

On defining literacy

by

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Of the many authors who have written about literacy in general and about reading in particular, relatively few have attempted to give a definition for either literacy or reading; the rest seem to begin with the assumption that most people know what a literate person is. The majority of the definitions that have been given are unsatisfactory. W.S. Gray, for example, defined a literate adult as one who has completed the fourth grade (1). But what are the specific skills that make such an adult literate? Only when we have the answer to this question can we judge whether another adult that has learned to read and write, say at home, is literate.

In a later report (2), Gray defines reading in terms of problem solving and personality development. He claims that one who fails to include "reflection" and "critical evaluation" is not reading; for reading must "deepen his understanding, aid in the reconstruction of experience, stimulate intellectual and emotional growth, modify behavior, and... promote the development of rich and stable personalities." Admittedly a person cannot understand what he reads without taking some attitude to it, which may be considered a modification of experience and personality; but such is the **result** and not the **process** of reading. And what of a person who reads a dull book and finds in it no contribution to the development of a "rich and stable personality?" Is he temporarily illiterate while reading the book?

Arthur Gates claims (3) that if a child is "reading," his «innermost being is involved." Thus a child who takes a passive attitude to the contents of a book is not reading! It is interesting that such stipulations are made for the grasping of written symbols but not for the grasping of oral sounds, though both are representations of the same code, namely, language.

A clear, precise definition of a given skill is one of the major pre-requisites for teaching that skill. With the imprecise definitions of literacy which now exist, it is no wonder that the teaching of reading and writing usually consumes an excessively long period of time and results in no little frustration on the part of students and teachers alike.

DIFFICULTY OF DEFINING LITERACY

The definition we seek here is one that would indicate the specific skills a person must possess to be literate. Because those skills are numerous and involved, a statement that attempts to define literacy precisely would be lengthy, detailed, and perhaps too complicated to be easily understandable. We shall therefore discuss the skills involved, and define a literate person as one who possesses them.

THE TWO BRANCHES OF LITERACY

A literate person can both read and write. The skills he possesses, then, consist of two corresponding sets: one for recognition, and the other for production.

GRAPHEMES AS REPRESENTATION OF LANGUAGE UNITS

The writing systems of all languages consist of symbols that represent language units: a unit may be the phone, the phoneme (segmental or suprasegmental), the syllable, the morpheme, the word, or the idea.

Different definitions and concepts of language have led to the evolution of different methods for the teaching of reading: the alphabetic method is based on the concept that language is basically a sequence of letters; the word method is based on the concept that language

is a sequence of words; and the sentence method is based on the concept that language is an expression of thought and that the unit of thought is the sentence (4). In spite of the great differences underlying these concepts, they all agree on a fundamental principle: that writing represents language units. It is on what the unit is that the proponents of the different methods disagree.

Thus the literate person possesses, among other skills, the ability to grasp language units from their written representation, and to put down the symbols for those units. The term "grasping" as used here implies a response similar to that which would be normally elicited by the same units if heard. It is this response that we consider the essence of grasping, not simply the pronunciation of what is written at one extreme, nor the modification of personality at the other. To this response we shall assign the label "normal response".

KNOWLEDGE OF THE LANGUAGE

A literate person knows the language which he can read and write; such knowledge enables him to associate the symbols with the language units. It is possible to arrive at the meaning of a passage written in, for example, the alphabetic system of the Phoenicians without knowing how to pronounce the phonemes represented; this may be called "deciphering", but it is not "reading" according to our definition. Again, a person may be able to imitate with remarkable accuracy the written symbols representing the utterances of a language he does not know; we hold that such a person may be "drawing," but he is not writing.

MASTERY OF THE GRAPHEMES

Mastery of the graphemes consists of the habitual response to and production of the features listed below. To such mastery we shall refer as "functional control".

(a) The direction: Graphemes are written in some sequence in every language: in some languages the direction is from left to right; in others, from right to left; and in still others, from top to bottom.

Direction is isolable as an independent feature opposed to, for example, the form of the letter. The writer has heard a student of Arabic read /tasabba9at/ 'it became saturated' as /tasa99abat/ 'it branched out'. It can be easily shown that the mistake was not the result of unfamiliarity with the letters (in Arabic both /tasabba9at/ and /tasa99abat/ contain the sa-

me letters), but of insufficient skill in handling the feature of direction.

(b) The shape of the letters: The significance of letters, like that of speech sounds, does not lie in composition, but in contrast. Each of the letters **b** and **d** consists of a straight line with a circle at the bottom; the two letters, however, are contrastive because the circles face different directions. Again, **p** and **b** differ distinctively because in one the circle is at the top of the vertical line while in the other it is at the bottom.

A literate person must be able to recognize and produce with habitual ease all the contrastive units which exist in the writing system: this includes numerals, punctuation marks, etc.

(c) The relation of grapheme to language unit: Recognition and production of the graphemes is useless unless the graphemes can be associated with the language units that they represent. This association must be automatic and without hesitation. A literate person must be able to grasp the language patterns from their written representation, and to put down the graphic symbols for the units, without analysis of what symbol represents what unit.

(d) Supplying signals not represented graphically: In most of the known writing systems, some distinctive units of language are not represented; e.g., pitch and stress are not usually represented in the conventional writing of English. Comprehension is hindered unless a person can supply in reading those signals that are not represented.

(e) Grasping the meaning of graphic symbols and conventions which do not correspond to elements in the speech signal, as well as ability to use those symbols and conventions effectively in writing: Examples of such symbols and conventions are quotation marks, capitalization of letters, paragraph indentation, and the uniting of several grammatical sentences into one "written sentence" through the use of semicolons, colons, and dashes.

