Book Review

W.D. Keidel und W.D. Neff (éds.) Handbook of Sensory Physiology

The present subvolume V/3 is an important complement to the two preceding volumes because in addition to special topics (Mathematical model of the mechanics of the inner ear, by CD. Geisler; Cochlear mechanics, by C.R. Steele; Residue and auditory pitch reception, by E. de Boer) it contains contributions of clinical importance.

/. Tonndorf gives an important survey of the basic facts of the biophysics of the sound transmission system in general and the mechanics of bone conduction in particular, emphasizing that the ear – with respect to bone conduction – constitutes a multiple input system.

C.S. Hallpike reports on sensorineural deafness and loudness recruitment, on their pathophysiological mechanisms and the clinical tests. W.D. Keidel presents an essential chapter on the physiological background of electric response audiometry (experimental data from research in animals and man); H. Davis provides basic information of the electric response audiometry in man with special reference to the vertex potentials. The reader will find a systematic account of the various auditory-evoked responses which may be recorded from the human head and which may – in principle – be used clinically to evaluate the sensitivity and other properties of the auditory system. Moreover, it includes an outline of the conditions and procedures recommended for ERA. Finally a complementary chapter, written by F. Zöllner and G. Stange, deals with the clinical experiences in evoked response audiometry. //. van Eggermont (chapter 15) presents a fundamental chapter on Electro-cochleography. This other important objective audiometric test procedure goes back to /. Lempert who already in 1950 suggested the placement of a needle electrode through the ear drum on the promontory. It was taken up later by Ruben, but the ultimate step by which ECOG finally became a diagnostic routine method was taken independently by Japanese (Yoshiej and French (Aran and Portmannj scientists 1967. F.B. Simmon’s chapter on the electrical stimulation of the ear and G.M. Gerkeri% article on the electrical stimulation of the auditory system in animals are essential contributions, providing important information on the physiological mechanisms underlying the clinical problem of cochlear implants.

H. von Gierke and D. Parker have written an interesting article on the environmental and physiological sources of infrasound, on the reception of infrasound energy by various parts of the body as well as on the direct and indirect auditory and non-auditory responses to infrasound stimulation. Community response to noise (sources, patterns of reaction, measurement of annoyance) is an instructive experimental psychological approach to this medical and social problem of pressing importance at the present time, written by W.K.

Book Review/Varia

248

Connor and W. Rudmose. Picton, Hillyard and Galambos present an important psych-neuro-physiological study on the problem of ‘Habituation and attention in the auditory system’. 
In two separate chapters an important clinical problem of inner ear lesions, caused by exogenic and endogenic toxicity, is discussed by M.E. Wigand (Hearing and equilibrium in renal failure) and by J.E. Hawkins (Drug ototoxicity) in detail. Although this synthesis of innumerable singular facts, obtained by experimental and clinical research, will be surpassed in a not too distant future by the constant flow of results due to scientific progress, the three volumes of this textbook will remain for many years an outstanding source of information, thanks to the effort of some experts of highest scientific standard.

C.R. Pfaltz, Basel

Varia

IVth International Symposium on Facial Nerve Surgery Los Angeles, Calif., September 2-5, 1980

President: William F. House, MD; Organizing chairman: Malcolm D. Graham, MD.

For further information address communications to: Facial Nerve Symposium, c/o Ear Research Institute, 256 South Lake Street, Los Angeles, CA 90057 (USA), telephone: (213)483-4431.