

(p. 153), "vibration interferes with accurate vision" (p. 216), "glare makes seeing more difficult" (p. 246), "people who are not addicted to smoking would be well advised not to start" (p. 277). Some of these deceptively simple statements are probably not true: for example, "constant vigilance is required in driving along crowded highways" (p. 68), "a cart vibrates when it is pushed over rough ground, the faster the cart goes the greater the amplitude of the vibration" (p. 209), "drugs can be classified as stimulants or depressants according to the effect which they have upon the brain" (p. 265). It is only fair to add that many of these findings which now seem obvious do so only with the benefit of hindsight; for example, in studies of motion sickness it is important to control or record head motion, the importance of directional lighting to facilitate fault identification, stimulants may increase efficiency at dull work but might be dangerous in case of emergencies which lead to over-arousal and errors.

The book illustrates well the assets and liabilities of the school of human performance experimental psychologists which has flourished since the Second World War. Dr Poulton has been a member of the Medical Research Council's Applied Psychology Research Unit at Cambridge for more than twenty years. He is the complete exponent of this kind of psychology. His chapters in the first part on technical problems of experimentation are a model of erudition; he quotes dozens of experiments in the second part and in each case he carefully describes what the results were and mentions the limitation of the particular experimental design, number of subjects and so on. There is a tendency to be parochial. It is claimed in the intro-

duction that the two hundred and fifty references represent only the most relevant ten per cent of possible references. In fact, if four or more references from one author are listed, that author is likely to be a fellow member of the Cambridge unit. The school adheres to the philosophy that the understanding of behaviour is confused by too many people having too many opinions based on inadequate evidence. Therefore, the thing to do is to stick to the evidence, trust only the controlled laboratory experiment and build up a body of knowledge by carrying out experiments suggested by the findings of earlier experiments. This is fine, providing it is not assumed that what emerges is a comprehensive picture of human behaviour. Confine presentation of information to that which has no history, no context and no real consequences, confine also the possibility of outputs to a small range of simple responses which are easily recorded, confine the human subjects to servicemen and students acting on simple instructions and after twenty years what you get is a picture of human behaviour which is totally unrecognizable to anybody not playing this particular psychological game.

In part one, two models of human performance are described. The first one sees the human being as an information processor with inputs, outputs, selectivity, long and short term stores and, in the middle, a slow "computer" of limited capacity. It is at least recognized that this is inadequate and so we have a second model entirely disconnected from the first, which centres on the concept of arousal. There are discrepancies in measurement, but arousal is seen as a unidimensional factor and

## FELL AND DALE



These craters are not on the Moon but are corrie basins in the heart of the English Lake District. The Conistone fells are shown in the foreground and the Langdale area is beyond. This photograph, taken by C. H. Wood (Bradford) Ltd, is one of several excellent plates in a new addition to the series "The Regions of Britain"—*The Lake District* by Roy Millward and Adrian Robinson (Eyre and Spottiswoode: London, October 1970, 75s). *The Lake District* follows the format of the earlier *The Pennine Dales* and *The Upper Thames* in introducing the reader to the geology, scenery, pre-history, and the history up to modern times of this small region, but there is, as well, enough detail for the specialist to enjoy reading sections of the book. Like its predecessors in the series, *The Lake District* is very readable and the text is helped along with 40 plates and many useful text figures and maps.