

OBITUARY

W. Grey Walter M.A., Sc.D. Cantab., Hon. M.D. Marseilles.

Dr. W. Grey Walter died in Bristol, England following a heart attack on May 3, 1977. His biography, training and honors are so well known that to repeat them here would be an act of repetitious pedantry of the sort which he always found especially distasteful. Few scientific disciplines owe as much to one man as electroencephalography and clinical neurophysiology owe to Grey. He came to the science at its birth and brought to it an imaginative, active and iconoclastic mind. His training under Adrian and Matthews fitted him well for work in an area where technological advances were needed. Although best known as a physiologist Grey was above all a superb engineer in the sense that engineers are tool makers and empiricists. He took an immense pride in the methods he devised and in their application. As one who had the privilege of working with him in the development of some of his instruments I can testify to his "green thumb." The early wave analyzers were, from the standpoint of formal electronic engineering, monstrous. The filters were products of instinct rather than mathematics and yet they showed reliability and stability, neither of which traits were strong in some of their commercial successors. Their mechanical design was a different matter. They were laid out with a regard for human factors that is seldom seen in engineering, even today, and components unobtainable in the 1940's were made with precision and ingenuity. Grey could never understand why some of his devices proved intractable in other people's hands. He could adjust the early BNI machines to a very high degree of precision and even the analyzer pen with its massive ten inch arm would perform consistently for weeks after a few minutes of Grey's inspired tinkering. The success-

ful design of *machina speculatrix*, the famous tortoise, gave Grey enormous satisfaction and led him to consider whole families of cybernetic models of biological systems, only a few of which saw the light of day. That the models were much misunderstood and sometimes belittled by the scientific establishment was perhaps a result of Grey's immense talent for persuasive oratory; it was inevitable that a man with such conceptual powers should sometimes take the word for the deed and describe as accomplished some things which were only patterns in his especially "enchanted loom."

On clinical and experimental EEG, Grey Walter had an enormous impact. It was he who first discovered the significance of the δ rhythm, first used photic stimulation in routine clinical practice and saw the significance of the inter-ictal EEG of epileptics at a time when clinical attention was largely focused on seizures per se. Among his later achievements — ironically depending only on eyeballing a routine record and not on some advanced technological device — was his discovery of the contingent negative variation, the "expectancy wave."

Grey once told me that his favorite literary character was Gumbril in Aldous Huxley's *Antic Hay* and much in his make-up resembled that self-consciously Complete Man. He was in every sense of the phrase a free thinker and had contempt for those who followed well paved paths. He was flamboyant, persuasive, iconoclastic and a great admirer of beauty in art, literature, science, and not least, in woman.

Grey was an especially gifted teacher, having a great knack for descriptive imagery. His book *The Living Brain*, which derived from

his series of popular radio talks, is a classic introductory work, fun to read, informative and provoking.

Grey retained throughout his life a youthfulness of mind and spirit which endeared him especially to neophytes in the science of neurophysiology. Even after a critically disabling accident which he suffered in 1970 he continued to travel, teach and entertain.

The atmosphere of the Bristol laboratories was always stimulating and exciting, visitors were numerous and came from all walks of life and from all parts of the world: they were always made welcome and sometimes indeed

ensnared into remaining. The intellectual freedom of all of those who worked at the 'Burden' was and remains absolute: there is no fitter monument to Grey than the continued tradition of limitless enquiry which survives him at Bristol.

At a time when science is beset by bureaucracy, manipulated by special interests and mistrusted by those whom it serves, the loss of such giants as Grey Walter is especially hard to bear. We have all, particularly those who had the privilege of his counsel and friendship, suffered a great loss.

H.W.S.