Book Reviews

The Price and Preparation of Genius

William James. A Biography. GAY WILSON ALLEN. Viking, New York, 1967. 576 pp. $10.

More than half a century after his death, William James continues to be read and quoted by writers academic and other, his life is still held up as an example of the perfect seeking after truth, and the impression left by his character as the most vivid among the vivid and populous tribe of Jameses evokes universal respect. But this degree of regard, which should satisfy any man—especially one who was modest and a philosopher like James—still falls short of the mark. The American public does not yet know that William James is to be numbered among the three or four superior geniuses that this country has produced.

Those who are conversant with James's life and works will therefore open Allen's biography with more than ordinary curiosity. Let it be said at once that the book is excellent, even though it fails to place with finality the man whom Whitehead called "that adorable genius." Allen could retort that he is concerned exclusively with the life and that we must go to Ralph Barton Perry's two thick volumes for an estimate of the work. But that rejoinder does not quite fit. Perry was pedestrian, and Allen does attempt to summarize the purport of James's scientific work and trace the evolution of his philosophy. In this attempt he is altogether conventional and insufficient, and he makes the unnecessary weakness worse by a deplorable preface, in which James is reduced to a "stimulating" teacher, whose "science" has long been "archaic," and whose mind hovered on the verge of insanity. Since the ensuing text contradicts this summary and yet deserves to be called an exceptionally good biography, it is as well to skip the preface and relish with admiration the 500 pages that follow it.

The work is equally fine in those two aspects of any story of a life, depiction and narrative. The picture of the family in which the young Jameses grew up is splendidly done. Henry the father is treated with respect and sympathy as a remarkable thinker, who lacked only a certain adaptation to the milieu to figure as a great man in the galaxy surrounding Emerson and Thoreau. What is even more admirable about Allen's treatment of the family is that it sets the stage for a continuously perceptive account of the lifelong relations between William James and Henry, his novelist brother. For the first time justice is done to their profound mutual affection, and true cause is shown for their superficial disagreements. The idea prevailing hitherto of a coarse-minded elder brother lording it over a subtle artist is now seen to be absurd.

The tracing of this delicate and manysided relation in so masterly a fashion would alone give high merit to a biography. Allen doubles our gratitude by performing a second miracle of the same genre: he rescues William's wife Alice from obscurity and a vague imputation of philistinism, or at least stolidity. For the first time, with the aid of new materials from the James papers at Harvard, Alice Gibbens James emerges as a remarkable woman, the perfect wife—as her husband well knew and often said—for such a man as he.

That man himself it would be wrong to call misunderstood by his biographer. Allen understands him well and even deeply, but not to the full depth. By implication James is always being judged by the standard of the university professor, of professional philosophers and scientists. The biographer does not seem to know that he has a genius on his hands. From this oversight, others follow: James's education was "erratic"; yes, but it was perfect for his genius. James had a great mental crisis in youth —like Carlyle, Mill, Tennyson, and many others—and he remained subject to fits of deep depression; but—and this we should be made to feel—the suffering, restlessness, extravagance of speech, despair, and compassion were the sources of James's power and wisdom. It is foolish to picture the man so steadily as an inept invalid that one begins to wonder when he found time and strength to write the thousands of pages of unexampled philosophic and scientific prose.

Again, the blinkering effect of James's American nativity and of the title of Harvard professor prevents Allen from seeing that James belongs to the great generation that turned the culture of the 19th century into that of the 20th —the generation of Nietzsche, Samuel Butler, Ibsen, Shaw, Dilthey, Bergson, Vaihinger, and DeVries. For his part, James did as much as any of them to dislodge and destroy the orthodoxies of crude scientism and neo-Hegelian idealism. He was what we should now call an Existentialist; and his Pragmatism, far from being a "characteristically American" philosophy of practicality, is a recognition of the true work of finite mind amid endless complexity. That mind, conscious and unconscious together, works much more like an artist than like a patent calculator. James showed this, and with Fraser helped revolutionize literature and psychiatry. And going even beyond this formulation, James came to question the assumed separatism of consciousness, thus bringing us to the world of Freud and Whitehead.

There would be no need to bring up these contributions made by James if the biographer did not himself refer to them half-heartedly and if, indeed, they were not the justification for writing a massive life. Allen's final sentence about James the defender of human dignity and freedom misses the point of his own big book. It is a pity, too, that Allen does not discuss James's prose, a prose as original and distinctive as Swift's, Shaw's, or Sir Thomas Browne's, and hence a piece of American art that the world should be aware of. Allen's own accomplished style shows that he was qualified to speak like a critic about James's.

But just as the frequent references to the bad health or low spirits of the chief characters in this biography must not blind us to their stretches of health and high spirits, so the regrets about what is missing in the panorama must not blind us to the richness and fair proportions of what we are given—I repeat: an exceptionally good biography. In the department where biographers must often be forgiven—errors of detail—Allen is also exceptional. I noticed but very few slips, and those mostly unhistoricisms, for example, calling Tennyson a lord 40 years before he became one; saying that the term Pragmatism came from Peirce,

whose word actually was Pragmaticism; putting the spanning of the American continent by railroad one year ahead of the true date; being rather unlucky with the transcription of French phrases and names; and generally failing to distinguish, under the general rubric of Darwinism, the idea of evolution from the hypothesis of natural selection. But these, it must be said again, are the merest specks on the surface of a first-class work.

