character, but these letters are arbitrarily presented and have nothing to do with the sound of the word.' He goes on to point out that the child is inevitably led to tie up phoneme and letter, and therefore urges (29) that 'our teaching ought to distinguish then, between regular spellings, which involve only the alphabetic principle, and irregular spellings, which depart from this principle, and it ought to classify the irregular spellings according to the various types of deviation from the alphabetic principle.' Here is expressed the core and basis of the Bloomfield-Barnhart method and, indeed, of any linguistically founded approach to reading instruction. This principle, when coupled with the understanding that the reader goes first from printed symbols to their oral counterparts and THEN to the meaning of the words, sums up everything that a linguist sees as essential in the process. I am convinced that anything that deviates from these principles is bound to slow up the process of learning to read.

Bloomfield suggests (30) that a considerable amount of linguistic knowledge and sophistication is necessary to prepare materials based on these principles, but that once the job is done anyone can soon grasp the principles that are involved. Once the principles are grasped, he says, any person will have acquired all the phonetics needed for ordinary instruction in reading. But ignorance of the principles is bound to lead to such incredible situations as the one he cites (30), where the author of a treatise on reading methods asks how we ought to teach children to read the word of: should we read it with the sound of f as in if or with the sound of f as in have? The latter pronunciation, he thinks, is careless and imprecise.

In this section Bloomfield omits any mention of how word-attack—the exercise of tying up letter with phoneme—is handled by those who advocate the word method approach. Granted that word-attack comes far too late and after the learner has been forced back, over and over again, to the old look-and-say or guessing approach, it is taken up and taught, generally after the middle of the second year. Failure to mention this is one of the serious objections that many reading specialists have to Bloomfield's article. The omission gives them a reason to attack him on the grounds of ignorance or unfairness or both, and allows them to discount all the really salient points of his presentation.

His criticism of the now largely discarded ideational method occupies him next. Here, as Bloomfield sees it, is a return to the picture writing of the American Indians. The rationale behind the method (31) is the assumption that since the skilled adult reader seems to grasp the content or the ideas from the printed page directly, scarcely noticing the individual words or letters, "the child is going at the thing in a wrong way and should be taught to seize the "ideas"

instead of watching the individual letters.' As Bloomfield points out, 'The child does his first reading out loud', and even the literate adult, when he reads very carefully, 'actually goes through the process of internal speech' which underlies each individual's acquisition of the mechanical skill of turning letter symbols back to the sound symbols which in turn release the meaning. This task of getting meaning 'is not peculiar to reading', Bloomfield goes on (32), 'but concerns all use of language; when we are not reading, but hearing spoken words, we have the same task of appreciating the content of what is said.' Again, the quintessence of the confusion between language and writing has 'led to the invention of ideational methods in reading instruction.' Even advanced students fail to grasp the content of what they read, but this shows lack of 'something other than reading power', and the student

needs to be taught the proper response to language, be it presented in writing or in actual speech. The marks on the page offer only sounds of speech and words, not things or ideas ... The child who fails to grasp the content of what he reads is usually a poor reader in the mechanical sense. He fails to grasp the content because he is too busy with the letters. The cure for this is not to be sought in ideational methods, but in better training at the stage where the letters are being associated with sounds.

The extreme type of ideational method is the so-called 'non-oral' method, where children are not required to pronounce words, but to respond directly to the content. They are shown a printed sentence such as *Skip around the room*, and the correct answer is not to say anything but to perform the indicated act. Nothing could be less in accord with the nature of our system of writing or with the reading process such as, in the end, it must be acquired.

And here is Bloomfield at his most acerb (32):

It is not easy for a student of language to speak patiently of such vagaries, in which educationalists indulge at great cost to thousands of helpless children. It is exactly as if these same educationalists should invent their own guesswork system of chemistry and introduce it into our schools.

Thus the failure of the mature student to grasp content from the printed word is equated with a failure in reading, and elementary reading instruction therefore concentrates more and more on the content. The fundamental mechanical process that underlies all reading is increasingly lost sight of and the problem of the inability of the student to respond correctly to speech on the writing is dubbed a 'reading problem'.

