Sight Unseen. An Exploration of Conscious and Unconscious Vision

This slim volume is based on the authors' investigations over a period of 15 years of a patient ("Dee Fletcher") who developed visual form agnosia following a freak accident in which she suffered carbon monoxide poisoning. Specifically, DF has lost certain perceptual abilities, namely identifying shape and form, although she can still perceive colour and the fine detail of surfaces (visual texture), yet her visuomotor ("vision for action") control is strikingly preserved. The neurological substrate of this pattern of deficits is selective damage to the ventral stream of visual processing, specifically the lateral occipital area, whilst the dorsal stream is left intact (the deficits are the inverse of those seen in patients with optic ataxia).

The authors take DF as the starting point for an exposition on the workings of the two visual systems, originally postulated by Mishkin & Ungerleider, summarizing animal work and functional imaging studies as well as neuropsychology.

Clinical Neurology Version 1.0

Few will dispute the assertion that junior doctors have little understanding of neurology. That this situation should persist despite the plethora of short introductory textbooks published in recent years will hopefully be taken as evidence that the best way to convey neurological knowledge is not to simplify and to abridge, but to present it in a way that makes its richness and complexity engage rather than perplex. And it may well be – the nature of clinical neurology being so intensely practical – that if this is a very difficult thing to do in a book it may be slightly easier in a multimedia production.

The idea behind this CD-ROM, then, is commendable, although the authors aim to be illustrative rather than comprehensive*. The disc contains good-quality video clips of over 60 neurological cases accompanied by short and functional imaging studies as well as neuropsychology. The conclusions which emerge are that visumotor control is viewpoint-dependent (egocentric), uses real-world metrics, and has a very short time constant, whereas visual perception is object-based, relational, and has an indefinitely long time constant. Moreover, the workings of the former are not available to consciousness, whereas the latter are (hence the subtitle of the book). Despite these polarities, and the possible implication of Cartesian dualism, nonetheless the two systems interact seamlessly.

It is a fascinating tale and well-told. Although obviously of most appeal to those with an interest in cognitive neurology, this book may nonetheless be read with profit by any neurologist with an interest in how the brain works. The lack of a bibliography of papers referred to in the text is, however, a significant omission.

AJ Larner, Cognitive Function Clinic, WCNN, Liverpool.

Developmental Neuropathology

This book is simply outstanding. Developmental neuropathology, a previous Cinderella specialty, has been illuminated by recent strides in molecular genetics, neuro-imaging and developmental biology. The result is demonstrated in this text. It uses a multidisciplinary approach to further our understanding of malformations, perinatal acquired pathology, sudden infant death syndrome, autism, metabolic and infectious diseases. I would have enjoyed in addition, a chapter on the macroscopy and developmental stages of the normal developing brain and the controversial area of non-accidental injury, but these are minor points.

The book has about 400 pages and 150 beautiful colour illustrations. Its 63 chapters were written by more than 50 international experts. To my knowledge this resource is not available elsewhere.

Each entity is defined and the clinical data, genetic influences, pathophysiology, macroscopy, microscopy and therapeutic approaches are presented. This format is similar to the previous in this excellent series of books which cover Brain tumours, Muscle diseases and Neurodegenerative diseases.

Finally, although I think this will become a fixture on every neuropathologists’ and paediatric pathologists’ shelf, I do feel it has wider appeal. In particular paediatric neurologists and neuroscientists involved in research would find it useful. After all if you can understand the child, perhaps knowledge of the man will follow.

Dr Reenu Kurian, Western General Hospital, Edinburgh.