passage of time may well turn out to be one of the most wasteful fallacies archeologists have committed.

The last three articles share a common interest in the specifications of observations and generalizations from nonarcheological data as a baseline for evaluation or stimulating model building for archeological data or procedure. These are "The Postmigration culture: a base for archaeological inference" by Douglas W. Schwartz, "Explanation as an afterthought and as a goal" by Paul S. Martin, and "Making inferences from the present to the past" by Edward P. Dozier.

Schwartz surveys cases of migration among sedentary agricultural groups. He seeks "cross-cultural regularities" which might characterize motives for movement as well as forms unique to "postmigration culture." He seeks to specify the characteristics of archeological material that are referrable to a community recently migrated. The logic is isomorphic with that of earlier arguments by Hill regarding the identification of storage rooms in pueblos. These are important concerns; they are, however, directed toward the specification of criteria for inclusion of a specific case under a categorical heading (migrations, storage rooms). This is not hypothesis testing in the sense of the specification of patterns of covariation of two or more variables.

Martin's paper is a review of the other articles but it is more than a review, it is a constructive criticism made with a sound understanding of scientific method and epistemology. Many of the criticisms I have offered are touched upon by Martin.

Dozier's paper outlines six premises which he proposes should guide the choice of analogues for inference from archeological remains. This is an approach previously outlined by Ascher. In my view it presupposes an inductivist strategy and particularistic point of view. The strategies suggested by Dozier will not lead in the direction of theory and the generation of timeless and spaceless, lawlike propositions.

The book is concluded by a series of well-reasoned comments, constructive criticisms, and suggestions by David Aberle which exemplify the kind of feedback archeologists need from their nonarcheological colleagues in anthropology.

I think it is important to point out what this book is not. It is not an attempt to present a cross section of the interests being pursued by the "new archeologists." It is, rather, a book exemplifying some new archeologists addressing themselves to the problem of social organization.

In my opinion the papers by Vivian and Dozier are out of place. The most controversial and provocative paper is by Hill. The most reflective and insightful papers are by Martin and Aberle. Lipe and Dean provide us with the best examples of ongoing inquiry into problems in Southwestern paleosociology.

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Plants and Their Pollinators

Insect Pollination of Crops. JOHN B. FREE. Academic Press, New York, 1970. xii, 544 pp., illus. $21.

Until about 30 years ago most farmers depended upon native bees or feral honeybees for crop pollination. Today, the widespread adoption of organic pesticides, self-sterile plant varieties, and large single-crop plantings has had a drastic and adverse effect upon insect pollination of crops. Those who have committed such ecological rape in order to reap the rewards of agricultural technology must now turn to pollination biologists for advice on the manipulation of pollinators.

This book is a summary of current knowledge of crop pollinators and pollination. The author has divided the text into two parts. The first (120 pp.) is devoted to a discussion of the behavior and management of various insect pollinators, and the second (310 pp.) to a family-by-family discussion of crops needing insect pollination. For each crop, the author discusses floral morphology, anther dehiscence, stigma receptivity, nectar production, pollinating insects, and varietal differences in pollination requirements. The sequence of plant families in the second part follows that devised by Bentham and Hooker and still used in most British Commonwealth herbaria, but for obscure reasons the Rosaceae are placed between the Moraceae and Liliaceae.

This volume is more than a compilation of the work of others. The author has used his own extensive research experience (60 of his publications are cited) in reviewing the literature. Some of his critical lapses betray certain deficiencies, however. For example, on page 266 he refers to "bees of the families Xylocopidae, Ceratinidae and Apidae." Although many readers may view such classification as obsolete, such matters are largely subjective. But the very next sentence refers to "the small wasp *Ceratina bispinosa*." This and similar errors cause me to wonder how much the author knows of bees.

The literature on crop pollination is scattered because the subject includes many facets of both "pure" and "applied" botany and entomology (not to mention bird and bat pollination). In preparing this volume the author has performed the unenviable yet invaluable task of critically reviewing a mountain of literature. Sixty-two pages are devoted to a list of approximately 1500 references. The utility of the work is further enhanced by the 37 pages of separate indices to author, plant species, and subject matter. However, a random check revealed numerous inexplicable omissions (for example the bee family Halictidae) from the indices.

Commendably, the author is consistent in his use of the metric system and compassionate in his inclusion of a table of conversion factors for those who think in terms of acres instead of hectares. Nevertheless, it seems unnecessary to give clover seed yields as "0.4–0.6 hl/ha" when the conversion table fails to mention hectoliters and when "40–60 l/ha" would serve as well.

I have but one caveat for those who will refer to this work. Both insects and plants are so much affected by such variables as climate, soil type, predators, parasites, and diseases that management practices successful in one locality are often disastrous in another. Although the author frequently mentions these complications, he does not sufficiently emphasize the importance of reevaluating the efficacy of management procedures when they are being introduced into new areas.

Considering the premium price of their books, Academic Press might have used a binding less susceptible to water damage. Inferior binding notwithstanding, this book belongs on the reference shelf of pollination researchers, apiculturalists, and farmers alike. A second edition is inevitable and could profitably include information on the protection of pollinators from pesticides and on pollinators as vectors of plant disease.

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