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Book Review

Not Father's Fatherhood Book

A Review of Peter B. Gray and Kermyt G. Anderson, *Fatherhood: Evolution and Human Paternal Behavior*. Harvard University Press: Cambridge, 2010, 320 pp., US\$23.96, ISBN 978-0674048690 (hardcover).

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Introduction and Summary

In many Western families and among policy makers that seek to influence the behavior of parents in these families, the consistent finding that women invest more in the care of their children than men is a seemingly constant source of concern and consternation. The clarifying light of an evolutionary analysis places these concerns in perspective and allows us to more fully understand why these sex differences are found in every culture in which they have been studied and helps us to address the equally important question of why the differences are not larger (Geary, 2010). The latter is the real riddle, as men's investment in their children is unusual among mammals and especially those that live in multi-male, multi-female communities. In all, about 5% of male mammals invest in their offspring (Clutton-Brock, 1991).

Gray and Anderson's *Fatherhood: Evolution and Human Paternal Behavior*, provides a much needed perspective on men's parenting in general, as well as nuanced discussion of how this parenting varies across cultures, historical periods within cultures, and across individual men. The evolutionary perspective is critical, but equally important is the focus on fatherhood, as books and articles on fatherhood are dwarfed by a large and growing body of research on motherhood and alloparenting (e.g., Hrdy, 1999, 2009). In redressing this balance, Gray and Anderson do for fatherhood what Hrdy (1999) has done for motherhood.

The book is lucidly written, lacks overwhelming academic jargon, and is organized in a reader-friendly manner. We agree with the authors' sentiment that this book should be of interest to a wide range of potential readers, including academics, laypeople, expecting fathers, seasoned fathers, and even policy makers. However, this book's readability should

not fool serious scholars: It addresses the most important theoretical and empirical contributions to the study of fatherhood in great detail, including quantitative comparative and cross-cultural data on the subject, some of which have been calculated by the authors themselves specifically for this book.

The book begins with evidence from comparative archaeology and primatology on the origins of human fatherhood, including informed hypotheses on the beginnings of paternal investment in human families (Chapter 1). The second chapter discusses cross-cultural and cross-generational variation in paternal care, clearly demonstrating the diversity of paternal behavior and discussing the potential sources of this variation. The authors then turn to cross-cultural variation in marriage systems, including discussion of divorce and remarriage (Chapter 3). Chapter 4 provides an overview of cross-cultural differences in fertility patterns, the demographic transition, and potential determinants of the demographic transition. Chapter 5 consists of, to our knowledge, the most inclusive analysis of the data pertaining to paternity certainty. The authors present data on cross-cultural, socioeconomic, and ethnic differences in paternity certainty and discuss the difficulty associated with accurately assessing non-paternity rates. Next, the authors examine possible influences of fathers on their children's outcomes, including an interesting and, considering the realities of modern fatherhood, apropos discussion of contributors to the increased likelihood of child support compliance (Chapter 6). Chapter 7 tackles the issue of stepfathers and cross-cultural variation in step-paternal investment.

In the book's 8th chapter, which concerns the tradeoffs between men's securing of resources, coalitional activities, and fatherhood, the authors present novel results on how men from 6 subsistence societies spend their time on these activities. The following chapter provides an overview of the effects of pregnancy and fatherhood on male sexuality, whereas chapter 10 addresses changes in male behavioral patterns after fatherhood, including the proximate bases of these changes (e.g., hormones). Next, the authors analyze sex differences in mortality and the moderating effect of fatherhood (Chapter 11). The book concludes with a chapter on some of the book's major themes and includes a thoughtful discussion of the policy implications that arise from an evolutionary view of fatherhood in modern society.

On the Origins of Parent-Offspring Correlations

Throughout the book, the authors identify several correlations among fatherhood status (e.g., living with biological or stepfather), paternal investment, and father and child outcomes. For example, the authors note that children who are raised in households with a stepfather have poorer outcomes than their peers who are raised by two biological parents, and that the stepchildren's outcomes are similar in some ways to those of children who are raised by a single parent (usually their mother). The authors conclude that poorer outcomes in stepchildren may be caused by less investment by a stepparent than by a genetic parent and/or from having spent time growing up in a single parent household (pg. 146).

In another case, the authors review the theory behind and the evidence for the hypothesis that girls who grow up in father-absent homes will facultatively adopt a faster life history strategy, characterized by earlier ages of menarche and first sex (Draper and Harpending, 1982; Belsky, Steinberg, and Draper, 1991). The authors conclude that the

evidence for this hypothesis is convincing, but that the effect of father absence on pubertal timing is small (pp. 123-127).

In both of these cases and others, the authors do not fully explore the possibility that heritable individual differences may provide more parsimonious explanations of the patterns they describe (see Rowe, 1994). We suspect that heritable individual differences may be responsible in some part for these parent-child correlations for a few reasons. Parent-child correlations have been shown to result much more from shared genes than from shared environments in quantitative genetic analyses (Harris, 1998; Scarr, 1992; Scarr and McCartney, 1983). We note caution, however, because these genetic analyses are usually conducted in modern populations, and the authors also present data from populations in which parenting may be more relevant to child outcomes.

Also, several life history traits may share a common genetic origin and produce effects from childhood to adulthood that may be simultaneously observed in an adult and their genetic offspring, resulting in correlations between parental behavior and their children's behavior (Figueredo, Vásquez, Brumbach, and Schneider, 2004). There is reason to believe that these findings may be relevant to at least one of the examples provided by the authors. The hypothesis that growing up without a father causes women to adopt a facultative life history strategy characterized by early menarche and early sexual debut was contradicted by a recent finding by Mendle and colleagues (2009). The authors found that children of identical twin sister dyads, who were also discordant on father absence, had indistinguishable ages at first intercourse. Specifically, the authors studied first cousins whose mothers were twin sisters. They found that when one cousin's father was present in the home and the other cousin's father was absent the two cousins' age at first intercourse was virtually the same. This may not be the final word in this issue, but it does suggest caution in making casual inferences based on correlated outcomes.

Conclusion

This book provides a broad, detailed, and well-written review of evolution and fatherhood, including integration of a wealth of quantitative, comparative, and cross-cultural data. The book's major strengths are its focus on empirical evidence, its firm foundation in evolutionary theory, and its readability. These qualities make the book essential reading for anyone interested in fatherhood and make it an excellent starting point for researchers who want to pursue evolutionarily informed studies of fatherhood. Perhaps the most important quality of this work is that it should spark the interest of young evolutionary minded scholars, such that in coming decades fatherhood will be studied with the same care and depth that motherhood has been.

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