sessions. The papers range over a large variety of topics: some of them deal with substantive scientific problems in theoretical physics and linguistics, some with sociohistorical questions concerning developments in science, and some (the majority of them) with methodological and far-flung philosophical issues. They also vary considerably in the clarity and cogency of their reasoning —indeed, in a disappointingly large number of instances the reasoning, such as it is, is capricious. But whatever one may think of the merits of the various articles, few will dispute the opinion that the book is outrageously overpriced.

The volume is perhaps most interesting because a number of new trends and current fashions in the philosophy of science are represented in it. Three examples of these tendencies must suffice. In self-conscious opposition to the positivism and pragmatism of a generation ago, a growing number of writers are now making obeisance to the allegedly important role in science of what they commonly call "metaphysics." Wartofsky must be counted as belonging to this group, and in his contribution to the volume he not only maintains that metaphysics is a "heuristic for science" but seeks to explain why this must be so. However, despite the length of his paper, he leaves quite obscure what he takes to be the differentia of metaphysical statements, so that it is difficult to make out what it is he is trying to explain or what is his explanation.

Again, according to a currently influential doctrine, if a scientific theory is false its falsity can be definitively established, while if a theory is true its truth cannot be shown to be even probable. Joseph Agassi subscribes to this view. But he thinks it is apparently incompatible with the fact that scientists often accept some theory for a relatively long period, so that science exhibits a degree of stability and is not in constant flux; and his paper is an attempt to account for this ostensible anomaly. However, his problem is intelligible only on the assumption that there is no such thing as confirmatory evidence for a theory, and hence no rational basis for accepting a theory—an assumption which seems to me highly dubious.

The third example of recent innovations in the philosophy of science is the contention that rational criticism of a scientific theory requires the development of as many theories as possible that are contraries of the given theory, with an examination of the allegedly "observational" evidence for the latter in the perspective of those alternative theories. In consonance with this view, Paul K. Feyerabend maintains in his paper that as a consequence of the increasing specialization of science and of its "autonomy" in relation to other human concerns, the "rationality" of science has declined since the Middle Ages; and he also tries to show that the empiricism advocated in Newton's methodology of science, like Calvinism but unlike Catholicism in matters of religious doctrine, is a major source of intellectual illiberalism. I am not sure how serious Feyerabend is in making these and similar allegations; but in any case, his commentators in the volume, who do take him seriously, make abundantly clear how fanciful are most of his factual claims.

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Human Bones

The Skeletal Biology of Earlier Human Populations. Symposia of the Society for the Study of Human Biology, vol. 8, London, Nov. 1965. D. R. BROTHWELL, Ed. Pergamon, New York, 1968. viii + 288 pp., illus. $11; to members, £2.

Considering the many famous British names which come to mind in connection with studies of the biology of human populations during the last 100 years—Darwin, Huxley, Pearson, Keith, for example—it is surprising that no one in Great Britain got around to forming a society for the promotion of this field until 1958. The official organ of the flourishing new society is *Human Biology*, published in the United States since 1929. In addition the society produces a symposium series of which the present volume is the eighth. As evidence of the society's increasing international complexion six of the 13 papers in the present volume are contributed by other nationals: three from the United States, two from Canada, and one from Hungary.

The entire group of papers gives a good indication of the ways in which anthropologists are now looking at human skeletons. Particularly fashionable are the studies of what used to be called "anomalies" but are now referred to as "discontinuous" or "nonmetrical" or "discrete" variations. R. J. Berry of the Royal Free School of Medicine in London lists 30 such variants for the skull alone, and J. E. Anderson of the University of Toronto adds others for the mandible and postcranial skeleton. Both authors view these variants as useful genetic indicators of group relationships.

Interest is high also in congenital malformations and pathological changes in bones. As regards paleopathology, A. T. Sandison of the Western Infirmary in Glasgow contributes some wise observations, which, coming from a practicing pathologist, are timely. W. A. Marshall of the Institute of Child Health in London relates the presence of transverse lines in the radii of living children to the disease records of the same children, thus providing a better basis for interpreting the lines seen in earlier populations.

Other papers deal with skeletal plasticity, growth, stature increase, paleodemography, and the biochemical and radiological approaches. Of special interest is a new view of the claimed secular increase in stature in recent times. Neil M. Huber of the University of California at Berkeley regards the evidence for this increase as nothing more than the attainment of maximum stature at progressively younger ages. He found the adult long bones from early medieval Alemannic row-graves in southern Germany to be about the same length as those of present-day Americans.

A typographic error on page 4 is good for a laugh: "public symphysis" for "pubic symphysis."

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Books Received

Active Nitrogen. A. Nelson Wright and Carl A. Winkler. Academic Press, New York, 1968. xii + 602 pp., illus. $27.50. Physical Chemistry Series.

Advances in Chemotherapy. Vol. 3. Abraham Goldin, F. Hawking, and Robert J. Schnitzer, Eds. Academic Press, New York, 1968. xiv + 407 pp., illus. $18.50.

Advances in Chromatography. Vol. 6. J. Calvin Giddings and Roy A. Keller, Eds. Dekker, New York, 1968. xx + 339 pp., illus. $16.75.

Advances in Extractive Metallurgy. Proceedings of a symposium organized by the Institution of Mining and Metallurgy, London, April 1967. Institution of Mining and

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