

Book Reviews

Portraiture and Excavations

The Face Finder. M. M. GERASIMOV. Translated from the German edition (Guterslöh, 1968) by Alan Houghton Brodrick. Lippincott, Philadelphia, 1971. xxiv, 255 pp. + plates. \$10.

The average man interested in the subject assumes that experts in forensic anthropology can get a scientifically accurate portrait from unidentified bones (1). The scientist, including the experts mentioned, remains skeptical. This book might lessen prejudice in each direction.

Gerasimov, prehistorian and dean of such experts, gives in chapter 3 elaborate but not precise directions for true flesh reconstruction. But in his descriptions and photographs of finding faces for many skulls, ranging from Broom's Sterkfontein australopithecine (Gerasimov calls her by her first name, *Plesianthropus*) and other prehistoric hominids to such historic figures as Timur, Ivan the Terrible, and the Tajik poet Rudagi, as well as victims of crimes, Gerasimov shows his sensitive artistic ability. Correspondences with portraits and photographs are convincing: his method works. It is the art of using standard thicknesses of flesh (2) plus judgments on things like nasal spine form, size, and direction and on muscle origin areas, plus artistic synthesizing—the same kind of repeatable judgment on morphological detail with which a radiologist reads a plate or a physical anthropologist recognizes from standardized criteria the sex, likely genetic background, biological age, body build, pathology, nutrition, and other biographical accidents of any skeleton. But though even a nonexpert can determine sex, for example, with 95 percent accuracy from a discriminant function of a half dozen measurements, Gerasimov offers his readers no such formulas. He assumes that they are either really expert or only casually interested.

It would have been most valuable to have Gerasimov's original additions to science, but he adds nothing of preci-

sion to the 1898 data of Kollmann and Büchly (2). He omits the word of Todd, of Krogman, and of Suzuki. Though he does mention understandingly Old World anthropologists and anatomists up into the 1940's he gives no bibliography. This is an indefensible omission understandable in terms of Russian isolation and the autobiographical approach. Likewise Gerasimov's extensive and interesting summaries of prehistory and paleoanthropology are dated. Brodrick, the prehistorian-translator, remedies this bit in his introduction. The double translations (Russian to German to English) are sometimes incorrect on crucial technical details: the anterior nasal spine, for example, is sometimes the tip (p. 55) or the point (pp. 54, 147), or spine and nasal bones even are reversed (p. 137), as the photograph of Timur shows. Other errors are Masquet for Mascré (p. xviii), muscle for fossa (p. 55), and arm instead of forearm (several times) in relation to Upper Paleolithic body proportions.

Gerasimov is a romantic and squeezes his science between two romantic slices: his childhood in Irkutsk, Siberia, and his excavating, ranging from Upper Paleolithic Mal'ta near Irkutsk to the 15th-century mausoleum of the Timurids in Samarkand. These delightful descriptions of how it felt to become an anthropologist operating between the Baltic, Black Sea, and Lake Baikal are art and not science, but they might turn a casual interest in anthropology into critical enthusiasm.

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References and Notes

1. In modern America I know of successful efforts only by W. M. Krogman, *The Human Skeleton in Forensic Medicine* (Thomas, Springfield, Ill., 1962), chapter 9; by Clyde C. Snow *et al.*, *Am. J. Phys. Anthrop.* n.s. 33, 221-27 (1970); and by police artists (usually from flesh remnants also); none of these dozen or so restorations perfectly match photographs taken at younger ages, yet these and many examples of matching skull drawings against portraits do succeed.
2. J. Kollmann and W. Büchly, *Arch. Anthrop.* 25, 329-59 (1898); also 39 other references cited by Krogman (1), who misspells Kollmann's name with one n.

Lunar Maps

The Times Atlas of the Moon. H. A. G. LEWIS, Ed. Times Newspapers, London, 1969 (U.S. distributor, Quadrangle, Chicago). xxxvii, 111 pp. \$25.

That an atlas of the moon is appropriate for these times can hardly be denied. To quote from the jacket of the *Times Atlas*, "The early explorers venturing into unknown regions of the Earth knew nothing of the details of the territory they were to penetrate. Landings on the Moon could not be allowed to take place in so ill-prepared a fashion and no effort has been spared in the United States to provide the Apollo crews with the most detailed information on the terrain which Man's industry and ingenuity could devise."

The *Times Atlas* is a curious assortment of the materials prepared for the lunar exploration venture. The cover photograph was taken by the Apollo 8 astronauts, and pictures are included that record the Apollo 11—the first—lunar landing mission. In view of the inclusion of these much more recent materials, the reader may wonder why the maps of the far side and of the polar regions of the moon were compiled from the incomplete coverage provided by Lunar Orbiter missions 1 through 4. Use of only slightly later versions of the ACIC (Aeronautical Chart and Information Center, U.S. Air Force) charts, which were compiled with the aid of Orbiter 5 pictures, would have almost covered the polar and far-side regions and would have shown better topographic detail in many areas.

Basically, the book is an atlas of the 44 ACIC Lunar Aeronautical Charts covering the near side of the moon at a scale of 1:1,000,000 and prepared largely from earth-based telescopic photographs and observations. The charts are beautifully reproduced, as are the other maps and pictures in the atlas. However, the planning and conduct of the Apollo landing missions were based on a series of much more detailed maps at larger scales prepared from Lunar Orbiter data, and this fascinating group of maps is not represented except for a photomosaic of the Apollo 11 site on page xxxiii. Problems do arise from the trimming and rejoining of the original quadrangle charts to fit the page size of the atlas. Geographic names or parts of names are missing on some maps and duplicated on others. Nevertheless, it is very convenient to