

in a book in the years of "scientific socialism."

Many statements in the book that could be corrected by a historian are nevertheless of value for the dimensions of historical reality they reveal. For example, the author seems to believe that his first scientific hero, Landau, was groundlessly committed to a Stalinist jail, was released after being declared not guilty in 1939, and in his scientific work was occupied entirely with pure physical theory. Information that has recently been made available from the KGB archives represents the matter in another way: Landau was arrested after taking part in the preparation of an anti-Stalin leaflet, was declared not guilty only in 1990, more than 20 years after his death, and nevertheless strongly participated in the Soviet nuclear weapon program, being awarded two Stalin prizes and the title Hero of Socialist Labor. Both these versions of events reflect aspects of the historical reality of Soviet physics. Sagdeev helps us to comprehend this fascinating reality.

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Excavations in Iraq

Early Stages in the Evolution of Mesopotamian Civilization. Soviet Excavations in Northern Iraq. NORMAN YOFFEE and JEFFREY J. CLARK, Eds. University of Arizona Press, Tucson, 1993. xviii, 285 pp., illus. \$50.

As R. M. Munchaev writes in the penultimate chapter of this book, "It has now been established that the study of many of the key problems pertaining to the archaeology, ancient history, and culture of Mesopotamia and the Near East is now impossible without taking into account the results of investigations by the Soviet expedition to Iraq." Until such time as the final reports on the work of Soviet prehistorians in northern Iraq are available in English, this book conveying some of those results will be essential to all scholars interested in the prehistory of the Near East.

Early Stages is a compendium of papers dealing with the excavation of several prehistoric sites on the Jebel Sinjar plain in northern Iraq by Soviet scholars between 1969 and 1980. Seven of the papers have appeared in English in the journals *Iraq* and *Sumar*, eight are newly translated from Russian, and one is a short summary of the conclusions of a book in Russian on the excavations. In addition, Yoffee has provided

a preface and a concluding analytical essay. The papers deal with the several sites excavated in chronological order (I would, however, recommend reading Munchaev's chapter first, as it provides an excellent introduction to the entire project).

The work reported on in this book has revolutionized our understanding of the late prehistory of Iraq and the Near East as a whole, particularly when combined with the results of later excavations by the British at Qermez Dere and by the Poles at Nemrik. These two sites extend the archaeological sequence for the region back in time from the earliest site excavated by the Soviets, Maghzaliyah (dating from the end of the 8th or the beginning of the 7th millennium). Maghzaliyah is a small Neolithic settlement with evidence of both plant cultivation and animal husbandry. Next in the Soviet project's sequence comes the Tell Sotto Culture, excavated at both Tell Sotto and Kultepe. This phase is described as pre-Hassuna, is closely compared with the sites of Umm Dabaghiyah and Telul eth-Thalathat, and is dated by the excavators to the second half of the 7th or the beginning of the 6th millennium.

The principal excavations of the Soviets were at a cluster of three sites named Yarim Tepe I, II, and III. Yarim I and II and the upper levels of Tell Sotto yielded classical Hassuna materials that are dated by the excavators to the second half of the 6th millennium. We are now in a position to come to grips with the Hassuna culture thanks to both the quality and the quantity of the Soviet excavations. Large horizontal areas were exposed, providing, for the first time, enough Hassuna material to permit a detailed analysis of the nature of this important late Neolithic or early Chalcolithic culture.

Yarim II and III produced Halaf-period materials, dated by the excavators to the 5th millennium. Again horizontal exposure was extensive, providing the largest single sample of Halaf materials ever excavated. The traditional stratigraphic relationship between Hassuna and Halaf was confirmed, cultural traits of both the eastern and the western Hala were found for the first time in a single context, and the domestic function of the heretofore enigmatic tholos structures was clearly demonstrated—they are granaries.

Yarim III yielded Ubaid materials, dated by the excavators to the late 5th or early 4th millennium. Again exposure was extensive. Perhaps most notable is the contrast in architectural plans between the buildings from Yarim III and more eastern Ubaid sites (for example in the Hamrin such as Tell Madhhur and Tell Abadeh).

