

in a modern context, but the dangers are ancient, and the real solution is as ancient as the dangers. It is questionable whether a new dimension of analysis or a new insight is contributed by the present work. It would be difficult, for example, to improve on Mill's admonition:

Precisely because tyranny of opinion is such as to make eccentricity a reproach, it is desirable, in order to break through that tyranny, that people should be eccentric. . . . That so few dare to be eccentric marks the chief danger of the time. [Mill, *On Liberty*, chapter entitled "Of individuality."]

Lee's first suggestion for combating the effects of propaganda is that "we must give up certainty." For, he states, "in a world in which all is relative to all else and in which all is constantly changing, there is no certainty, no valid absolute or dogma." Some of the staunchest defenders of freedom in our day would not agree with this assumption. Certainly, for example, responsible British conservatives in the tradition of Burke would be the first to believe in certain absolutes concerning the dignity of man and the existence of natural law; yet they would also be the first to defend individuality and eccentricity within the circle of these absolutes. All of which is simply saying that the maintenance of individuality does not really depend upon the denial of certainty "in all things" but rather upon the questioning of certainty in most things. There will be sharp disagreement about this first assumption of liberty. But at least Lee has reminded us of the need for asserting independence and thinking for ourselves. This should help us to escape the pall of uniformity that he decries.

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*Atlas of Men.* A guide for somatotyping the adult male at all ages. William H. Sheldon. Harper, New York, 1954. xvi + 357 pp. Illus. \$10.

This *Atlas of Men*, by William H. Sheldon and two listed collaborators, is the fourth book to appear in the inevitably controversial "Constitutional Psychology" Series. For the record, it is outsize and handsomely printed. It provides 1:30 body-build photographs of 1175 men selected from a master file of 46,000, and age-height-weight norms for each of the 88 known somatotypes. In addition, there is a prose accompaniment: verbal and graphic sketches of birds, insects, and mammals (both living and extinct); observations on diverse topics; an estimate of the probable somatotype of Abraham Lincoln (1½-6-3); and some commentary on Babe Ruth's lower legs.

Age-weight-height norms for each somatotype represent an interesting and potentially useful contribution. So, too, is the evidence that for most somatotypes, gross weight decreases by the late fifties, suggesting possibly differential survival *within each somatotype*. However, statistically sophisticated workers may object that 46,000 cases (two-thirds of them

from college campuses) are too few for 88 somatotypes, 15 stature groups, and 8 to 10 age groups, or 13,200 categories in all! Thus, while the information for the 7-1-1, incidence 1 per 10,000, is based on only 4 or 5 men, there are 75 weight-for-age-and-height norms given for this rare somatotype! Sheldon explains that "in the cases of somatotypes of extreme rarity the weight data are derived *mainly* by interpolation" (p. 31), which is a most unpretentious way of describing the methods used in computing the "norms."

As readers of the previous volumes know, the three-number system may be augmented by more verbal descriptions. A 4-5-1 can be called an endomorphic mesomorph or a Northwesterner (referring to its position on the somatotype triangle). In this *Atlas*, Sheldon, responding to no popular demand whatsoever, likens each of the 88 somatotypes to a different bird, insect, or mammal—1-1-7's are "wasps," 1-7-2's are "eagles," 3-2-5's are "railbirds," 3-5-4's are "race-horses," and 6-2-1's are "seals" or "platypuses." Impartially, the animals, as well as the men, come in for description and portrayal but in the form of miniature line cuts and not in the expected three views.

In certain respects Sheldon has moderated, or meliorated. Neither sociologists nor razor blade manufacturers will find personal affront in the *Atlas*. In considering the idea of specific organ weaknesses, cross-cutting somatotypical lines, Sheldon comes closer to Julius Bauer. He adheres more closely to contemporary thinking by suggesting that morbidity (and probably) mortality might be reduced if most somatotypes were trained down to 10 percent below their norm-for-somatotype weights. (In the case of the 7-3-1 this still leaves about 200 lb of fat.)

Yet these concessions do not entirely remove the impression of increasing isolationism. Rarely are other studies utilizing the somatotype approach mentioned, even when conducted by C. W. Dupertuis, who is listed on the title page as a collaborator. Hooton's modification of the Sheldon system is ignored, even though extensively applied to Army separatees. Tanner's work in England, extensive work in Scandinavia, several studies from South Africa, in fact the factor analyses of Burt, Howells, and others, even the work of Morris—none achieve acknowledgment. Kraus (who somatotyped Japanese) is never mentioned by name, nor is Gallagher, Bodell, or Seltzer. And the whole question of why there should be correlations between physique and disease, normal or psychotic behavior, or anything is avoided or dealt with mechanistically, when there is increasing evidence that body form and biochemical function are not unrelated dimensions and when Sheldon stresses the desirability of reasonable (but unspecified) biochemical tests.

