Niko Tinbergen, Irwin Bernstein, C. Ray Carpenter, Joe Erwin, William Mason, Ron Schusterman, Steve Suomi and Sherwood Washburn, to name a few). For those that are unfamiliar with the RPRC system, a brief history: in the late 1950s, NIH established a need for access to population(s) of primates for research in the United States. The original proposal for a single national research centre to act as a resource for primate research in the U.S.A. expanded into a programme of seven Centers, which have all survived to the present day. The first two Centers opened in 1962 in Beaverton, Oregon and at the University of Washington in Seattle, Washington. Shortly thereafter, five more Centers opened, most affiliated (to a greater or lesser extent and success) with academic institutions. The basic facilities of each Center are funded through five-year 'Core' grants through the National Center for Research Resources of NIH. The Centers are to provide basic research resources in primatology, including clinical/veterinary and husbandry support, to researchers in the U.S.A. and from overseas. A small faculty is partially supported by the Core grants, and there are large 'affiliate' researcher programmes at each Center.

Dukelow's history focuses on the personalities that were involved in hammering out the early structure of this system; hence the reference to 'alpha males' in the title. The book includes a chapter on the development of the RPRC system at NIH as the need for primates in research was being established, followed by chapters on each Primate Center (Oregon, University of Washington, University of Wisconsin, New England (Harvard), Yerkes (Emory), Delta (Tulane), California (University of California at Davis). Each chapter includes a section on the pre-establishment politics, including the choosing of initial director, a brief biography of each founding director, and a longer history of each Center under the founding director, followed by a brief epilogue bringing the biography of each director up to publishing time. The book makes extensive use of NIH records of early meetings and negotiations, as well as personal reminiscences of living directors, core staff members (past and present) and past advisors.

Unfortunately, frequent typographical errors (one every two or three pages) plague the book and are quite distracting. Otherwise, this book does a thorough job of documenting the development of an extremely successful federal programme and in doing so, provides some valuable insights into the politics of science, and many of the anecdotes are just plain fun to read. If you are a primatologist or are interested in the history or politics of science, you will enjoy and appreciate this book.

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Biological Perspectives on Motivated Activities. Edited by R. WONG. Norwood, New Jersey: Ablex Publishing (1995). Pp. x+434. Price $69.95.

Biological Perspectives on Motivated Activities is a brave, though ultimately unsuccessful, effort to bridge the gap between contemporary evolutionary perspectives on behaviour and the causal studies of motivation carried out in psychological laboratories during the 1970s and 1980s.

The volume's theoretical framework is provided by an opening chapter in which Cosmides & Tooby propose that an evolutionary psychology should be based on study of the domain-specific, information-processing systems that provide a crucial link in the causal chain connecting evolution and behaviour. This compelling restatement of positions that Cosmides & Tooby have developed in a series of landmark chapters published during the past decade is, like its predecessors, addressed primarily to those who study human cognition. Consequently, as its authors acknowledge, the introduction is not quite on target for a collection of nine empirical chapters that describe studies of motivation in non-human animals. Also, and unfortunately, only one of the other contributors to the book makes even passing mention of Cosmides & Tooby's work, and most seem not to have read each other's contributions. As a result, the volume's coherence depends almost entirely on its editor's introductions to each of the book's 10 chapters.

Wong often succeeds in drawing connections between diverse contributions, and he should be applauded for making the sort of effort that other editors of collected volumes (myself included) should make, but rarely do. The problem, and one that would be difficult to overcome, is that most of

the nine empirical chapters describe research initiated in a markedly different intellectual climate than that which prevails today. Perhaps as a result, discussions of evolutionary issues in the empirical chapters often seem tangential to the purposes of the studies of causal mechanisms of motivation that the various contributors describe.

As is almost always the case in an edited volume, the chapters are uneven; some are reviews of extensive literatures; others focus on the work of a single laboratory. All but one seem to have been written in 1990 or 1991. Porter & Levy's comparison of the olfactory communications mediating mother–young interactions in Norway rats, Egyptian spiny mice, rabbits and sheep; Raible's discussion of mechanisms controlling emergency, short-term and long-term regulation of feeding behaviour; and Schulze's insights into complexities of homeostatic mechanisms were particularly informative.

Considered as a whole, Rod Wong's volume is an ambitious, but possibly premature, undertaking. Perhaps, in the not-too-distant future it will be possible to edit a volume of studies of motivation undertaken to explore the psychological processes that link evolution to behaviour. *Biological Perspectives on Motivated Activities* points the way towards, but does not reach, that goal.

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The Natural Science of the Human Species: An Introduction to Comparative Behavioral Research, The 'Russian Manuscript' (1944–1948). By KONRAD LORENZ. Cambridge, Massachusetts: The MIT Press (1995). Pp. 384. Price $35.00.

It is hard to know just how to review this, the first book about ethology by Konrad Lorenz. Written as the introduction to a synthesis of comparative ethology he planned, this manuscript was composed while Lorenz was a Russian prisoner of war near Yerevan, Armenia from 1944 to 1948 and came to be known as the 'Russian manuscript'. Anyone who spent much time speaking with Lorenz learned about this manuscript when he described the plan it laid out for systematic studies of behaviour, summarized its history of ideas anticipating ethology or puzzled over its mysterious disappearance some time in the 1960s. My own conversations with Lorenz over several years in the 1970s were often centred on his recollections of this manuscript or questions about the ideas it presented, all of which now seem remarkably true to the original text. Written using steel nibs or birds' quills with potassium permanganate or diluted ink on low-quality Russian notepaper or cut pieces of paper cement sacks, the manuscript he brought back from prison camp was 750 pages long. So this review could be about the writing itself. How did he get the writing materials, remember so many quotations from diverse sources, organize his thoughts so clearly or even manage to write at all with no desk or light in unheated quarters? He apparently had a library of one book, Goethe's *Faust I*, so the writing alone would be a daunting achievement for those of us wedded to on-line libraries, spell checkers and other modern tools of the trade. Truly a triumph of human spirit, the existence of this manuscript speaks volumes about the man who returned from Armenia with it, two birds in cages constructed from salvaged wire and not much else.

Or the review could be about the manuscript as the source of Lorenz's writing and research after his return. Indeed, in her insightful editor's foreword, Lorenz's daughter, Agnes von Cranach, identifies how parts of the Russian manuscript served as the inspiration and partial content for several lectures, articles and two later books. In some sense, the manuscript lays out the life work Lorenz chose, particularly bringing into focus his concerns about the human species, which occupied so much of his writing in later life. For scholars of Lorenz, this is a treasure trove of his views about the origin of ideas in ethology and an estimation of their relative importance. Imagine a scientist today who could (or would!) write a manuscript presenting a comprehensive analysis of a field, its origins and prospects. As such, it is a remarkable historical document, destined to become an important reference for practising ethologists.

Or, the review could be about the text itself. Thanks to the wise choice of Robert Martin as the translator, we can hear Lorenz's resonant voice call out from the pages. Martin, in a delightful foreword, describes the special literary surgical skill he developed through his translations of Lorenz's other works. Anyone who has read