In reaching this conclusion, Bloomfield sees as perfectly logical the assumption that the child can neither grasp the content of what he reads as he reads it nor is concerned (or should be) about the content. Hence (34), though we need not forego the use of sentences and connected stories ... we need not fear to use disconnected words and even senseless syllables, and, above all, we must not for the sake of a story, upset the child's scarcely-formed habits by presenting him with irregularities of spelling for which he is not prepared.' Though I concur with the last portion of this statement, my experience indicates that when the child gets through putting letters back into sounds he needs to come out with a 'real word' that 'has meaning'. Some individuals may get a feeling of accomplishment by reading a nonsense syllable or may do just as well with a series of disconnected words, but the children I have observed do far better when they

realize they are reading a story that has a beginning, a middle, and an end. And whether Bloomfield is right or not, the teachers will not allow his disconnected words to appear in the classrooms for a long time to come, so deeply has the words-have-meaning doctrine become ingrained. Here is an area where we should have good objective testing and not rely on dicta ex cathedra. It is just here that the Bloomfield-Barnhart system has been and will be most severely criticized by educationalists and laymen alike.

In a section of his essay (35) entitled 'Before reading', Bloomfield takes up what he feels the child should have accomplished before he begins reading. First he must recognize the letters, that is, he must make some response to them on request. Bloomfield prefers the response to be the conventional names of the letters—aye, bee, see, dee, etc., using first the printed capitals and then the printed small letters. 'The written forms of the letters should not be taught,' he says, 'until reading habits are well established; the early introduction is a cause of delay.' Here again we have an ex-cathedra statement, and one for which I would like to have more evidence. If the educationists have established this as a fact, Bloomfield should say so; if it is based only on Bloomfield's own experience of a few cases, it should not be stated so boldly. It is perfectly possible that the response to the letters might be both oral—saying their names—and manual—an attempt to trace their shapes. But if Bloomfield is speaking of the differences between the cursive and the printed forms, this is, of course, a different matter, though I remember that I laboriously traced the words I see, in script, the very first day I went to school.

He goes on to speak of the necessity of instilling the left-to-right order in which letters and words follow each other in our writing system. This is accomplished simply by being sure the child responds to the names of the letters in their proper order in the sequence shown to him. When the child can do this, he is ready, says Bloomfield (36), to undertake 'the great task of learning to read—one of the major intellectual feats in anyone's life—[which] consists in learning the very abstract equation: printed letter = speech sound to be spoken.' He concludes the section with another warning against the isolation of the speech sounds in the process, 'since the isolated speech sounds are foreign to our language'; with another reminder not to introduce irregular spellings; and finally, with a repetition of the dictum not to bother the child 'to attend to the meaning of what he reads'.

Bloomfield's next section (36-9) has to do with differences in pronunciation—according to region and class—and can be considered along with George P. Faust's final very short introductory chapter (43-4), 'Speech variation and the Bloomfield system'. Bloomfield here warns against the notion that any one regional dialect is superior to than another or more correct and states (37) 'that the most we can ask of our pupils in this respect is that they speak like the educated people in their own part of the country.' Of course only standard forms will be used in the instruction: 'we want our pupils to learn to speak and write Standard English'; but that this is 'another matter, and in the main, quite separate from reading instruction' (38-9).

