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First in Water Analysis

come change from garden peas. The chapter on linkage, crossing-over, and gene-mapping precedes that on sex linkage. In my opinion it would be wiser to treat the special case of sex linkage first and then to deal with linkage in general, but this is not a serious fault.

Although he includes a discussion of the common human chromosome aberrations and describes the medicolegal applications of the ABO blood groups (including a brief discussion of states recognizing blood-group evidence in court), Burns's emphasis on human genetics may not be as great as some students would like. The book ends with a chapter in which problems of human genetics and genetic engineering are discussed.

The Science of Genetics includes a number of typographical errors; but one or two more serious problems should be noted. On pages 42, 220, and 221 Burns cites chromosome numbers for the saltmarsh grasses (*Spartina*) that have been demonstrated to be erroneous. *Spartina* spp. commonly are cited as a textbook example of speciation via interspecific hybridization followed by amphidiploidy. Many of the newer botany, genetics, and cytology books give the corrected counts. Burns's failure to do so may be regarded by many as a minor error, but such errors tend to shake one's confidence in what otherwise seems to be a fine book.

Two other problems should be noted: In the chapter on inheritance related to sex Burns cites pattern baldness in man as an example of sex-influenced inheritance. Although he is not alone in doing so, some writers would not agree with him; instead, they would cite pattern baldness as an example of sex-limited inheritance. Perhaps it would be best to present both alternatives, with supporting pedigrees. Also, in the same chapter Burns says that 50 sex-linked (X-linked) genes are known in man. Human geneticists now suggest that the the number of known X-linked genes in man is at least 70. Such matters do not negate the many fine qualities of this book. If *The Science of Genetics* proves to be the success that I anticipate it will be, the author surely will consider correcting the weaknesses mentioned when a third edition is prepared.

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History and Philosophy

PUBLIC AFFAIRS, by C. P. Snow. 1971. Charles Scribner's Sons, New York. 224 p. \$6.95.

C. P. Snow—novelist, physicist, civil servant—has long addressed himself to the relationship of science and society.

This book brings together his major statements: "The Two Cultures and the Scientific Revolution," "The Two Cultures: a Second Look," "The Case of Leavis and the Serious Case," "Science and Government," "Appendix to 'Science and Government,'" "The Moral Un-neutrality of Science," and "The State of Siege." A prologue and an epilogue give Snow's most recent thoughts on the major themes of this collection.

Readers who know Snow from his controversial "two cultures" statement will find the other essays equally thought-provoking. The volume will be especially valuable to seminars dealing with science and politics, but the engrossing account of the conflict of personalities and policy recommendations of two scientists, Sir Henry Tizard and Lord Cherwell, should be pondered by all who are concerned with the role of scientists in government. Snow provides a sound argument for the need to enlist scientists in the forming of public-policy decisions; and he asserts that their participation must be open rather than secret: "the euphoria of secrecy," he says, "goes to the head."

In "State of Siege" Snow discusses the related problems of world population growth and world food resources and of the growing gap between rich and poor nations. He has been joined by many since he first presented this argument, in 1968, but the actions he foresaw as necessary to solve these serious threats to the species have yet to be implemented.

James T. Robinson
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REASON AND EXPERIENCE, by James L. Larson. 1971. University of California Press, Berkeley. 186 p. \$7.50.

This book is an analysis of the conflict between practical and theoretic tendencies in the work of Linnaeus (Carl von Linné). Larson begins by rejecting the traditional scientific and philosophic approaches to the problem as inadequate and guilty of error, which has "for too long a time [stressed] the role of a single set of considerations in Linné's systematic work." He insists that the argument must be enlarged to include a thorough examination of the assumptions of 18th-century naturalists concerning the system, the elements, and the representation of natural order.

In his first, and longest, chapter Larson traces the history of the problem of order in nature as it developed and was interpreted by the herbalists during the 200 years before Linnaeus. Emphasis in this chapter is on the conflict between order as understood by reason alone and as understood in the light of observed affinities and practical considerations. The remainder of the book