Because Sheldon's writings always elicit a strikingly bimodal response with individuals on the tails loudest in their praise or condemnation, it is hardly possible to review the *Atlas* in the conventional way. If you are for Sheldon or at least interested in descriptive somatotyping you will find in the *Atlas* multiple ex-

amples of each somatotype, at various ages, plus the age-weight-height data mentioned. If you are against the man or his system, then the college-weighted sample, the subjective though reproducible ratings, the attempt to provide norms with inadequate material, and the tasteless zoo approach may elicit a dangerous cardiac response.

Either way, you will not find a definition of the somatotype other than something between the phenotype or the genotype, nor direct information bearing on the permanence of the somatotype, nor proof that an endopene or an endomorph is not simply an individual habituated to markedly different patterns of food consumption and energy expenditure.

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*Anatomy of Weeds.* Emil Korsmo. Grondahl, Oslo, 1954. 413 pp. Illus. Kr. 100.

Emil Korsmo terminates his lifework in the field of weed biology by publishing this book containing anatomical descriptions of 95 weed species with 2050 original drawings. The anatomical structure of the stem, leaf, and underground parts is illustrated and described for each species. In addition, a short description is given of the external morphology of the plant, together with its means of multiplication and dispersal and its distribution.

Almost all the 95 species included are present as weeds in the agricultural areas of northeastern North America. Of those weeds classified as "primary noxious" under the Seeds Act of Canada or of the State of Indiana, at least two-thirds of them are treated in this volume. It illustrates and describes the anatomy of 25 of the 94 species contained in *Some Important Michigan Weeds* [Special Bull. 304, Michigan State College (1951)], and of 26 of the 165 species contained in *South Dakota Weeds* [South Dakota State Weed Board Pub. 5 (1950)].

Folio in size, the book is printed in English on coated paper stock. The text is well-written and the plates are very well reproduced. Korsmo is to be congratulated for compiling this information on plant anatomy, and it will be of real value to all workers dealing with weeds.

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*The Compleat Strategyst.* Being a primer on the theory of games of strategy. J. D. Williams. McGraw-Hill, New York-London, 1954. xiii + 234 pp. Illus. \$4.75.

In this book the theory of games of strategy, applied to two-person games, has found an unsurpassed popular exposition. The author is chief of the mathematics division of the Rand Corp., which has done a formidable amount of research on most branches of

game theory and its applications, primarily to military problems. He is therefore writing from the basis of unique experience; but in addition he brings unusual abilities to bear on his task, which is to give a simple, accurate account of a difficult theory.

The two-person situation, characterized by a conflict in the interests of the two parties (not necessarily individuals), is basic for the understanding of game theory. In this book it is explained in its many facets with great clarity. The fundamental concepts of the theory, such as saddlepoints, pure and mixed strategies, payoffs, value of a game, and so forth, are all presented in such fashion that a reader willing to do a moderate amount of thinking and to use elementary arithmetic (not more!) can get a good grasp of these notions. This is accomplished by means of interesting illustrations that are aptly used, often in a very humorous manner; they are further enlivened by the excellent cartoons of Charles Satterfield. The author shows the wide diversity of situations to which game theory applies, be in the Russian duel, the dissolution of a firm, the question of when to present flowers to your wife, or the deployment of troops on several mountain passes when the enemy's dispositions are unknown. References to linear programming and to nonzero-sum games (that is, where both sides may win or lose) conclude the work.

The reader, having followed the author on a not-very-thorny path, should be able to go beyond the illustrations offered and to apply the theory to problems of his own experience. If there are prizes awarded for successful popularization of scientific theories, this book should be a serious candidate.

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*Linear Analysis.* Measure and integral, Banach and Hilbert space, linear integral equations. Adriaan Cornelis Zaanen. North-Holland, Amsterdam; Interscience, New York, 1953. 600 pp. \$11.

This book does two things and does them very well indeed. It gives a comprehensive account, from first principles, of the basic theory of both Banach and Hilbert spaces. It also presents, as illustration and application, a thorough treatment of linear integral transformations having a compact iterate.

In order to have significant examples at all stages of the argument, the author begins (part I, 5 chaps., 87 pp.) with a discussion of measure and integration suited to his purposes. Familiar definitions of exterior measure and measurable set are given and specialized to yield Lebesgue measure if  $X = R_m$  (Euclidean  $m$ -space) and, in a different way, Stieltjes measure if  $X = R_1$ . Measurable functions, product-measures, and an integral (via ordinate sets) are discussed, the development is carried through Fubini's theorem. A brief treatment of additive set functions culminates in the Radon-Nikodym theorem. The final chapter develops the basic theory of the Lebesgue spaces  $L_p$  ( $1 \leq p \leq \infty$ ) and the Orlicz spaces  $L_\Phi$ . Although