Faust correctly points out that we may spend a good deal of time needlessly

worrying about whether certain automatic differences in pronunciation (like the weak-stress forms of the articles) are going to be confusing to the child. Further he is convinced (43) that variant forms heard in such words as those written length and width will cause no problem: they are so 'completely acceptable that we scarcely know they exist, and there is only the remotest chance that the child will ever notice them for himself.' He admits, though, that the two pronunciations of from, one to rhyme with prom and one with come, may cause a problem when we are teaching the child to associate the letter o with only the phonemes /a/and /o/ (43-4). Faust may be right in suggesting that for those who use the 'frum' pronunciation, from be treated as an irregular spelling; but he illustrates, perhaps inadvertently, how much less troublesome regional variations are than some have thought when he writes (43), 'Taken by themselves, at and an clearly rhyme with bat and ban ...' In my dialect an and ban do not rhyme, an being phonemically /æn/ and ban /béhn/. The first word rhymes with the verb can /kén/, the second with the noun can /kéhn/. From experience with schoolchildren in Montgomery County, Md., I can attest that in dialects where this phonemic distinction occurs, the association of a letter a with both $/\infty$ and /eh/ causes only temporary confusion, while the difference between /æ/ and /æh/ presents no problem at all. Similarly, the letter o can be safely used to represent the variant regional pronunciations with /3/, /a/, /oh/, /ah/ in words like fog, log, and dog. Though the child hears the differences, he quickly calibrates the selections made by his own idiolect or dialect with the other standard variations. The danger, of course, comes when an uninformed teacher insists that her own pronunciation, native or acquired, is the only correct one. This insistence can be carried to the extreme of absurdity when, as Bloomfield mentions (39), we have as recommended pronunciations such affectations as 'lass with a "broad a", or pre-see-us instead of preshus for the word that is written precious.'

Bloomfield concludes his essay with a very important section entitled 'First materials'. Here he stresses once more the regularity principle (39): 'Our first materials must show each letter in only one phonetic value; thus, if we have words with g in the value that it has in get, got, gun, our first material must not contain words like gem.' Silent letters as in knit or gnat must be avoided, as must (40) the use of double letters, 'either in the value of single sounds (as in add, bell) or in special values (as in see, too).' Combinations of letters like the th in thin and the ea as in bean must not be used, and neither must x, which represents /ks/ or /gz/, or q, which occurs only with u for /kw/. a, e, i, o, u are used for the simple vowels heard in cat, pet, pin, hat, cut; the remaining letters are regular in their correspondences with the consonant phonemes they represent. Only these letters will appear. The fact that /k/ is represented by both c and k, Bloomfield feels, causes no problem. Groups like bat, cat, fat will be used at first rather than groups like bad, bag, bat 'because it is easier to watch the first letter than the last, and because rhyme is familiar to the child' (41).

When the teacher or the parent points to a word like can, the child (since it is assumed that he knows the names of the letters) will read the letters off by name in left-to-right sequence. He is told that he has spelled it and that now he is

going to read it. He is told that the word is can; and, having repeated it, he has read it. Next he is presented with fan—a poor choice for beginners with the same dialect as mine, since fan does not rhyme with one of the words spelled can. Having gone through the same procedure, 'the aim is now to make the child distinguish between the two words—that is, to get him to read each of the words correctly when it is shown by itself, and, when the two words are shown together, to say the right one when the parent or teacher points to it, and to point to the right one when the parent or teacher pronounces it' (41). Again Bloomfield warns against asking the child 'at this stage to write or print the words: that comes much later.' He suggests that two words are sufficient for the first lesson.

Now my experience has been that unless a great deal more work with the alphabet has been undertaken than is the current practice anywhere, the average child is not ready at the start to discriminate the separate letters in even the simplest words. He needs considerable experience of seeing words as wholes—a sight vocabulary if you will—before he begins to see for himself that the only difference in the written form between cat and pat is the difference between the first letters. Then and only then is he ready to make the association between the contrasting phonemes and the contrasting letters. Of course, there are children able to make these discriminations at the beginning of their first school year, but then some children come to school already able to read.

Bloomfield finds no problem (41) in whether or not a word is strange to the child or whether it conveys a meaning to him, since it is only the mechanical process of associating letters with sounds that concerns him. But he does add, 'There is no harm in telling the child that "a van is a big covered truck for moving furniture," or that "Nan is a girl's name." Nonsense syllables are included from the very beginning, since (41–2) 'nonsense syllables are a test of the child's mastery of the phoneme'; he can be told 'that the nonsense syllables are parts of real words which he will find in the books that he reads... The acquisition of nonsense syllables is an important part of the task of mastering the reading process. The child will learn the patterns of the language more rapidly if you use the nonsense syllables in teaching.'

The essay concludes with a review of his convictions: present as many suitable words (and nonsense syllables) as possible; do this without regard to meaning; make no attempt at teaching the child that words like can and fan are similar in sound or that the spelling indicates a similar sound (as is done in the phonics methods). 'All we do is to present such words together; the resemblance of sound and spelling will do its work without any explanation from us.' But 'time and repetition' are essential. 'Above all, we must not upset the habit by presenting words in which the letters have different values.'