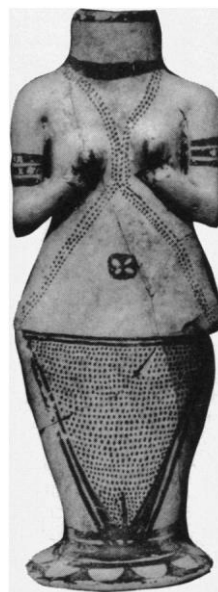
Noticeably missing in these papers is any discussion of archaeological theory or method (the only explicit attempt at such I could find is on p. 64). One would like to know more about how these sites were dug, how the material was dealt with out of the ground, and what were some of the interpretative issues that our then-Soviet colleagues were concerned with. A hint on the last issue can be found in the three papers that are analytical rather than descriptive:

N. O. Bader's summary of the Russian volume, a discussion by N. Ya. Merpert and Munchaev of Halaf burial practices, and the essay by Munchaev previously mentioned. What is implicit in these papers (especially the first and last of them) is an understanding of cultural change and evolution on the Sinjar plain in terms of successive population replacements. If I understand the arguments correctly (and this is hard to do precisely because the issues are not stated explicitly), except for the interpretation of the Tell Sotto Culture as something pre-Hassuna that evolved into Hassuna, the Halafians are seen as a new people in the region who replace the Hassunians, and the appearance of the Ubaid is interpreted in the same way.

Yoffee's welcome concluding chapter, "Mesopotamian interaction spheres," is an excellent and intellectually stimulating

effort to make up for the lack of methodological interpretation in the other papers and something of a counter-argument to the implied population-replacement model of cultural change. Yoffee's efforts to develop structural paradigms for historic Mesopotamian civilization that might, with due caution, as he emphasizes, be applied to a broad interpretation of change and cultural interaction in Neolithic and Chalcolithic Mesopotamia are an important contribution to the analysis of Near Eastern prehistory.

This collection offers as thorough a set of preliminary excavation reports as one can find in the archaeological literature on the Near East, and the volume is handsomely illustrated in a way that makes it possible



Anthropomorphic vessel from Yarim Tepe II. [From *Early Stages in the Evolution of Mesopotamian Civilization*]



Pottery kiln from Yarim Tepe II. [From *Early Stages in the Evolution of Mesopotamian Civilization*]

actually to work with the materials.

This book is the first tangible result of the exchange conferences between Soviet and American archeologists (in the United States in 1981 and in Uzbekistan in 1983) arranged by the International Research and Exchanges Board. The Board spent its money wisely.

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Corrections

In the heading of Philip Pauly's review of Robert E. Kohler's *Lords of the Fly* (15 April, p. 445) the subtitle of the book was listed incorrectly. The correct subtitle is "*Drosophila* Genetics and the Experimental Life."

In "Women in Science: Some Books of the Year" (11 March, p. 1458) the name of the senior editor of second edition of *The History of Women and Science, Health, and Technology* should have been given as Phyllis Holman Weisbard, and the name of the editor of the first edition should have been given as Susan Searing. Also, the statement that the author of *A Matter of Choices: Memoirs of a Female Physicist*, Fay Ajzenberg-Selove, is now retired was incorrect.



Books Received

A-Bomb Radiation Effects Digest. Itsuzo Shigematsu *et al.*, Eds. Harwood, Langhorne, PA, 1993 (distributor, International Publishers Distributor, Langhorne, PA). vi, 37 pp., illus. Paper, \$30 or £20. Synopsis of *Effects of A-Bomb Radiation on the Human Body*. Translated from the Japanese by Brian Harrison.

Acidification of Freshwater Ecosystems. Implications for the Future. C. E. W. Steinberg and R. F. Wright, Eds. Published for Freie Universität Berlin by Wiley, New York, 1994. xvi, 404 pp., illus. \$157. Environmental Sciences Research Report ES 14. From a workshop, Berlin, Sept. 1992.

The Adhesion Molecule FactsBook. Rod Pigott and Christine Power. Academic Press, San Diego, CA, 1994. viii, 190 pp., illus. Paper, \$19.50. FactsBook Series.

Arsenic in the Environment. Part 1, Cycling and Characterization. Jerome O. Nriagu, Ed. Wiley, New

York, 1994. xvi, 430 pp., illus. \$95. Advances in Environmental Science and Technology, vol. 26.

Asteraceae. Cladistics and Classification. Kåre Bremer with assistance of Arne A. Anderberg *et al.* Timber Press, Portland, OR, 1994. vi, 752 pp., illus. \$79.95.

Astrophysical Jets. Denis Burgarella, Mario Livio, and Chris O'Dea, Eds. Published for the Space Telescope Science Institute by Cambridge University Press, New York, 1994. xii, 315 pp., illus. \$59.95. Space Telescope Science Institute Symposium Series, 6. From a symposium, Baltimore, MD, May 1992.

