

dimensions of personality are extroversion-introversion and emotionality-stability. The 'trait-psychology', on which this is based, seems at best dubious, at worst spurious. Nor is there any basis for the idea that 'the main personality dimension implicated in this field is extraversion-introversion'. Such an assertion could only be justified if *all other* 'dimensions' had already been investigated, which is not the case.

Dr. Ingham's contribution makes the important point that self-selection *in* and *out* of jobs may play havoc with industrial surveys of the effects of noise which fail to take account of this factor. For the rest, he notes the absence of evidence that noisy jobs cause more, or more severe, symptoms than quieter ones. His conclusions that 'we cannot exclude the possibility that some older people are more susceptible to noise', and that others 'complain of more symptoms when they work in a noisy environment' may not, however, be regarded as particularly striking.

In a way, the final paper, by Dr. C. W. Kosten, seems to be the most satisfactory in matter and presentation. He deals with a specific question, namely, annoyance due to aircraft noise near airports. He sets out the facts, examines them thoroughly, and formulates a number of helpful practical recommendations.

If anything is shared by the participants, it is the doubt whether extrapolation from laboratory to field conditions is legitimate. Some of them are pessimistic about the possibility of coping with the complex interaction of factors in an actual industrial situation.

The Proceedings should prove of interest not only to experimental psychologists, physiologists, and industrial medical officers, but also to engineers, architects, economists and regional planners. A few papers ought to be printed and made available to a wider readership.

JOHN COHEN

Protection of the Patient in X-ray Diagnosis. ICRP Publication 16. (Pp. iv + 46; £1.25.) Oxford: Pergamon Press. 1970.

This publication is a report prepared by a task group of Committee 3 of the International Commission on Radiological Protection and contains also, as appendices, relevant recommendations from the 1970 Report of ICRP Committee 3 on 'Protection against Ionizing Radiation from External Sources' and the Memorandum published by the British Institute of Radiology in 1964 on the implementation of the Second Report of the Adrian Committee on Radiological Hazards to Patients. There is also a list of 52 references.

The report fully recognizes that it is most desirable that the great and growing service to the individual and the community from medical x-ray diagnostic methods should not unnecessarily be impaired in any way because of possible radiation hazards. At the same time, however, there is need to ensure that the very real advantages of diagnostic radiology are obtained with the minimum of risk to the individual and to future generations. Available evidence suggests that, in some countries, the population exposure from diagnostic radiology could be reduced to a small fraction of present levels without any sacrifice of real benefit and without impeding the continuing development of clinical radiological practice.

The first and third chapters are concerned with the role of education in ensuring that medical personnel, and others involved in radiology, will display sound clinical judgement in determining when individual patients will really benefit from particular x-ray investigations, and will always employ the best techniques involving minimal patient exposure. Basic physical concepts and a brief consideration of the somatic and genetic risks of exposure to ionizing radiation are given in chapter 2, where it is shown that the main risks to consider in relation to diagnostic radiology are possible induction of leukaemia as a result of irradiation of the active bone marrow, long-term genetic damage to the community resulting from gonad exposure, and developmental abnormalities following excessive irradiation of the fetus in the first three months of pregnancy. Chapter 4, comprising the remaining half of the report, deals in some detail with all the technical and physical factors which can influence the magnitude and extent of patient exposure and which therefore require careful attention if that exposure is to be minimized.

This publication should be diligently studied not only by medical radiologists, hospital physicists, and senior radiographers but also by all clinical practitioners who submit their patients for x-ray investigations.

S. K. STEPHENSON

Contemporary Problems in Perception. Edited by A. T. Welford and L. Houssiadis. (Pp. 175; illustrated; £3.00.) London: Taylor and Francis. 1970.

In 1968 a NATO Advanced Study Institute was held in Greece 'to collect some of the current strands of thinking on human perception'. The present collection of papers was the result—first seeing print in the January 1970 number of the journal *Ergonomics*. The publishers have reprinted the collection in hardback form for, as they put it, 'more general circulation' (at an increase of one-third of the journal price).

Thanks to the psychological literature in the English language, many contributors are well known; others from Italy, Turkey, Greece, etc. are less so. In terms of the number of articles, the western Europe/North America ratio is 10 to 3.

There are three main groups of papers. The first deals with general approaches and theories. Welford surveys the work on perceptual selection and integration (an updated and much shortened version of his 'Fundamentals of Skill' Chapter 6); Gregory considers the role of internal models (an interesting paper this . . . but how to give the models more substantial empirical clothes?); Kabrisky and his colleagues consider the computer simulation of the 'identification game', and Vickers presents new evidence for an accumulator model of psychophysical discrimination.

The second group of papers is more specific inasmuch as they mostly report results of single experiments ranging in subject from two- and three-dimensional viewing to whiteness constancy and cross-cultural emotional expression.

The third group of papers looks at the relation between perception and action (performance?). Sanders describes