

Reading the world



■ **PAULO FREIRE.** We have often compared our experiences of literacy work. The lessons you have learned from your research in ethnoscience coincide in many respects with what I have called “reading the world”.

I have always insisted that literacy, thought of in terms of reading words, must necessarily be preceded by the “reading” or “deciphering” of the world around us. Learning to read and write is tantamount to “re-reading” the world of our experience.

It must never be forgotten that, long before they begin to learn to form letters, the very young have learned to speak, to manipulate oral language. Through their family experience, they “read” the reality of the world around them long before they can write about it. Later they simply write what they have learned to say.

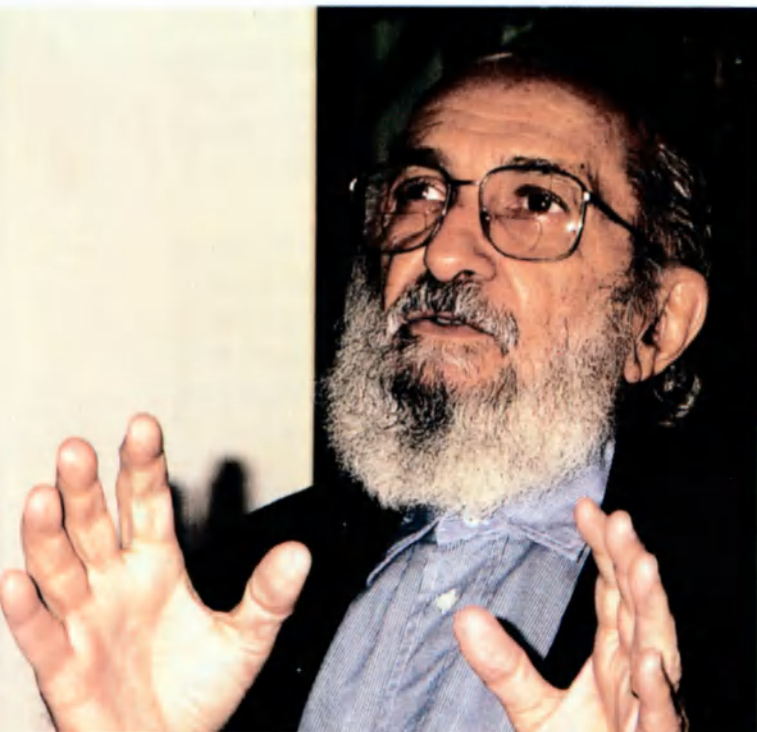
Any literacy training process must take this historical and social fact into account and use it systematically so as to encourage pupils to practise oral expression, which is inseparably linked to what I call “reading the world”. Indeed, it is this first reading of the world that incites children to express, by means of signs and sounds, what they have learned from the universe around them.

Literacy work must take this reality as its point of departure and refer to it constantly so as to make possible, thanks to the greater breadth of knowledge that reading and writing confer, a more profound decipherment, a “re-reading” of the world once it has been discovered.

Depending upon the culture involved, this learning process centres on two poles. On the one hand there is what might be termed “spontaneous” knowledge; on the other there is “rigorous” or “scientific” knowledge. In each of us, there is a conflict between the two. The demands of rigour are never totally clear and unequivocal and never free from ideological influences; traces of ideological tendencies always remain, in the very rigour with which we disclaim our own ideological background.

■ **MARCIO D'OLNE CAMPOS.** I have long been interested in the differences between the various types of knowledge—popular, tribal and scientific. With regard to what you call the “re-reading of the world”, the example of various Indian peoples has led me to a radical revision of my conception of the role of the educator.

Lack of a system of writing has not prevented these peoples from devising other methods of recording their vision of the world and of expressing their relationship with their immediate environment and the universe at large. This they convey through personal ornamentation, rites, myths, and intensive use of the spoken word. Their close involvement with their environment induces the first, original



Paulo Freire

The noted Brazilian educator Paulo Freire and his friend Marcio D'Olne Campos, ethnoscientist and teacher, exchange reflections on literacy teaching and discuss the purpose and conditions of a truly popular form of education

“reading of the world”, which precedes—indeed, makes possible—the creation of signs and symbols. The “re-reading of the world” is thus made manifest through a whole system of expression that antecedes the symbolism of the alphabet proper.