Asymmetric Catalysis in Organic Synthesis. Ryoji Noyori. Wiley, New York, 1994. xx, 378 pp., illus. \$54.95. George Fisher Baker Non-Resident Lectureship in Chemistry at Cornell University.

Atoms, Metaphors and Paradoxes. Niels Bohr and the Construction of a New Physics. Sandro Petruccioli. Cambridge University Press, New York, 1994. viii, 241 pp. \$49.95. Translated from the Italian by Ian McGilvray.

Bacillus thuringiensis. An Environmental Biopesticide. Theory and Practice. Philip F. Entwistle *et al.*, Eds. Wiley, New York, 1994. xviii, 311 pp., illus. \$95.

Banach Algebras and the General Theory of *-Algebras. Vol. 1, Algebras and Banach Algebras. Theodore W. Palmer. Cambridge University Press, New York, 1994. xii, 794 pp. \$89.95. Encyclopedia of Mathematics and Its Applications, vol. 49.

The Basal Ganglia IV. New Ideas and Data on Structure and Function. Gérard Percheron, John S. McKenzie, and Jean Féger, Eds. Plenum, New York, 1994. xiv, 616 pp., illus. \$125. Advances in Behavioral Biology, vol. 41. From a meeting, Giens, Var, France, Oct. 1992.

Biology of Adventitious Root Formation. Tim D. Davis and Bruce E. Haissig, Eds. Plenum, New York, 1994. xiv, 343 pp., illus. \$89.50. Basic Life Sciences, vol. 62. From a symposium, Dallas, TX, April 1993.

Cerebral Cortex. Vol. 10, Primary Visual Cortex in Primates. Alan Peters and Kathleen S. Rockland, Eds. Plenum, New York, 1994. xx, 555 pp., illus. \$115.

Chancellor at Berkeley. Glenn T. Seaborg with Ray Colvig. Institute of Governmental Studies Press, Berkeley, CA, 1994. xx, 718 pp. + plates. Paper, \$34.50.

Chemical Dynamics at Low Temperature. Victor A. Benderskii, Dmitrii E. Makarov, and Charles A. Wight. Wiley, New York, 1994. xii, 385 pp., illus. \$74.95. Advances in Chemical Physics, vol. 88.

Chemistry and Biology of (1→3)-β-Glucans. Bruce A. Stone and Adrienne E. Clarke. La Trobe University Press, Victoria, Australia, 1992. viii, 803 pp., illus. A\$175.

The Chronological Annotated Bibliography of Order Statistics. Vol. 8, Indices, with a Supplement on 1970–1992. H. Leon Harter with N. Balakrishnan. American Sciences Press, Columbus, OH, 1994. viii, 267 pp., illus. Paper, \$110. American Sciences Press Series in Mathematical and Management Sciences, vol. 24.

The Collected Papers of Albert Einstein. Vol. 3, The Swiss Years. Writings, 1909–1911. Martin J. Klein *et al.*, Eds. Princeton University Press, Princeton, NJ, 1994. xxxvi, 644 pp., illus. \$85 or £65. Translation by Anna Beck, xiv, 437 pp., illus. Paper, \$29.95 or £19.50.

Culture and Human Development. The Selected Papers of John Whiting. Eleanor Hollenberg Chasdi, Ed. Cambridge University Press, New York, 1994. xiv, 358 pp., illus. \$59.95. Publications of the Society for Psychological Anthropology, 6.

Culture and Human Nature. Melford E. Spiro. Benjamin Kilborne and L. L. Langness, Eds. Transaction, New Brunswick, NJ, 1994. xxxii, 309 pp., illus. Paper, \$21.95. Augmented reprint, 1987 ed.

"Daddy's Gone to War". The Second World War in the Lives of America's Children. William M. Tuttle, Jr. Oxford University Press, New York, 1994. xvi, 365 pp. \$30.

The Danger from Strangers. Confronting the Threat of Assault. James D. Brewer. Plenum, New York, 1994. xvi, 267 pp., illus. \$22.95.

Darwin Machines and the Nature of Knowledge. Henry Plotkin. Harvard University Press, Cambridge, MA, 1994. xviii, 269 pp. \$24.

Darwinism, War and History. The Debate Over the Biology of War From the "Origin of Species" to the First World War. Paul Crook. Cambridge University Press, New York, 1994. xii, 306 pp. \$64.95; paper, \$27.95.

Dazzle 'Em with Style. The Art of Oral Scientific Presentation. Robert R. H. Anholt. Freeman, New York, 1994. xiv, 200 pp., illus. Paper, \$11.95.