The remainder of the book consists of exercise material, arranged according to the patterning of representation between phonemes and letters, and graded according to difficulty. Two sections, Let's look (46-50) and Let's test our ABC's (53-4) furnish material for the required preliminary readiness. The former section gives several pictured representations—a man shooting an arrow, a dog chasing a cat—to stress the left to right direction of the letters and words of the written language, and two pages of groups of geometrical shapes in which one in each

set is different from all the others or where among five shapes two pairs are alike and a fifth is different. The other section consists simply of one page with the capital letters of the alphabet written in five lines, from left to right, and a second page with the capital letters accompanied by their corresponding lower-case letters, similarly arranged.

The reading material proper is divided into six parts, each preceded by a guide to the lessons. Part I, 'First reading' (57-121), contains 36 lessons, followed by tests for each lesson (101-16) and by a list of all the words used in the lessons. This first part is typical of the way in which all the material is presented; a brief examination will illustrate how Bloomfield's ideas are implemented. Each lesson begins with a list of words to furnish an illustration of the pattern being taught; Lesson 1 treats the group an, can, Dan, fan, Nan. Next come examples of the words in simple phrases—a can, a fan, a pan, then simple sentences ranging from Dan ran to A man ran a tan van. Though the Guide is concerned about varying pronunciations of on (58), inferring that any deviation from /an/ would have to be treated as an irregular spelling, it entirely omits treatment at this point of the words bog, dog, fog, hog, and log, leaving them to be treated among the irregulars in Lesson 166. There seems to be no concern about the /æ/-/eh/ variation which occurs in Eastern dialects and which I have discussed above. Dan and ran in the sentence Dan ran are presented in juxtaposition under the assumption that they show the same rhyming vowel. The word can in A cat can nap is obviously assumed to have the same phonemic structure as the can in a can, but, again, this is not the case for some twenty-five million speakers of American English with dialects like mine.

What is more important than these inconsistencies of analysis and presentation, the entire method assumes that a large number of new words can be presented at once just because they have a similar and patterned regularity in the relation of phonemes to letters and exemplify minimal contrasts between initial consonant phonemes and initial letters. I have learned by experience that the matter is not so simple. Bloomfield himself stresses the need for constant repetition at the early stages, yet the new words are never repeated in any kind of context more than four times in one lesson, even at the beginning. Later on, in Part V for example, the reading material in 'story' form seems not to have been selected to illustrate the new words or their patterns but just to have been provided as something to read. As stories, they are for the most part natural and colloquial in style; but nowhere is there any explanation or treatment of punctuation marks or the other conventions in which they abound.

Criticism of the individual sections—Part II, 'Easy reading'; Part III, 'More easy reading'; Part IV, 'The commonest irregular words'; Part VI, 'The commonest irregular spellings of consonant sounds'—could easily be detailed; each part raises many questions regarding the rationale of selection and the order of presentation. For example, why is one of the most regular spelling conventions of the written language—a single vowel letter followed by a single consonant letter and a final silent e to stand for the complex nuclei /ey/, /iy/, /ay/, /ow/, /(y)uw/, as in mate, mete, mite, mote, mute—put off until Part V, and even then

not presented as a pattern? In the *Guide* to this part, Barnhart (I assume it is Barnhart rather than Bloomfield, though I have no way of knowing) discusses only words spelled with a, such as *safe*, *game*, *bake*. And throughout this *Guide*, the author spends a greal deal of space worrying about regional variations, which, as I have said, are easily calibrated between dialects.

To sum up, the most serious defects of the work are six.

- (1) There is an underlying assumption that because the educationalists know no linguistics they have learned nothing about the teaching of reading in the thirty or forty years they have devoted to their research with real children in real classroom situations.
- (2) The materials ignore some of the basic results and findings of educational psychologists in the area of learning theory.
- (3) The analysis of English upon which the materials are based is not complete and not consistently applied.
- (4) The ordering of the presentation and grading of the materials in terms of difficulties presented to the learner seem to be based on the educated guesses of a linguist, not on research or experience with average children in schools.
- (5) Meaning is divorced from the process of going from written symbols to spoken words. There is no realization that the end result should release a meaning which the child already possesses.
- (6) Nowhere are there any illustrations. Pictures do not have to tell the story, but children are helped by pictures and have come to expect them. 'What good is a book without pictures?' said Alice.