This point is a vital one and is almost universally applicable. In our own Brazilian society, for instance, apparently arbitrarily selected characters are often imposed on children, sometimes in an intimidating manner, although they bear no relation to their experience or the symbolism they use to express it. Educators do not always seem to be aware that there may be other symbols than those which they want to teach their pupils. The gap between teacher and pupil is even greater in the case of children from Indian societies, in which the original symbolism is linked to myths and rites.

I see this standpoint in the world which is specific to each one of us as the necessary starting point and the *raison d'être* of literacy work. We cannot ask children to remain isolated, as though in a glass capsule, while learning to read and write, and only later require them to begin to “read” the world around them.

■ **P.F.** I want to stress that teaching should always take into account the differing levels of knowledge that children bring with them when they come to school. This intellectual baggage is an expression of what might be called their cultural identity and this, of course, is linked to the sociological concept of class. The teacher must take into account this initial “reading of the world” that children bring with, or, rather, within them. For each child, this has been fashioned within the setting of his or her own home, locality, and town, and is strongly influenced by social origins.

Schools tend, almost invariably, to discount this prior knowledge. I am always astonished by the disdain with which schools, with a few happy exceptions, treat the perceptual, existential, “lived” experience acquired by the child outside the school confines. It is as though they want to erase this other form of language, which constitutes the child’s way of being, sensibility and initial vision of the world, from his or her mental and physical memory.

This lack of respect for the child’s experience has consequences that are far more deleterious than is generally realized. It implies a failure to recognize all the inventiveness, the hundred-and-one artful tricks that children from less



Opposite page, child drawing on a Cape Verde beach. Right, painting by Zhou Han, age 6. This painting and those on pages 6 to 9 are by Chinese children. They have been kindly sent to us by their art teacher.

favoured backgrounds employ to defend themselves against a world that tends to oppress them.

I am not against the assessment of levels of knowledge in schools. What I object to is the fact that such assessments should only cover knowledge acquired at school, as if it had been laid down that nothing important happens outside school or school hours. No attempt is ever made to forge a sufficiently strong link between what children learn in school and what they learn in the world outside.

■ **M.C.** The world the child is already deciphering.

■ **P.F.** And which he or she never ceases to decipher. This lack of consideration towards knowledge derived from experience seems to me to be not only an ideologico-political choice, but also to indicate a certain scientific incompetence. Schools are authoritarian and élitist because they furnish ready-made knowledge, a package that is supposedly complete. Such a conception of knowledge is scientific nonsense, an epistemological falsification. There is no such thing as a closed system of knowledge. All knowledge is constituted within the setting of history, never outside it. All new knowledge springs from the decay of previous knowledge which was itself once innovative. Knowledge is born when one has the humility to accept that such knowledge will, in its turn, decay. Sometimes certain scientists seem to forget this.

Having said this, neither you nor I would want to confine children to the knowledge they had before they went to school. On the contrary, we want pupils to learn to understand better what they already know, so that, in their turn, they will become the creators of new knowledge.

■ **M.C.** Here we touch on a theme we are both familiar with—that of the role of error in the pedagogical process. The French epistemologist Gaston Bachelard suggested a pedagogical system based on error, which involved seeing mistakes not as the aberrations of a tired mind, but as an



“epistemological obstacle”, a barrier to the act of knowing and a challenge to reality from the person faced with it. Errors can thus be seen as “ideological obstacles” which deny the existence of or block the way to the birth of new knowledge.

■ **P.F.** Bachelard’s concept of error should be democratized. If all educators regarded error not as in itself a barrier to understanding but as an obstacle of an ideological nature, then error itself would become a necessary step in the progress of knowledge.

Teachers should, by word and deed, show their pupils that error is not the sign of a serious gap in their knowledge or a proof of their incompetence, but, on the contrary, a legitimate step in the learning process. Rather like someone who looks first to his right for something that he will eventually find on his left.

Once this inflection is given to the notion of error, the whole pedagogical relationship is profoundly changed. Not only does it ease the concept of learning for the child, it also encourages the teacher to adopt a more modest approach and relieves him of some of the burden of authority. Under the authoritarian conception of error, error enables the teacher to assert his power and to punish.

■ **M.C.** To punish in the classic meaning of the word.

