

## SECTION 2

### Understanding a Descriptive Picture or Scene

18. Being able to assign meaning to a scene which includes several items, each of which is recognized, depends on being able to integrate the separate items. In part, the failure to do so seems to account for the inability to perceive pictures three dimensionally. But other factors play a part in effecting ease of understanding, and one of the most important is sheer economy of detail.

19. In his work with newly literate people in Latin America, Seth Spaulding found that the number of objects (in an illustration) that must be perceived in order to interpret an illustration correctly should be kept to a minimum. Following up this guide line, Holmes working in East Africa found that pictures which had several connected items telling a story could not be understood by non-literate adults. Before they could grasp the relationships between the people and the objects in the picture, he had to explain the picture to them in words. The failure to grasp the point of the picture often occurs when a single visual cue has been missed because of the over-rich surrounding detail. Fuglesang also reports that in Uganda pictures suddenly became meaningful when he directed attention to the particular items in the general scene that gave the cue for that particular viewer.

20. Stepping aside for a moment from the main stream of the discussion, I should like to draw attention to the universality of this problem. Difficulty in reading a picture, that is making connections between the separate items is not confined to non-literate societies or to non-Western cultures. M.D. Vernon in The Psychology of Perception published by Penguin Books in 1962, draws attention on page 102 to the fact that, if a picture has a 'meaning' in the sense that it suggests events not actually depicted, a child may not be able to understand this until about the age of eleven years. Younger children do not always notice the items that to the designer seem important or central; they notice what is already familiar and understood. What items a viewer will select for attention is governed by experience and interest. This is the clue to the difficulty experienced by all viewers, whatever the culture, of understanding a complex visual statement. By selecting for attention non-relevant items, the 'story line' may totally escape the viewer. Professor Vernon warns, on page 103 that "showing pictures of historical scenes or people living in foreign countries to children aged under eleven may not give them any clear idea as to the incidents depicted. The children may be confused by the unfamiliar costumes and settings and have no more than the vaguest notion of what the people are like or what they are doing. Or the children may notice only things which are familiar and comprehensible to them..... It is necessary to explain what is happening in the pictures, still more to get the children to talk about them until they show that they really grasp the significant features." This connects with what Alan Holmes found, about explaining a picture and it seems that this is a common need.

21. The difficulty that many adults are reported to have in understanding photographs or realistic pictures may be connected with the fact that in life many things are not seen "frozen" as in a still photograph. N. Spurr suggests in a report to the Colonial Office in 1952 that with the films he made in Tanganyika the objects and people being depicted in motion were much easier to equate with life and were readily understood. Dr. S. Biesheuvel

found, when administering non-verbal aptitude tests to multilingual groups of men seeking employment in the mines in Johannesburg, the same phenomenon occurred. (Reported in "Psychological Tests and their Applications to non-European Peoples," published in The Year Book of Education, Evans Bros. 1949 pp. 10 - 104.) When the tasks were shown in motion by means of a silent film, the men understood what was required of them and were able to perform the manual tasks set out on the test table. But they could not do so when they were shown still photographs. A later experiment by Hudson, interestingly enough, indicated that a colour film was in no way superior to a black and white presentation. Form alone, without colour, provides a sufficiency of cues for recognition to occur.

22. When this experience is considered in relation to some findings from Brazil and repeated in East Africa, an explanation suggests itself. Fonseca and Kearnl\* found that recognizable, familiar objects presented in an illustration add to comprehensibility, but that the illustration of a process involving separate steps or actions was not understood, unless at least each main step or action was depicted separately. This general conclusion is confirmed by the finding of Hudson and Hector who noted in their study of the interpretation of posters, as reported by Wendy Winter, that if a simple poster used only two stages to tell a story of the consequences of carelessness in handling tools it was not understood because the two stages did not appear to be connected. Alan Holmes in his study of the understanding of visual symbols in Kenya, published by O.V.A.C. in 1963, found support for the hypothesis that the compression of a process involving a series of actions into one or two pictures is less likely to be understood by people of limited education than when a series of sequential pictures is used, in a close-step sequence. A parallel finding is reported by Helen Colborne when she investigated young English children's understanding of road safety posters and again by Basil Chaplin working on a science education research project at the University of Ghana in 1959-1960. He reported, in a privately circulated paper, that "Instructions to pupils are given largely by numerous 'sequence pictures' because it proved largely impossible to convey adequately in a second language the complex space-time descriptions necessary to scientific explanations and instructions and that with English students too, comprehension of what to do and how to do it was faster by the multiple sequence picture method."

23. Summarizing then, we find that in part, comprehension of pictures with social meaning or pictures showing a number of connected items such as a landscape, is dependent on a process of maturation common to all children. But if a picture is complex, many non-literate people do not understand it unless their attention is directed in such a way that they notice the significant, critical detail. For this reason each stage in a process or a story must be shown separately in a close step sequence. Apparently, people unsophisticated in using pictorial material do not 'skip read'.

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\* Comprehension of Pictorial Symbols: an Experiment in Rural Brazil. Luiz Fonseca and Bryant Kearnl. College of Agriculture, University of Wisconsin, 1960.