BOOK REVIEWS

DESCARTES' BABY: HOW THE SCIENCE OF CHILD DEVELOPMENT EXPLAINS WHAT MAKES US HUMAN

By Paul Bloom. 271 pp., illustrated. New York, Basic Books, 2004. \$26. ISBN 0-465-00783-X.

Paul Bloom's premise in Descartes' Baby is that we are natural-born dualists. As infants, we instinctively divide the world into physical objects and mental states, and we reason differently about the two. Babies find it perfectly natural for a person to begin moving without coming into physical contact with anything but are surprised if an object moves under the same conditions. Out of the dichotomy between things and people grows our conviction that body and mind are distinct entities—that physical things are driven by principles such as solidity and gravity and immaterial minds are driven by emotions and goals.

Bloom does a masterly job of illustrating how we manipulate our dualism. We are able to see the same object as part of either the physical world or the mental world. We think differently about a painting by Vermeer and one that was painted to look like a Vermeer. We judge not only the physical product but also the creative act that led to the product, an act that is intimately tied to the goals of the creator. We can thus see a thing as more than a thing. But we can also see a person as less than a person. Disgust is a reaction to the physical, and when we use the term to describe our reaction to people, we are, in effect, turning those people into physical objects — we can then scorn them, ignore them, or even kill them.

In skillful prose that weaves together clinical research, literature, philosophy, neuroscience, and captivating examples from children (some of the best are from his own family), Bloom makes the case that responding differently to physical things and to immaterial minds is adaptive, an unsurprising product of evolutionary pressures. Moreover, the capacity to respond to the minds of others, which has developed during evolutionary time, has led to unexpected by-products during historical time. These by-products are some of our most interesting and distinctive traits — the ability to construct religions, value art, and hold moral beliefs, to name

just a few featured in the book. Bloom also makes a thought-provoking case for historical progress, not only in our dealings in the physical world but also in the moral world — we are "nicer to one another than we used to be," Bloom writes.

In addition to outlining change over evolutionary and historical timescales, Bloom tackles change over ontogenetic time. His examples from the world of developmental psychology are some of his best, since this is his own discipline. Bloom is careful not to claim that babies are full-blown dualists. The bias to see objects as distinct from people provides the foundation for a dualist stance, but that orientation needs to be fleshed out by children as they interact with members of their culture.

Bloom stops here. He does not consider the possibility of a culture that eschews dualism — a culture in which it does not make sense to ask whether the mind affects the body (or vice versa) because the two are one and the same. Are there nondualist cultures? Could there be? What type of historical trajectory might lead to nondualism? What type of developmental path would children born into nondualist cultures follow? Although it does not raise these questions, Bloom's far-reaching and provocative book brings novel speculations of this sort into bold relief and thus maps out the terrain for a new generation of thinkers.

Susan Goldin-Meadow, Ph.D.

University of Chicago Chicago, IL 60637 sgm@uchicago.edu

BIOLOGY AND PATHOLOGY OF THE OOCYTE: ROLE IN FERTILITY AND REPRODUCTIVE MEDICINE

Edited by Alan O. Trounson and Roger G. Gosden. 350 pp., illustrated. New York, Cambridge University Press, 2003. \$90. ISBN 0-521-79958-9.

POR A LONG TIME, WE HAVE BEEN TAUGHT that the oocyte in adult mammals is virtually inactive, that it essentially remains in a resting state until the periovulatory period. Evidence that has emerged in recent years paints an entirely different