■ **P.F.** In the strictly classic sense—write out a hundred times “I shall not make a mistake again”; to be kept in; to be sent out of the room. This kind of thinking goes beyond the intellectual plane. There is a danger that the pupil will see error as a moral and cultural stain, as some kind of unforgivable sin in some way linked to his or her social origins.

Far from being static, curiosity is perpetual, symbolic movement. The curious mind cannot approach, grasp or assimilate the object of its attention without feeling its way or without making mistakes. When error is regarded as the logical outcome of curiosity, it should never be punished.

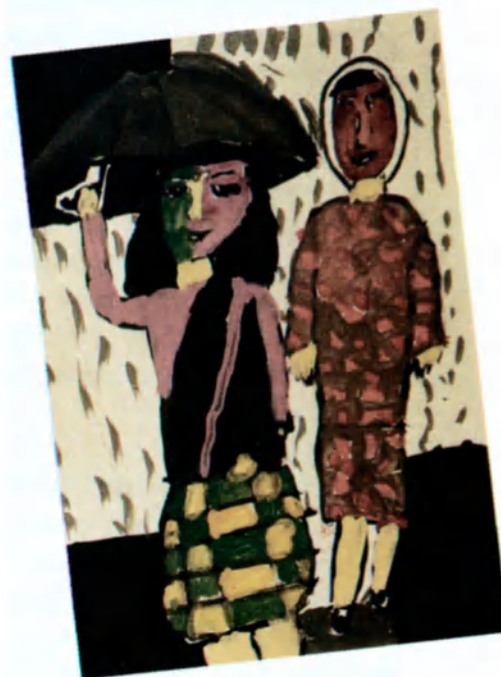
Once this “error complex”, this feeling of culpability, has been eliminated, the knowledge that pupils bring with them must be made an integral part of the dialogue that is established between the class and the teacher. By its nature, scientific rigour involves moments of complete spontaneity. I would even go so far as to say that absolute rigour does not exist, but co-exists with spontaneity and even arises from it. Neither scientists nor teachers have the right to scorn what is known as “popular wisdom” and even less to exclude it so as to impose a supposedly rigorous explanation of the world.

What we want is a pedagogical method, which, while not rejecting the demands of rigour, gives scope to spontaneity and emotion and adopts as its point of departure what I might call the pupils’ perceptual, historical and social “here and now”.



■ **M.C.** I would like here to refer to my experience of “ethnoscience”, which is the ethnography of knowledge as seen through local group practices in the formulation of knowledge and techniques. By definition, therefore, it is a discipline devoid of any trace of ethnocentricity.

In order to understand the body of knowledge accumulated by a minority culture, it must be learned from the inside. First one has to explore the vast network of words, the world of basic notions that makes a link between man and nature that is specific to that culture. How can this be done? By adopting, from the start, the position of an apprentice compiler of knowledge and playing the card of spontaneity. As an educator I might also add, by accepting the spontaneity of others, just as we accept our own. This means sharing the child’s culture within the classroom.



Opposite page above: painting by Ean Ya-Feng, age 7. Opposite page below: a village in the Brazilian forest. This page, paintings by Ye Peng, age 6.



■ **P.F.** Yes, the ideal standpoint is acceptance of the spontaneity of others.

■ **M.C.** In this way, I prepare myself for a real dialogue. Coming to grips, without preconceptions, with a different cultural context is the fundamental precondition of my work as an ethnoscientist. I have to call upon all my ingenuity, all my freshness of mind, if I am to understand the tools of thought and action and the categories of thought that are inherent in tribal societies. Only later, and very gradually, is it possible to systematize.

This experience, and especially my work on the knowledge of astronomy of the Indians of the island of Búzios, in the Brazilian state of São Paulo, has had a great influence on my work as an educator. I learned that what you, Paulo, call the “minimal vocabulary” is much vaster than the actual words that are used. The word is much more than a sign; it is a symbolic, all-encompassing discourse. The symbolical signification which impregnates the communication of these groups of people with their world is as structured as their language. Both come together in the deciphering of the universe and the constitution of knowledge into themes for reflection.

It is this vital relationship between nature and society, a relationship which is the fount of culture, that we are trying to comprehend in depth. Like the teacher, the scientific researcher must work in what might be called the “laboratory of life”. This is not to denigrate the scientific facilities available to us—books, laboratory research, programme content, in short, all official knowledge. It is, however, essential to put this official knowledge into perspective, on the spot, to ensure that we do not inflict on children abstract exercises dreamed up by people who are insufficiently competent.