Whether or not these criticisms will be considered fair by the linguists who read this review, I know from twenty years of working with interested and open-minded professionals, who earnestly want to improve the teaching of reading, that this is the way the book and the basic essay has struck them and will continue to strike them. They will be angered rather than enlightened; they will resent the interlopers, and will fail to see the essential rightness in Bloomfield's position. What is needed, as Sister Mary Fidelia noted in 1942, is a team approach. No one discipline has the experience or the knowledge to solve the problem singlehanded.

In conclusion, I have come to believe that there are six essential criteria for the preparation of primary reading materials. (In this summary, I have drawn freely from a presentation by Dr. Clara G. Stratemeyer before the National Council of Teachers of English in November 1960. Dr. Stratemeyer, a well known educator, was formerly Supervisor of Elementary Education in Montgomery County, Maryland.)

- (1) The printed page, to be recognized by children as a recording of speech, must be prepared in the informal style which children and adults alike use in daily communication: no more primerese!
- (2) Words should be presented in the context of a story that will interest the children, and through characters with whom they can identify.
 - (3) Pictures should be used to illustrate the story, not to tell it.
 - (4) The words used should be already familiar to the children, at least at the

beginning. But the words need not be those most frequently occurring of such words. As Dr. Stratemeyer puts it,

In teaching children to read, we are not seeking simply recognition of a large number of individually discrete word symbols. Rather we are concerned with developing an awareness of the alphabetic system and control over its operation. From words used and understood by children, the specific items of the vocabulary should be chosen for their contribution to this purpose of making clear the alphabetic system ... If English symbols and sounds provided a one-to-one relationship, the task of learning to read would be simple. This is not the case, and yet we can simplify the task of beginning reading by limiting ourselves, through our choice of vocabulary items, to such a consistent one-to-one relationship between symbol and sound.

- (5) Every means must be used to have new words register first as wholes distinct from other words-as-wholes. Experience shows that the average child needs a recognition or sight vocabulary of at least seventy-five words before he can see the contrasts between letters in context. Thus a further restriction is imposed on the vocabulary; for example, dull and doll have the same configuration on the printed page, so that the child will have a tendency to read one for the other until he has learned to pick out the contrast in the vowel letters. The practice of presenting only regular correspondences between phonemes and letters shortens the time before he begins to sense the alphabetic principle.
- (6) Finally, the new words should be repeated in meaningful contexts under what Dr. Stratemeyer calls the 'principles governing spaced repetition for practice'. It has often been demonstrated that the child does not retain a new word if it is not used again and again. 'To introduce a word on page 23, to reuse it on page 24 and then not present it again until page 52, does not constitute an adequate application of these principles.'

Dr. Stratemeyer concludes, 'Preparing reading materials with the criteria here presented will be an arduous undertaking. Temptation will often be great to relax adherence to some of them. Progress will be slow because of the need to try each step with children, since there are no precedents in experience on which to base these decisions. But there are no valid reasons for delay in adding linguistics as a source of guidance in developing more effective programs of instruction in reading.'

It is to be hoped that *Let's read*, with its hard-hitting essay by Bloomfield, will provide those interested with food for thought. Reading specialists and educational psychologists can no longer dismiss what Bloomfield did twenty years ago; it is now rather a matter of putting together all that has been learned by the disciplines concerned, and so giving Johnny the break he deserves.

Trends in European and American linguistics 1930–1960. Edited on the occasion of the Ninth International Congress of Linguists ... by Christine Mohrmann, Alf Sommerfelt, and Joshua Whatmough. Pp. 229. Utrecht and Antwerp: Spectrum Publishers, 1961.

Reviewed by Fred W. Householder Jr., Indiana University

This is a fascinating collection. Each contributor has apparently struck out blindly in one or more directions in total ignorance of what the other contributors