SPEED

Reading and writing must proceed at a useful speed if the person is to be classified as literate. Perhaps the definition of "useful speed" is the most problematic part of our discussion.

A given rate of reading and writing may be useful enough to an elementary school student, but quite unsatisfactory for an advanced medical

student. A "useful" speed, therefore, cannot be defined in terms of words per minute.

A person has achieved a "useful" speed in reading and writing when he can grasp meaning without making written symbols the focus of his attention, and when he can produce the graphic symbols representing utterances without being consistently conscious of the shape and the direction of the symbols and of what symbol represents what unit. Written graphemes are only a representation, not an end—in that they are similar to speech sounds. Whether sounds or graphemes are used, the language code, the language signals, and the message are the same; the difference is only the medium of perception (in hearing it is the ear, and in reading it is the eye) or the medium of production (in speaking it is the organs of speech, and in writing it is the hand).

One does not know a language until he can use its patterns of sounds in "habit trees". In like manner, one does not know how to read and write until a comparable facility has been achieved with the graphic symbols. Nevertheless we cannot stipulate that to read at a useful speed means to grasp language units from the written page at the rate they are grasped from the spoken sequence of sounds. In the first place, we have no scientific proof that visual messages can be transmitted to the brain at the same rate as auditory messages; in the second place we have no conclusive studies comparing the muscular activities involved in hearing with those involved in seeing; in the third place, we may justifiably wonder whether it is fair to expect the same efficiency of performance from two organs each of which starts to handle the skill of perceiving language symbols at a different stage in life, and each of which continues such perception for a different length of time; and, finally, spoken signals have a time sequence, while written graphemes have a space sequence—which suggests that the rate of perception should be different for each. Likewise, we cannot stipulate that to write at a useful speed means to represent language units graphically at the rate they are produced orally.

We therefore limit our demand, as far as speed is concerned, to the factor which we mentioned above and which, we believe, is basic to all efficient language communication: namely, the ability to concentrate on the message, and to handle the forms as a matter of habits operating below the threshold of awareness,

THE MATERIAL

It is common knowledge that people who can read and write with great facility in a given field mispronounce, hesitate, misunderstand, and misspell when attempting to read or write about an unfamiliar, highly technical subject.

Our definition of literacy must specify the material to be read or written, which means the addition of two requirements:

(a) A literate person must be able to read and write about subjects that lie within the range of his interest and experience; inability to handle other subjects does not disqualify him as literate.

(b) Within the range of his interest and experience, a literate person must be able to read and to write materials that he has never before seen written in their entirety.

We shall describe as "of normal difficulty" materials that lie within the interest and experience of an individual, but which have not necessarily been read or written by him before.

DEFINITION

The following is suggested as a definition to which the above discussion gives surface:

"A literate person is one who can at a useful speed (1) respond normally to, and (2) put down the graphic symbols which represent the units of a language known to him—symbols of which he has a functional control—provided the material being handled is of normal difficulty".

FOOTNOTES

- (1) William S. Gray, "How Well Do Adults Read?" in *Adult Reading, Part II of The Fifty-fifth Yearbook of the National Society for the Study of Education* (Chicago: University of Chicago Press, 1956), p. 38.
- (2) *The Teaching of Reading: A Second Report, Part I of The Thirty-sixth Yearbook of the National Society for the Study of Education*, (Bloomington, III.: Public School Publishing Company, 1937), pp. 25-28.
- (3) Arthur I. Gates, "The Nature of the Reading Process," in *Reading in the Elementary School, Part II of The Forty-eighth Yearbook of the National Society for the Study of Education* (Chicago: University of Chicago Press, 1949), pp. 3, 4.
- (4) See Charles C. Fries, *Linguistics and Reading* (New York: Holt, Rinehart and Winston, Inc., 1963), Chapter I.

L'arabe remplace le Français dans les Tribunaux Algériens

« L'arabe remplace le français comme langue principale dans les tribunaux algériens depuis le premier octobre 1971 », a annoncé M. Boualem Ben Hamouda, Ministre de la Justice, à Alger, au cours de la cérémonie d'ouverture de la nouvelle année judiciaire.

« Les débats se dérouleront en arabe, et les mémoires, les conclusions des avocats seront présentés en arabe suivis d'une traduction en français. Les décisions seront prononcées en arabe, distribuées en arabe, suivies d'une traduction en français. Le temps viendra où les traductions en français seront écartées », a-t-il dit.

Le président Boumédiène présidait la cérémonie.

Le Ministre a ajouté que les autorités étaient conscientes des difficultés de l'arabisation, mais avaient accepté de les combattre. Un lexique sur la terminologie juridique arabe et des guides explicatifs sur les différents aspects de la procédure ont été préparés pour simplifier la

tâche des magistrats, avocats et avoués, a-t-il dit.

Un centre de formation a été créé pour les magistrats et les greffiers en vue d'améliorer leur arabe.

« Nous avons pu amener les magistrats et les avocats à se libérer des mentalités, des pratiques et de coutumes désuètes en contradiction avec notre société, tel l'attachement étroit à la langue française, aux règles juridiques occidentales... », a encore déclaré le Ministre algérien.

« C'est ainsi que cette nouvelle robe, inspirée des costumes nationaux traditionnels, fera sentir aux magistrats et avocats la nécessité impérieuse d'un affranchissement de tout ce qui nous est étranger.

« Nous pouvons affirmer que la nouvelle année judiciaire verra avant sa fin l'Algérie dotée de tous les codes fondamentaux qui régleront notre société moderne et qui auront un caractère strictement et purement algérien ».