ly thorough and well-planned study of what the first 10 years of postbomb pregnancies could show about genetic effects. The result of that study was that, although everyone agrees that radiations cause mutations, it was not possible to demonstrate any effect on the offspring of survivors of the unfortunate "experience."

Schull and Neel have had the perspicacity to realize that the immense effort put into the Hiroshima and Nagasaki studies could be put to uses other than the original attempt to assess radiation damage. In this second book to come out of their work with the Casualty Commission, they have attempted to deal with the effect of consanguineous marriages on human populations. Having collected a uniquely complete and large set of data on marriage patterns, schooling, measurements of physical and psychological traits, and mortality and morbidity statistics, they have analyzed the data with great care and intelligence. Again they have come up with an encouragingly negative report. At the levels of inbreeding now occurring in the world's populations, or likely ever to occur, the deleterious effects are quite small, though detectable. Whatever is wrong with mankind, it cannot be pinned on first cousins.

There is a great danger in the field of human population genetics of being led to lurid or extreme conclusions by the very import of the questions. Schull and Neel have avoided this trap with great skill. Moreover, in their last chapter, they have embarked on an enterprise of great danger. This last section is a general review and discussion of the hottest issue in population genetics today: What does inbreeding data tell us about the genetical structure of populations and about the kind and intensity of natural selection presently operating in populations? Although they are unable to resist some polemical forays (the temptation to do battle in this field is too great even for very well-adjusted gentlemen), they succeed in giving a well-balanced view of the messy and contradictory evidence and theory on this question.

This book, and especially its last chapter, can be taken as a cautionary tale. Two highly competent and conscientious scientists, working with a team of highly trained colleagues for more than 15 years, using the most sophisticated statistical techniques in a highly sophisticated field, with a very large set of human population and individual data, have asked a number of basic questions about the genetical structure of human populations. And the answers are—ambiguous. Can it be that the statistical methodologies of population genetics are inadequate for the problems of measuring heterozygosity and estimating the intensities and kinds of natural selection? *Ça vous donne à penser.*

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Prehistory of the Old World

Atlas de Préhistoire. vol. 1. Henriette Alimen. Boubée, Paris, 1965. 185 pp. Illus. Paper, F. 31.50.

Volume 1 of the *Atlas de Préhistoire*, by Henriette Alimen, is a slightly revised, new edition of the book that was published in 1950. It is an indispensable textbook for the student of prehistory in that it is a sound and particularly well-illustrated manual on the French Paleolithic, Mesolithic, and Neolithic. It has been extended only briefly to the prehistory of the rest of Europe. This new edition has all of the virtues of the first and has been made even more attractive by increasing the size of the pages and using glossy paper.

The new edition follows the same plan as its predecessor. The first part begins with a concise discussion of the various types of archeological sites, including, notably, a clear description of the geomorphological aspects of the Paleolithic open-air and cave sites. This is followed by a short presentation of the rudiments of archeological field and laboratory work, including the auxiliary sciences of archeology, notably petrography. The last chapter (of the first part) is a succinct review of the various methods of dating used in archeology.

The second part of the book begins with a short discussion of prehistoric stone working techniques and is, essentially, a useful summary of the French Paleolithic. This part is particularly well illustrated and provides the student with the basic rudiments of an introductory course. The chapters on the Mousterian and Aurignacian have been revised to take into account the work by Bordes and Peyrony.

The book ends with a short discussion of the subsistence techniques of prehistoric man, his burial customs, and the art of the Upper Paleolithic.

The large format and attractive presentation of the material in this second edition have made it an extremely pleasing book. Its outstanding qualities are the extremely logical presentation of the material, the balanced and detailed presentation of the French Paleolithic, the inclusion of the historical development of archeological research in France, and the unusually large number of illustrations, including some color plates. On the other hand, most of the recent developments have only been entered in terse paragraphs, appended at the end of the various chapters. Most of the text and captions have not been revised. This leads to some confusion and tends to de-emphasize current research. Unfortunately for the student, the names of many scholars who are mentioned in the text are not included in the bibliography, which has been restricted to 57 titles.

It is very regrettable that a comprehensive, detailed, and up-to-date text on Paleolithic archeology has yet to appear in English. Henriette Alimen's *Atlas de Préhistoire* (vol. 1) stresses the French Paleolithic in the traditional manner, but it needs to be complemented with Denise de Sonneville-Bordes's *L'Age de la Pierre* (1961) and Kenneth P. Oakley's *Man the Tool-Maker* (ed. 5, 1961). These two short texts will provide the student with additional material emphasizing more recent research and covering the rest of the Old World.

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Perspective on Genetics

The Evolution of Genetics. Arnold W. Ravin. Academic Press, New York, 1965. x + 216 pp. Illus. Paper, $2.95; cloth, $6.

