matical expressions of a single principle and are related in essentially the same way as the fullness and emptiness of a container. However, both verbally and graphically, Stiner treats them as if they were independent phenomena, and she interprets her data as revealing other, equally fundamental age structures. She particularly emphasizes a "prime-dominated" pattern that characterizes some of her Neanderthal and later human prey samples and that is distinguished by an abundance of prime-age adults (as opposed to juveniles, which are more numerous in both theoretical catastrophic and attritional profiles, and to old individuals, which are relatively more common in attritional ones). In fact, however, it is not possible to discover a new fundamental age structure, and even in wildlife biology most observed age profiles depart significantly from theoretical catastrophic or attritional expectations, mainly because of uncertainties in age estimation, population instability (short-term growth or shrinkage), or unavoidable census bias. The departures may suggest the forces that shaped a sample, but they are not grounds for defining a new fundamental pattern.

Stiner's difficulties with the difference between observed and theoretical distributions also lead to a problem in her interpretation of "prime-dominated" age profiles. She attributes these to a uniquely human form of "ambush hunting" practiced by at least some Neanderthals and most later people. The difficulty is that the kind of hunting she envisions would have reduced prey populations over time. She argues otherwise, on the example of modern game-management schemes. However, game managers preferentially remove prime-age animals to curb population growth, a predicament that Neanderthals and later Paleolithic people probably did not face. A more basic problem, though, is that Stiner's approach is based on only three age classes ("juvenile," "prime," and "old") of unequal length, and the result is that it is hard to detect departures from theoretical distributions for essentially the same reason that it would be difficult to assess statistical normality from a histogram comprising only three bars of unequal breadth. A more conventional analysis involving a sufficient number of age classes to gauge profile shape might show that her "prime-dominated" profiles conceal some truly interesting mortality profile variation.

My methodological concerns are not trivial, but they are offset by strong points that I have not discussed, such as an interesting chapter in which Stiner and a close colleague attempt to integrate faunal and artifactual data. Stiner's prose style is also lively and engaging, and there is no denying the intellectual attraction of her paleoecological approach. Some flaws aside, the book should be read by anyone contemplating a similar, behaviorally oriented analysis of fossil bones.

Richard G. Klein
Department of Anthropology, Stanford University, Stanford, CA 94305, USA

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Other Books of Interest

Quantum Mechanics. Historical Contingency and the Copenhagen Hegemony. JAMES T. CUSHING. University of Chicago Press, Chicago, 1994. xvi, 317 pp., illus. $65 or £51.95; paper, $27 or £21.50.

"The Copenhagen hegemony" at issue in this work refers in general to the physicists' rejection of—indeed refusal even to consider seriously—any interpretation of quantum mechanics that seeks to retain some features of the space-time visualizability and determinism that classical physical theories incorporated, and in particular to the cool reception accorded the interpretation of quantum mechanics put forward by David Bohm in 1952. Cushing, a physicist-philosopher, takes it as "a *historical* problem to explain [the] marginal status" of the Bohm interpretation. He addresses this historical problem by elaborating physicist Edward Nelson's hypothesis (quoted on p. 175) that "had the Schrödinger equation been derived [from stochastic mechanics] before the invention of matrix mechanics, the history of the conceptual foundations of modern physics would have been different." This brings Cushing back to the origins of the quantum mechanics and of the Copenhagen interpretation in the 1920s, with the result that his argument is divided over two, only very loosely connected historical fronts.

It is impossible not to be sympathetic to a philosopher who rejects his discipline's canonical distinction between the context of discovery and the context of justification and who, rather, believes that "any division between scientific practice and a metalevel of the methods and goals of science is largely a false dichotomy." On these grounds Cushing is prepared to give "an emphatic yes" to the historicist position that "if certain equally plausible conditions, rather than the actually occurring and highly contingent historical ones, had prevailed . . . our present understanding of the behavior of the fundamental laws of nature in terms of an inherently indeterministic physics [would] have been replaced by the apparently diametrically opposed view of absolute determinism." However, to make this case—indeed *any* counter-factual case—is considerably more difficult than Cushing appears to recognize. Moreover, the body of historical evidence he does bring forward goes so little beyond Max Jammer's long-standard historical examination of the interpretations of quantum mechanics (*The Philosophy of Quantum Mechanics*, 1974) that his theses remain at the end of this book just about what they were at the beginning. Although it fails to persuade, the book will have utility through the many capsule summaries, in two or three pages at a technical but accessible level, of theorems, thought experiments, and the like encountered in the early and the recent history of the interpretation of quantum mechanics, as well as through its very full bibliography and its exceptionally complete index.

Paul Forman
National Museum of American History

The Quantum Generation. Highlights and Tragedies of the Golden Age of Physics. MARGARITA RYUTOVA-KEMOKLIDZE. Springer-Verlag, New York, 1994. xxii, 327 pp., illus. $39.50. Translated from the Russian edition (Moscow, 1989) by John Hine.

The title of this book only remotely suggests its content, indeed is an artifact of the obstacles that the Soviet Union of the 1980s placed in the way of its original publication. True, some hundred of its 300 pages are just the sort of popularized physics that the title might lead one to expect, but most of these were written as substitutional material at the suggestion of the "two 'surgeons' [who] handled my case. One was a lady suffering from a serious goitre condition who simply would not look me straight in the eye. . . . The other was a buxom lady with a bouffant hairstyle who never doubted for a moment that she was right about everything." What these guardians of "the traditions of Soviet publishing" solicited from the author was material to substitute for some of the less pretty features of the life and times of the Russian theoretical physicist Yuri (Georg) Borisovich Rumer (1901–1985), whose biography is the real subject of this book. (Ironically, Springer-Verlag continues those traditions to the extent of adopting the misinformative title of the Russian edition.) This biography, in the concrete, down-to-earth, not-taking-themselves-too-seriously manner often found in the memoirs of Russian physicists (but much less often in those of Europeans and Americans), is based in large part upon Rumer's reminiscences as recorded by the author. The less valuable half of these 200 biographic pages is that devoted to Rumer's years, 1929–1932, in Göttingen, where he assisted Max Born and befriended "the