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Atmospheric Phenomena

Aurora and Airglow. Proceedings of a NATO Advanced Study Institute, Staffordshire, England, August 1966. BILLY M. MCCORMAC, Ed. Reinhold, New York, 1967. 697 pp., illus. $28.50.

The aurora, together with the more widespread but fainter upper-atmosphere emission, the airglow, is an exciting subject for study in the space age. The sun causes the aurora to be produced on earth. The magnetosphere of the earth is perturbed in some way by the particles or waves of the solar wind. The upper atmosphere is then bombarded by streams of charged particles. The atoms and molecules of the upper atmosphere are spectroscopically excited, increased ionization is produced, and the entire gas is heated. This description of the aurora suggests the broad range of physical interests that are involved in the study of this solar-geophysical phenomenon and the great distances over which it may be necessary to conduct observations.

Many of the contributions in this proceedings volume are tutorial in style and serve very well as reviews of various aspects of the subject. Sydney Chapman gives a masterly history of efforts to account for aurora and airglow, in which one may discover, for example, what were Benjamin Franklin's ideas on the aurora. Twilight and dayglow observations and theory are covered very nicely by Gadsden and by Noxon. The worldwide morphology of the nightglow is presented by Roach and Smith. There is an excellent account by O'Brien of satellite observations of the relation of particle fluxes and auroras. The theoretical interpretation of how the solar wind perturbs the magnetosphere and how the auroral particles are accelerated in the geomagnetic tail is given by Axford and by Speiser. Omholt has an excellent review of the spectroscopic excitation mechanisms in the aurora. There are many other very fine reviews on auroral and airglow theory and observations, including ideas on how electric fields may be involved in auroral excitation and accounts of how observations have been conducted from the polar cap to the equator.

This volume also contains many contributions of what must be classified as unrefereed research reports. The quality and permanent value of these papers vary. Some are reports of recent rocket observations that were carried out with definite objectives and that succeeded very nicely in producing results that more carefully define the primary electron influx producing the aurora. There are other reports, however, of rocket experiments that attempted to measure all parameters that were measurable without any apparent scientific objectives in mind.

A remarkable achievement of this volume is that such a handsome printing and editing job has appeared within a year after the institute was held. The book contains an excellent introduction to the subject matter by the editor, an interesting conference summary conducted by a panel, and finally the editor's conclusions about the current state of knowledge in the field.

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Aspects of Primate Interaction

Social Communication among Primates. Based on an international symposium held in Montreal, December 1964. STUART A. ALTMANN, Ed. University of Chicago Press, Chicago, 1967. 406 pp., illus. $15.

This interesting and important volume contains 17 chapters based on papers presented at a symposium at the 1964 meeting of the AAAS. The contributors represent a variety of disciplines: anthropology, psychology, psychiatry and neurology, linguistics, zoology. This breadth is due not only to the fact that the study of behavior naturally brings together scientists of many different backgrounds, but also to the excellent planning by the editor, who was also the organizer of the symposium. The techniques needed to reveal the roots of behavior belong to no one traditional science, and it is to be hoped that future studies of primate behavior evolve on an even broader base than that reflected in this volume.

The volume is dedicated to the memory of the late K. R. L. Hall, who died the summer after the symposium. Hall was a leader in elucidating the relations between controlled laboratory experiments and field observations. The importance of this point of view is evident in many of the papers in the volume and the discussions that follow them. The emphasis on the complementarity of the two kinds of study reflects a trend that holds great promise for the future of both.

The volume is divided into five parts. The first is on reproductive behavior and includes papers on breeding in *Lemur catta* (Jolly), reproductive cycles in baboons (Rowell), and mother-infant relations in macaques (Rosenblum and Kaufman; Jensen, Bobbitt, and Gordon), with discussion by Altmann. The second part contains three papers on agonistic behavior—in baboons (Kummer) and in rhesus (Kaufmann; Sade)—with discussion by Rioch. There are three papers in the third section, on causal mechanisms—experimental approaches (Miller), neurological aspects of vocalizations (Robinson), brain stimulation of squirrel monkeys (Ploog), with discussion by Rioch. The fourth part, on social dynamics, includes a paper on the remarkable aye-aye (Petter and Petter), one on newly acquired behavior patterns (Tsumori), and two on langurs (Sugiyama; Ripley), with discussion by Warren. The final section is on communication processes—social interaction in patas (Hall), auditory communication in vervets (Struhsaker), structure of primate communication (Altmann), with discussion by Sebeok and final editor's comments by Altmann.

The papers are too diverse to permit the book to be easily summarized or evaluated, but some major points can be made. Because, as several of the papers indicate, it is now possible to monitor internal states by brain stimulation and telemetry and to gather objective information on events in "the little black box," a new era in behavior studies has begun. These technical advances render obsolete theories of behavior which attempted to limit the study of behavior to externally observable events and considered internal events as unascertainable in principle. Further, these studies show that the notions of the brain as a *tabula rasa*