

the importance of the distinction, he cites the now-familiar example of the large family unit of the Chinese, a unit achieved by only a small proportion of its members, never the average or even common form of the family in that society. "Nevertheless, one of the most significant structural features of traditional China is the fact that the ideal structures which the gentry both held and to some extent approximated in actuality were also the ideal structures for the vast majority of all Chinese regardless of whether they were actually able to live up to them or not" (p. 29). This is presumably one of those hypotheses about the facts, and the reader is spared having to think about it further, for the only reference to the literature on the Chinese family is to the author's own book *The Family Revolution in Modern China*, itself equally hypothetical. For the implications of such stability of discourse, the reader would do well to look at pages 122 to 125.

It would be incorrect to suppose that the discussion of modernization proceeds throughout at this inconclusive level. The two chapters of part 1, on the structure of relatively modernized and relatively nonmodernized societies, are to be recommended to anyone who has himself ever attempted even half as much. Particularly intriguing is the brief section on what the author sees as one of the major problems of the relatively modernized society, which is the requirement that the socialization of the individual must prepare him "for an unknown future."

Developed at very great length is a consideration of the common elements and main lines of variation in societies, and the principal relationships among them. Here the author is at his best, nicely advancing many earlier discussions of these issues in the policy context. More specifically, an effort is made on the one hand to show the student of public affairs that societies can and must be considered as wholes, and on the other to wean him away from reification and personification of societal units, a common feature of macroanalysis in the social sciences properly excoriated by the author.

How can the achievement of this complex work be estimated? Only, I would suggest, by the productivity of its insights. Will future studies use it as a starting point? The author has not, in fact, provided very clear points

of departure for such an advance. Will it succeed in its avowedly applied aim of sensitizing the practitioner of public affairs to the contributions which social analysis may make to his effectiveness? Perhaps so, if he is adept at relating his planning and experience to the structure provided by the author. It can be done, but it is likely to be attempted only by those already highly committed to the view that social science does speak to the issues of the day, no matter that its voice be uncertain.

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## Tectonics

The first edition of *Traité de tectonique* (Masson, Paris, ed. 2, 1965. 457 pp., F. 215), by Jean Goguel, which appeared in 1952, was translated into English by Hans E. Thalmann (Freeman, 1962). I reviewed the first French edition 11 years ago [*Journal of Geology* **63**, 397 (1955)].

The new French edition differs little in format and relatively little in content from the first edition. The first part of the book deals with field observations, the intermediate part emphasizes geometrical analysis, kinematic analysis, and mechanics, and the last part is concerned with synthesis and interpretation. Goguel, because of his background in mathematics and engineering, is especially well versed in kinematics and mechanics, but is also a first-class field geologist.

The next to the last chapter, 14 pages in length and entitled "Margin of uncertainty in tectonic interpretations," is new. It has obviously been inserted to consider two hypotheses that have been emphasized in recent years. One concerns the extent to which crustal shortening is involved in folding. V. V. Belousov believes that folding is caused by vertical movements and that the opposite sides of the folded belt are no closer together after folding than before. Goguel believes that much folding, such as that in the Alps, involves crustal shortening, the opposite sides of the belt being closer together after the folding. This question is of the utmost importance in analyzing the dynamics of the earth. The vast amount of paleomagnetic data gathered during the last two decades has led many geophysi-

cists and geologists to revive the hypothesis of continental drift. Goguel does not discuss the basic principles of paleomagnetism nor does he analyze the data. Instead he reiterates the old arguments against continental drift. He concludes that neither Belousov's hypothesis of folding nor the hypothesis of continental drift is sufficiently probable to necessitate rewriting his final chapter entitled "Search for an explanation."

The chapter on isostasy has been rewritten. This has been necessitated by the great progress made in seismology during recent years. "But, beneath this crust, the mantle shows notable differences, at least in the upper part, and appears to be the site of phenomena that should play an essential role in the localization of deformation of the crust. The time is past when the geologist thinks he can confine his study to the crust."

Although 14 of the 215 figures used in this edition were not in the first French edition, 9 of them were in the English translation. Fifteen percent of the text is not in the first French edition; of this, 11 percent is completely new, but 4 percent was in the English edition.

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## History of Medicine

Yacqūb ibn Ishāq al-Kindī, who died about 874 and to whom this compilation of recipes is attributed, was known as the philosopher of the Arabs. He was one of the greatest intellectual figures in Islamic history, not only in medicine and philosophy, but in other sciences as well [for details, see my article "Al-Kindī, a ninth-century physician, philosopher, and scholar" in *Medical History* **9**, 328 (1965)]. This compilation, *The Medical Formulary of Aqrābadhin of al-Kindī* (University of Wisconsin Press, Madison, 1966. 424 pp., \$8.50), was microfilmed and reproduced from the original manuscript, No. 3603, at the Aya Sofia Library (Istanbul, Turkey) and it was translated into English and annotated by Martin Levey, with an introduction, an etymological and philological interpretation of the drug simples, and two indices added.

This scholarly work fills gaps in the study of Arabic pharmacy and the evolution of materia medica. In the in-