In our research, therefore, we have been obliged to give pride of place, as our starting point, to notions of space and time which, in each case, provide a different framework and

colouring to our natural and cultural environment and thus form the whole basis of our presence in the world. The questions we put to the various disciplines, to the various repositories of knowledge, are formulated in terms of the questions this presence in the world asks of us. Both in the school and in the field, this has led to a trans-disciplinary approach. We move freely from one method of exploring knowledge to another.

Thanks to this listening in to the world, we are able to rediscover and verify our knowledge in another cultural context—the world of the pupil. We are making progress not in our own knowledge, but in the knowledge of others.

■ **P.F.** Once again one must deplore the dirigiste approach adopted by many educators. It is impossible to comprehend intuitively the knowledge of the Indians you have been talking about. First of all you must immerse yourself in the setting and conditions that have given rise to that knowledge. This is what many intellectuals refuse to do. Even when they expound progressive ideas, their practices remain deeply authoritarian and their ideology remains élitist. Although, perhaps, they would not admit it to themselves, for them only institutionalized knowledge is true knowledge. In fact, they see no value in popular wisdom, which they consider to be imperfect, insignificant and not worth talking about.

This reminds me of a rather revealing anecdote. It was during a meeting at which the working methods of peasants had been discussed. A group of intellectuals had just finished a lengthy discussion, when a peasant got up to speak. “The way things are going,” he said, “I don’t see any point in continuing. We shall never reach agreement. You over there”—and with a humorous gesture he emphasized the class distance that separated the two groups despite the fact that they were in the same room—“you over there are preoccupied with the salt, whereas for us what counts is the sauce.” The room fell silent. The intellectuals asked themselves perplexedly what the peasant was getting at. His companions, on the other hand, knew exactly what he meant and were waiting for a reply.

In his terse, simple language, the peasant was saying “The discussion is going round in circles because you are looking only at a fragment of reality whereas we see it as a whole. We are thinking about things as a whole without stopping to examine details, whereas you, who are always talking about the overall picture, are getting bogged down in details.” Salt is only one ingredient in the sauce, but the sauce symbolizes the sum of all the ingredients. This was a metaphor that revealed an analytical capacity that certain intellectuals did not expect to find in a peasant.

In my view, knowledge and competence are only of value—always relative, but nevertheless considerable—if one is aware that they are, like human beings, necessarily partial and imperfect.



Top, woman spinning in a Brazilian village.
Above and opposite page, paintings by Zhao Cheng, age 6.

PAULO FREIRE, of Brazil, is an internationally known educator. His many works translated into English include *Pedagogy of the Oppressed* (Herder & Herder, New York, 1970), *Pedagogy in Progress: the Letters to Guinea-Bissau* (Seabury Press, New York, 1978), and *The Politics of Education: Culture, Power and Liberation* (Macmillan, Basingstoke, UK, 1985).

MARCIO D'OLNE CAMPOS is a Brazilian physicist with an interest in ethnoastronomy, ethnoastronomy and education. He is the founder-director of the Aldebaran observatory at the University of Campinas, São Paulo state, Brazil.

■ **M.C.** The fact is that, from the moment when we think of them in terms of movement and not as a definitive achievement, all forms of knowledge and competence are, as Piaget said, constantly brought into question. Everything seems to indicate that the equilibrium we seek as we attempt to construct our knowledge is doomed to be destroyed as soon as it is achieved. If we accept the idea that knowledge is an ongoing process, then we must always be ready to retrace our steps. We accept this disequilibrium because we know that it is the prerequisite of a new equilibrium.

This position is just as valid for the teacher as for his relationship with others. This other being who speaks to you from a marginal, minority culture that is quite different from your own, is capable of introducing you to his or her cultural context if only you are prepared to accept the disequilibrium. Return to a state of equilibrium is dependent upon contact and dialogue and not upon a way of thinking that will leave you isolated in your so-called competence. For me, the key to literacy training lies in this kind of intensive, dynamic interaction.

■ **P.F.** What conclusion can we draw from all this? It is the same for us all, whether we are Latin American schoolchildren, students in Asia or university teachers in Europe or America: friend, please never lose your capacity for wonder and astonishment in the world which you regard and in which you live. ■