The fourth part of the microplan and the most innovative, is a system by which the student can obtain immediate feedback on his replies to the multiple choice questions. A kit is supplied containing a stencil from which duplicated sheets can be run off with the letters A B C D E for each of the 32 questions. Also, a perforated plastic sheet is supplied which can be laid over the duplicated sheet and phenolphthalein spirit applied so that the appropriate letter is soaked.

The student is provided with some alkali, such as washing soda, in a coloured fluid, such as coffee, and with a small applicator he applies this to the letter which he considers is the correct answer for the multiple choice question. If he is correct he receives an immediate reward in the form of a bright colour from the inapparent phenolphthalein absorbed on the letter. The perforated sheets are arranged in such a way that there are 8 different combinations of results, so that the student cannot memorise on which letter the phenolphthalein is likely to be absorbed.

Initial experience in Indonesia suggests that this system is a strong motivation for students to learn. This kit will shortly be available from TALC.

DAVID C MORLEY

Technological Developments and Trends in Pediatric Radiology. Progress in Pediatric Radiology, volume 7. Edited by H J Kaufmann. (Pp. 290; illustrated + tables. \$99.50 hardback.) Karger: Basel. 1979.

The editor of this distinguished series writes in his foreword that 'this is the first volume not devoted to a region or an organ system of the child's anatomy. An attempt is made to bring together information on technical advances as they affect the practice of pediatric radiology.'

The first quarter of the book is taken up by a single chapter from Paris on 'CT-scan contribution to the diagnosis of intracranial tumors and mass lesions in infancy and childhood'. This is a careful catalogue, rehearsing each tumour in turn, drawn from the considerable experience of this school. Like many catalogues, it is probably of interest to the expert, but short on insights for the general reader. On the last page (95!) there are paragraphs headed 'Discussion' and

'Final conclusions' which provide interesting summaries—for example no false-negative findings for hemisphere lesions, 3500 CAT examinations with masses found in 10%, but then still leading on to conventional neuro-radiological examinations in one half. And 88 references—clearly a feast for the neuroradiologist concerned with children's intracranial tumours.

The following four chapters are about whole body CAT, abdominal ultrasound, cardiac ultrasound, and hilar tomography in oblique projections. Each chapter in this book is for a different specialist, and for this reason Drs Dixon and Flower will review the first and the last in this list.

The final section is a regular feature of the series: the 'special treatment article'. This happens to be 'Therapeutic catheter procedures' here, but I do not think a therapy topic is intended under the regular heading. Its odd name is in the Clockwork Orange tradition 'and now we give you the special treatment, Sir—ugh'. There is a position paper, followed by critical comments from other authors. Catheter embolisation techniques are currently in the forefront of attention, and indeed they can be life-saving. The position paper and some of the commentators remind us that the paediatric field is small: the Boston Children's Hospital does about one embolisation procedure a month, and about 10 times as many diagnostic angiograms. This is the liveliest part of the book.

I am not sure how much there is here for the paediatrician, as opposed to the neuroradiologist, as opposed to the paediatric radiologist. The book is a careful digest of what is now possible, working through the various imaging techniques. Many doctors will also want to know about usage, and here the brief of the book ends. It puts the right sentiments in this direction. Thus in the section on abdominal ultrasound 'As a multiplicity of imaging modalities develops, there is an increasing need for an integrated approach to a diagnostic imaging problem, so that the complementary nature of the information obtained from each modality can be appreciated. This requires a critical understanding of the strengths and limitations of each method. Continuing work is necessary on objective assessment of the reliability of different methods in particular circumstances and applications.'

That is clearly on the side of the angels in intent, and perhaps the next volume in

the series will battle with what is best done for any particular patient and clinical problem.

THOMAS SHERWOOD

The chapter on 'Extracranial computerised tomography' contains useful information about patient preparation and radiation dose. In these early days of scanning the examples and related discussion are, inevitably, anecdotal. The ease with which CAT demonstrates lung metastases in the costophrenic recesses is shown. A myasthenic patient is shown to have no thymoma but interpretation within and around the soft tissue density of the involuting thymus may not be so simple. In the abdomen the lack of perivisceral fat in children is mentioned together with the consequent loss of CAT organ delineation. This lack of fat allows good ultrasound examinations, and question the role of CAT in jaundice advocated here. Organ delineation might improve with carefully administered oral contrast medium which, although not discussed and apparently not routinely used, is evident on some demonstrated scans. The chapter is a helpful résumé for the general radiologist/paediatrician but does not greatly assist the CAT man in his struggle for accurate diagnosis and rational machine allocation.

A K DIXON

Oblique hilar tomography is of proved value in adults, but not often performed in children. Is it useful here? These authors say yes and provide a plausible group where the thymus 'causes difficulties'—they have 'encountered several situations', but alas there are no illustrations. I suspect the thymus is best demonstrated by good, simple x-rays. What other 'situations'? Lymphoma and inflammatory conditions: there is a good illustration of the value of the technique in assessing mediastinal node enlargement in Hodgkin's disease. The inflammatory group is poorly illustrated, and hardly makes a good case. Is it of much practical help to show big nodes in measles and cystic fibrosis? A final plea is that the authors should use standard anatomical nomenclature when describing the bronchi: what is 'the upper bronchus'?

C D R FLOWER