namic interpretation which Zotin advocates in his monograph. As a workable alternative, changes in coupling between component processes could be studied directly during biological development (as has been done, for example, by A. Martonosi *et al., Cold Spring Harbor Symp. Quant. Biol.* **37**, 455 [1973]). Concepts from network thermodynamics (as presented, for example, by G. Oster *et al., Quart. Rev. Biophys.* **6**, 1 [1973]) and generalized statistical mechanics (as developed, for example, by K. Kornacker, *Progr. Theoret. Biol.* **2**, 1 [1972]) could then be used to analyze the data for any unifying principles that might govern the nonlinear dynamics of biological transformations.

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Developmental Anatomy

Patterns in Plant Development. TAYLOR A. STEEVES and IAN M. SUSSEX. Prentice-Hall, Englewood Cliffs, N.J., 1972. xviii, 302 pp., illus. $10.95. Foundations of Developmental Biology Series.

This text presents the developmental anatomy of vascular plants in a form suitable both as an introduction for undergraduates and as an overview of the field for investigators wanting to be brought up to date with regard to it. The book's outstanding merit is that it reduces to readable and well-illustrated form the results of countless investigations applying the techniques of histology, surgery, and tissue culture to plants. Despite its age, the field of plant development is still conceptually diffuse and strikes one as being in a condition similar to that of, say, macromolecular synthesis prior to Watson-Crick—that is, many processes are somehow implicated as part of a mechanism but few can be shown to be part of a well-defined causal chain. A companion volume, *Control Mechanisms in Plant Development* by Galston and Davies, may go somewhat farther in this regard, but plant ontogeny is still awaiting the clarification and ingenious detailed modeling that has come to genetics and even ecology. Because the book confines itself to vascular plants two sources of relevant experimental work, that on lower plants (Jaffe's, for example) and simpler animal systems (Wolpert's, for example), are not drawn upon. Theory of pattern formation in general is not discussed. The book's strength is in description. Although the circumlocution typical of the field does slip in ("The cytochemical differences . . . do not necessarily relate to differences in mitotic activity and may be quite independent of such differences if these actually exist," p. 66), I confess to not being aware of any grand generalizations that the authors have failed to present clearly. Meristem ontogeny and the course of vascular differentiation are particularly well treated.

The book summarizes the many questions that have been raised, and the few that have been answered, during the era in which studies of plant development have been greatly influenced by Wardlaw and Wetmore, to whom the book is dedicated. With the background information and issues so tidily put together for contemplation, the student or newcomer to the field has all the more opportunity to comb the literature of adjacent fields, and his own mind, for the new and we may hope the ultimate classes of mechanisms fully accounting for plant morphogenesis.

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Books Received

Acupuncture Therapy. Current Chinese Practice. Leong T. Tan, Margaret Y.-C. Tan, and Illza Veith. Temple University Press, Philadelphia, 1973. xii, 160 pp., illus. $15.

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Aggression. A Social Learning Analysis. Albert Bandura. Prentice-Hall, Englewood Cliffs, N.J., 1973. x, 390 pp. $8.95.

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Beyond the Punitive Society. Operant Conditioning: Social and Political Aspects. Harvey Wheeler, Ed. Freeman, San Francisco, 1973. x, 274 pp. $8.95.

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