One begins to scan this paperback and soon finds himself engrossed with the text despite a familarity with the contents. The author's intent is to unfold for the nongeneticist the development of the central concepts of the exploding field of genetics. As stated by Ravin, the book is written for a "broad audience . . . undergraduates considering a career of teaching and research in biology, students who are embarking on graduate studies in biology, profes-

sional biologists . . . interested in current research on heredity, and laymen who have had some education in biology. . . ." For all but perhaps the last group the book is to be enthusiastically recommended. Far from preparing a dull history or just another review, Ravin has shown the best in literary skill and has allowed the ideas to lead the reader through the course of 65 years of genetics. One is intrigued by the clarity, simplicity, and brevity by which the thought sequence is developed. The major contributions of individual workers are credited without fanfare and without breaking the flow of thought. Although most of the text develops the concepts of molecular genetics as elucidated from microbial genetic systems and biochemical techniques, the legacy of "classical genetics" (defined by the author as pre-1940) is clearly silhouetted. In the last chapter, modern genetic theory is related to the unanswered problems in genetics, and indeed to those of all biology. Ravin's careful explanation of the essential meaning of nearly every term introduced could well serve as a glossary for contemporary genetic terminology. Two minor inaccuracies, or perhaps lack of clarity, should be mentioned. One wonders in what way Beadle and Tatum revealed the immense power of selective systems. The first selective systems, if by this Ravin means the application of selective techniques, were applied to bacterial systems and only later to fungi. The description of somatic recombination and its detection by the parasexual cycle is unclear, perhaps because of brevity. The reader is left with the impression that mitotic recombination can be detected only after haploidication. Perhaps he means somatic recombination can best be verified via analysis of haploids. In conclusion, the book can best be characterized as providing perspective—perspective on the relation between classical and molecular genetics and perspective on what genetic research has revealed—and a prognosis of where genetics has yet to go.

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Continuity and Change in Social Organization

Arab Border-Villages in Israel. Abner Cohen. Humanities Press, New York; Manchester University Press, Manchester, England, 1965. xiv + 194 pp. Illus. $6.

All those interested in Arabs, kinship organization, Israeli politics, peasants, or the process of social change will find Abner Cohen's book, *Arab Border-Villages in Israel*, both informative and stimulating. His monograph is the last in a distinguished line of descent (Barnes, *Marriage in a Changing Society*; Gluckman, *The Judicial Process among the Barotse*; Mitchell, *The Yao Village;* Turner, *Schism and Continuity in an African Society*) that attempts to combine functional and processual analysis and "the extended-case method" in reference to the institutions of marriage and kinship.

Cohen attempts to trace the changes during the past 30 years of the social and political structure of a single Arab village in Israel: from the dominance of a single patrilineal kin group to a class alliance across descent group lines and then to a reemergence of competing patrilineal kin groups in a wider political and economic arena. He argues that these changes are representative of those taking place in the wider area known as "The Triangle." One of the great strengths of the analysis is the author's knowledge of the popular idioms of the Arabic language and his recognition of the symbolic significance of these idioms for general sociological processes (see, for example, pp. 58, 90, 105, 108). He has described rather graphically the dilemma of Arabs on the border who, although they must increasingly enter the Israeli economy, must, also increasingly, assert their cultural separation from the society that it represents.

The validity of Cohen's main theme, however, is open to question. Has village social and political organization developed in the three stages he outlines: strong patrilineages with a single one usually dominant, to class alliances, to a reemergence of patrilineages in a wider arena? His "extended" cases of patriliny belie this claim. Affinal and matrilateral ties are not merely a "domestic" aspect of patriliny (see pp. 110 to 119). They are as critical for the political struggle within the village in the third stage as they were in the second (see, for example, pp. 63, 74, 76, 77, 85, 90 to 92, 106, and 120). Although rights of women are said to operate according to "the order of priority between men [as] . . . determined by genealogical [patrilineally defined] nearness . . ." in the third stage, statements elsewhere suggest otherwise (see p. 121 as opposed to p. 75).

Finally, the critic must question the zero point that Cohen assumes in his analysis. Were patrilineages ("hamulas") ever so strong in the first place? Did "hamulas" ever exert collective ownership and control over land in the "mushā' " system? To my knowledge, there has never been a field study of the "mushā' " system in operation to substantiate such a claim. My investigations in Kufr al Ma, a village in East Jordan which presumably had in the past just the type of "mushā' " system described by Granott, Weulersse, and others, mainly from literary sources, disclosed that the participating individuals were not exclusively patrilineal kinsmen. Rather, they were villagers, related patrilineally or affinally, or *unrelated*, who decided in an *ad hoc* fashion to come together for the purpose of partition.

No matter how much one disagrees with Cohen's analysis, he must accept Cohen's book as one of the most provocative contributions to social anthropology in the last decade.

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Organic Chemistry

Methoden der Organischen Chemie (Houben-Weyl). vol. 6, pt. 3, *Sauerstoffverbindungen*. G. Dittus, H. Kröper, and H. Meerwein. Thieme, Stuttgart, 1965. xlviii + 832 pp. Illus. DM. 212.

Part 3 of the sixth volume of *Houben-Weyl* deals with the preparation of ethers, acetals, and ortho-esters, and with the practically important reactions of these compounds. As in previous volumes of the series, the editors have succeeded in securing highly competent authors for all eight chapters in the book. Hans Meerwein himself has written the first four chapters, which comprise half of the pages.

Meerwein's first chapter covers the preparation of open-chain ethers, including phenol- and enol-ethers. Fifty-