Ecological Genetics. Leslie A. Real, Ed. Princeton University Press, Princeton, NJ, 1994. xvi, 238 pp., illus. \$49.50 or £40; paper, \$24.95 or £18.50.

Eight Little Piggies. Reflections in Natural History. Stephen Jay Gould. Norton, New York, 1994. 479 pp., illus. Paper, \$10.95. Reprint, 1993 ed.

Einstein Lived Here. Abraham Pais. Oxford University Press, New York, 1994. xviii, 282 pp., illus. \$25.

Electronic Structure of Refractory Carbides and Nitrides. V. A. Gubanov, A. L. Ivanovsky, and V. P. Zhukov. Cambridge University Press, New York, 1994. xiv, 256 pp., illus. \$79.95. Translated from the Russian edition (Moscow, 1990).

Elementary Probability. David Stirzaker. Cambridge University Press, New York, 1994. x, 406 pp., illus. \$64.95; paper, \$24.95.

Encyclopedia of Antibiotics. John S. Glasby. 3rd ed. Wiley, New York, 1994. vi, 515 pp., illus. \$225.

Encyclopedia of Human Behavior. V. S. Ramachandran, Ed. Academic Press, San Diego, CA, 1994. 4 vols. Vol. 1, xviii, 728 pp., illus. Vol. 2, viii, 707 pp., illus. Vol. 3, vi, 679 pp., illus. Vol. 4, vi, 651 pp., illus. The set, \$499.

Faces in the Clouds. A New Theory of Religion. Stewart Elliott Guthrie. Oxford University Press, New York, 1994. xii, 290 pp., illus., + plates. \$30.

Factors of Soil Formation. A Fiftieth Anniversary Retrospective. Ronald Amundson *et al.*, Eds. Soil Science Society of America, Madison, WI, 1994. xviii, 160 pp., illus. Paper, \$24; to SSSA members, \$20. SSSA Special Publication no. 33. From a symposium, Denver, CO, Oct. 1991.

The Faith of a Physicist. Reflections of a Bottom-Up Thinker. The Gifford Lectures for 1993–4. John Polkinghorne. Princeton University Press, Princeton, NJ, 1994. x, 211 pp. \$24.95.

The Falling Sickness. A History of Epilepsy from the Greeks to the Beginnings of Modern Neurology. Owsei Temkin. Johns Hopkins University Press, Baltimore, MD, 1994. xviii, 467 pp., illus. Paper, \$24.95. Reprint, 1971 ed.

Gender Development. Susan Golombok and Robyn Fivush. Cambridge University Press, New York, 1994. xii, 275 pp., illus. \$49.95; paper, \$16.95.

Genes and Human Self-Knowledge. Historical and Philosophical Reflections on Modern Genetics. Robert F. Weir, Susan C. Lawrence, and Evan Fales, Eds. University of Iowa Press, Iowa City, 1994. xx, 248 pp., illus. \$29.95; paper, \$14.95.

Geostatistics for the Next Century. Roussos Dimitrakopoulos, Ed. Kluwer, Norwell, MA, 1993. xxvi, 497 pp., illus. \$194 or £128 or Dfl. 320. Quantitative Geology and Geostatistics, vol. 6. From a forum, Montreal, June 1993.

Global Ecology. Environmental Change and Social Flexibility. Vaclav Smil. Routledge, New York, 1994. xiv, 240 pp., illus. \$59.95; paper, \$17.95.

A History of Vector Analysis. The Evolution of the Idea of a Vectorial System. Michael J. Crowe. Dover, New York, 1994. xviii, 270 pp., illus. Paper, \$7.95. Augmented reprint, 1967 ed.

Handbook of Pattern Recognition and Image Processing. Vol. 2, Computer Vision. Tzay Y. Young, Ed. Academic Press, San Diego, CA, 1994. xvi, 584 pp., illus. \$85.

Handshake Circuits. An Asynchronous Architecture for VLSI Programming. Kees van Berkel. Cambridge University Press, New York, 1994. xiv, 225 pp., illus. \$39.95. Cambridge International Series on Parallel Computation, 5.

Health Psychology. Biopsychosocial Interactions. Edward P. Sarafino. 2nd ed. Wiley, New York, 1994. xxiv, 592 pp., illus. \$55.95.

Hen's Teeth and Horse's Toes. Stephen Jay Gould. Norton, New York, 1994. 413 pp., illus. Paper, \$10.95. Reprint, 1983 ed.

High Performance Liquid Chromatography in Neuroscience Research. R. Bruce Holman, Alan J.