Goudsmit [*Phys. Rev. Letters* **15**, 229 (1965)]. Goudsmit points out that "the quality of the papers is often not such as to do much honor to the celebrity" and that most of these articles, which are accepted without refereeing and editorial interference, would hardly have been published in a regular issue of the same journal. He also draws attention to the difference between theoretical and experimental scientists in that the former can always write some "second-class" papers, whereas an experimentalist would have hardly anything ready in his drawer at any given time.

If the articles in the present book were judged as journal articles, I should in general agree with Goudsmit's judgment. But perhaps one should make a distinction between a special issue of a journal and a book dedicated to an eminent man. Such a volume need not be merely "an outlet for second-class papers by first-class authors," as W. Pauli's article in *Niels Bohr and the Development of Physics,* and R. Jost's article in *Physics in the Twentieth Century*, a volume honoring Pauli, demonstrate. It can provide a place where contributions not necessarily original in a scientific sense, but dealing with pedagogical, philosophical, historical, and expository aspects of various scientific questions, are presented. If in addition these contributions deal in particular with the wider impact of the work of the person being honored, the collection is not only a true honor but also can be of great importance to a wider audience of scientists and to the history and philosophy of science. We should like to see more very carefully prepared books of this type.

The present volume has to be looked at from this point of view and meets, on the whole, the above criteria. Because of Weisskopf's preference for simple, clear, and beautiful formulations and because of his renowned "intuitive" way of looking at things with minimal formal derivations—"which has been a source of esthetic pleasure to everyone who has had the good fortune of working with him"—a number of theoretical physicists who have visited CERN (European Center for Nuclear Research) at various times have put together this volume with articles in the tradition of the honored. Weisskopf was Director General of CERN for five years. The book contains 42 articles with a wide range and variety of topics: articles by W. Heisenberg, J. R. Oppenheimer, and P. Morrison on the philosophy and foundations of theoretical physics; intuitive and "*anschaulich*" description of a number of important concepts (articles by M. Fierz, O. Klein, H. J. Lipkin, G. Källen, L. L. Foldy, K. Huang, G. C. Wick, H. A. Bethe, H. B. G. Casimir, G. Wentzel, B. D'Espagnat, D. Amati); recent problems and results in high-energy and particle physics (T. D. Lee, L. Van Hove, A. Martin, S. Okubo and R. E. Marshak, Y. Yamaguchi, B. T. Feld, T. Kinoshita and N. N. Khuri, Y. Nambu, R. Oehme, L. Wolfenstein, D. C. Peaslee, K. Gottfried, J. Prentki and M. Veltman, S. D. Drell, D. R. Speiser and J. Weyers, A. Pais and M. Cini) and in nuclear physics (A. de-Shalit, J. D. Walecka, E. M. Henley, D. R. Inglis, H. Feshbach and A. K. Kerman, A. S. Goldhaber and M. Goldhaber, T. E. O. Ericson); an article by W. Thirring on the quantum theory of electric conductivity; and finally, two articles to smile about (by H. Hagedorn, J. S. Bell and M. Nauenberg).

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The Physical Measure of Man

In writing **The Human Body in Equipment Design** (Harvard University Press, Cambridge, Mass., 1966. 380 pp., illus. $11.95), Albert Damon, Howard W. Stoudt, and Ross A. McFarland have drawn on more than 70 years of combined experience in anthropology and psychophysiological measurement. The book has four chapters in addition to its introduction and conclusions: "Anthropometry and human engineering," "Biomechanics and equipment design," "Human body composition and tolerance to physical and mechanical force," and "Design recommendations."

For those designing equipment to be used in propinquity to man, this book is the best presentation that I know (with 140 tables of measurements) of previously scattered anthropometric data. But I found, in addition, that the clear exposition and frequent use (with 108 figures) of cartoon sketches to illustrate test principles and methods of measurement give a striking sense of the "measure of man," interesting as literature. In the following sample quotations (which are generally further qualified and referenced in the text), the word pictures presented may indeed be interesting to many more than those who design black boxes with people inside, or near people:

> Goals of the design engineer in accommodating human dimensions: (1) All men should be able to operate all machines. . . . (2) Do not limit the machine's performance by human failure . . .
>
> A truck seat should be stressed for 215 pounds per nude civilian driver.
>
> At the end of the day, erect stature decreases by approximately 0.95 inch among adults, because of compression of the intervertebral discs in the erect position.
>
> Women exceed men in the range of movement at all joints but the knee.
>
> Exercising one arm or leg significantly increases the strength of the other limb as well ("cross education").
>
> Comfort, which promotes (but cannot ensure) efficiency, is one segment of a continuum between luxury and death.
>
> Solely by muscle power, a normal man can transport about 200 tons a day through a horizontal distance of 1 meter or 50 tons through a vertical distance of 1 meter.

The statistical limitations of using these anthropometric data for other than the original (mostly United States) populations are emphasized, but the richness of population types considered in this book is a delight, from Ernest Hooton's classical "travelers on a railroad train," to "Army Drivers, Negro," to the National Health Examination Survey's "6672 people carefully selected to represent racially, geographically, and socioeconomically the non-military and non-institutionalized American population between ages of 18 and 79," and so on.

There is some repetition at the end, with perhaps not enough cross-referencing from "Design recommendations" to the rest of the book. The elements of "static and dynamic fit" are well reviewed, with some 500 references. The authors conclude, "Research is more urgently required [than on static dimensions] on dynamic body measurement and biomechanical abilities as they affect human performance and equipment design. . . . Working together, the human biologist and the designer can materially improve man's comfort, efficiency, health, and safety in a world increasingly man-made."

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