a shabby kind of trick. Nevertheless, he hopes that certain cognitive emotions can open the gateway to the realm of objective values, but he admits that he is not very sanguine about the prospects of such an endeavor. The European scholar, familiar with the shortcomings of Meinong and Scheler, is likely to share his skepticism rather than his hopes.

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Analytical Pathology. Treatises in the perspective of biology, chemistry, and physics. Robert C. Mellors, Ed. McGraw-Hill, New York, 1957. 477 pp. Illus. $12.

Contrary to what might be suggested by the title, *Analytical Pathology* is not a procedural manual. Rather, it is a collection of separate monographs by well qualified investigators, each of whom has made notable contributions to his subject. In his preface, Eugene Opie, preaching from what he has practiced long and well, states, "The clinician and the pathologist must in very large part borrow from the physicist, the chemist, and the physiologist the methods that can be hopefully used to solve their problems." It is this approach, championed by Virchow, but forgotten by some of his followers, that the editor has called "analytical pathology." Three of the seven major subjects have been covered by five men who do not hold appointments in pathology, but they are nevertheless students of pathology to the extent to which they are investigators of the mechanisms of disease.

Many other topics might have been chosen, but all that are included are indeed ripe for critical appraisal. This they have received in varying degree. The many-sided approach is well exemplified, as is to be expected, in Robert Mellor's own massive review of cancer. The consideration is of relevant work from ancient, as well as from the most recent, sources. Gofman's chapter on "Arteriosclerosis and hypertension" is largely a discussion of his own study of lipoproteins and the relationship that he considers it to bear on the pathogenesis of arteriosclerosis. "Hypertension" is a gratuity in the title and receives practically no attention. Jones' interesting section on "Inflammatory and vascular disease of the glomerulus" likewise is based largely on a single, although excellent, technique. Both writers are at pains to defend their own concepts and to demolish others. Neither of their chapters has the scope of a general review, but each possesses the merit of an extensive personal exploration of difficult terrain.

Ratnoff's contribution on hepatic failure is a consideration of the disturbed chemistry and physiology of cholemia, ascites, and hemorrhagic phenomena. This chapter is notable not only for its wide and judicious coverage but also for its excellent literary style.

Agnes Burt Russfield's summary of the "Adenohypophysis" is as outstanding for today as was Severinghaus' article in *Physiological Reviews* of 1937. There are doubtless some who would disagree with some details of her presentation—for example, with the statement that "castration cells" do not exist in man.

Mueller and Vilter have contributed a valuable survey of the macrocytic anemias, and their associate, Will, an equally timely consideration of abnormal hemoglobins. Wagner's account of hypersensitivity is directed specifically to the role of the connective tissue. The knowledge of the chemistry of this tissue is well summarized. Many will take exception to this writer's statement that the cellular production of antibodies is intimately associated with the lymphoid elements. His use of the term *lupus erythematosus "disseminata"* leaves something to be desired on grammatical grounds. There is a critical summary of recent important work, including Wagner's, on the nature of "fibrinoid."

However one might view the title, this volume will serve to inform and to stimulate all workers in the biological and allied sciences as applied to man.

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Route-Mapping and Position-Locating in Unexplored Regions. Wilhelm Filchner, Erich Przybyllok, and Toni Hagen. Academic Press, New York; Birkhäuser, Basel, Switzerland, 1957. 288 pp. Illus. $9.

Exploration by camel caravan in Tibet and western China is the primary subject of this book. The title may mislead some, since in the United States the term *route-surveying* means surveys of proposed routes of communication (highways, railroads, pipelines, power lines), whereas Filchner uses the term in its European sense of reconnaissance surveys made along the traveler's route. Filchner's references to route-planning are strictly a matter of the planning of *his* route.

It is important to realize that, although the total number of persons who have ever engaged in route-mapping is small, yet such surveys underlie the maps of most of the land area of the globe, including most of Canada, Central and South America, Siberia, central Asia, central Australia, and much of Africa. Anyone who wishes to use maps at any scale larger than a school atlas is immediately confronted with the question of their reliability. This in turn is a very complex question, answerable only in terms of the method used. From this comes the significance of the present work.

The book is in three unequal parts, bound together, consecutively paged, but with separate numbering for the chapters in each part. The first, longest (166 pages), and most important is by Filchner, one of the two or three most important explorers of central Asia. Filchner conducted four expeditions to central Asia between 1900 and 1941, and one to Antarctica. The second section, by Przybyllok (80 pages), covers the standard methods of spherical astronomy and the use of the theodolite. The third section (30 pages), by Hagen, is concerned with the application of photogrammetric methods to aerial reconnaissance surveys. It also follows more or less conventional lines; it is interesting as showing that the techniques of route-surveying are probably no longer needed, since most of the purposes can be met by photomosaics, controlled and uncontrolled.

Filchner's section, which is the meat of the book, emphasizes strongly the most important part of all ground surveys—namely, the problems of staying alive and moving about, of pack animals, food, tents, clothing, and relations with the natives as well as the techniques of field surveying. Few books of travel give as close and intimate a picture of the caravan, its animals roped nose to tail with woolen ropes, packs fastened to boards with holes cut for the humps, a layer of felt under the pack to prevent chafing, leather guards on the feet of some of the camels to prevent scuffing, a leader who must walk, not ride, and even the procedure for collecting camel's dung for fuel.

Filchner's mapping procedures contain some surprises for those accustomed to topographic surveys. The emphasis is on the compass and the watch as the fundamental tools—the compass for direction and the watch, in combination with estimates of speed, for distance. It should be pointed out, of course, that Filchner makes every effort to correct the survey so obtained by frequent astronomical fixes, and by taking bearings as often as possible to mountain peaks; but the backbone of the survey is still compass and watch.

A second important point is that the end-result of the survey is a logbook rather than a plane-table sheet. In the logbook are recorded all times and directions, sketches, and small sketch maps. The final map must therefore be built up from the logbook. Obviously, this means that in the final map there will