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A kinder, gentler nativism?: Review of Alison Gopnik, *The philosophical baby*

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Book review

A kinder, gentler nativism?

Alison Gopnik, *The philosophical baby: What children's minds tell us about truth, love, and the meaning of life.* Farrar, Straus, and Giroux, New York, 2009, ISBN: 978-0-374-23196-5 (cloth), 288 pp., $25

In its historic philosophical and psychological formulations, nativism highlighted innateness. Development was deemed nothingmore than a genetically driven process ofmaturation; learning, in turn, was nothing more than the filling in of superficial content. In this determinist view, neither development nor learning could be deemed active, creative, or constructive processes, and nothing genuinely new could result.

The nativists who have increasingly populated the literature of developmental psychology since the 1980s, however, are neonativists. Neonativists fully accept modern views of immature organisms as dynamic, developing systems interacting with complex, everchanging physical, social, and cultural environments. In addition to the traditional nativist focus on the role of genes, neonativism also encompasses a constructivist focus on the active agency of the organism and an empiricist focus on the active role of the environment (see also Bjorklund & Pellegrini, 2002, on "evolutionary developmental psychology"). Thus, in place of a determinist view of development as genetically driven maturation, neonativism is a kinder, gentler nativism that begins with our evolutionary heritage but goes on to incorporate constructivist and empiricist considerations in providing a contemporary developmental account.

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Perhaps the kindest and gentlest nativism of all is the popular neonativism for parents presented in two books by prominent developmental researcher and theorist Alison Gopnik. The first, written with fellow developmentalists Andrew Meltzoff and Patricia Kuhl (Gopnik, Meltzoff, & Kuhl, 2001), was entitled *The scientist in the crib: What early learning tells us about the mind*. The scientist, it turned out, was both the developmental psychologist studying the baby and the baby studying everything. The notion of babies as scientists is consistent with both a nativist view of early competence and a constructivist view of children as active researchers and theorists. The subtitle then brings in an empiricist element in its reference to early learning. But nativism predominates throughout the book: early learning tells us what the mind is like because it is a product of our innate tendency to learn about people, about things, about language, and about matters in various other discrete domains for which we are innately prepared. We function like scientists right from the start because we are genetically programmed to do so. Thus, *The scientist in the crib* was neonativist in that it provided a serious role for constructivist and empiricist processes but incorporated these in a fundamentally nativist framework.

In what may be considered a sequel, Gopnik now presents a vision of the baby as a philosopher. Like its predecessor, *The philosophical baby* is aimed at a general audience, especially parents, and is readable, informative, entertaining, and often amusing. Like its predecessor, the book presents itself as passing on the latest findings from developmental psychology. It does indeed present interesting findings in clear and compelling ways. What will not be clear to the intended readers, however, is that what they are reading, rather than a consensus view of the field, is a neonativist interpretation.

Gopnik repeatedly highlights the "neo" side of neonativism in appealing to nativist, constructivist, and empiricist considerations in ongoing interaction, thus providing more often than not what most developmentalists would see as a reasonably balanced account. Early in the book, for example, she proceeds nimbly from a standard nativist notion of innate capacity to an inspiring overview of development that draws heavily on considerations associated with empiricism (especially in the first paragraph below) and constructivism (especially in the second):

> We begin with the capacity to learn more effectively and more flexibly about our environment than any other species. This knowledge lets us imagine new environments, even radically new environments, and act to change the existing ones. Then we can learn about the unexpected features of the new environment that we have created, and so change that environment once again and so on. What neuroscientists call plasticity—the ability to change in the light of experience— is the key to human nature at every level from brains to minds to societies.
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> Learning is a key part of the process, but the human capacity for change goes beyond just learning. Learning is about the way the world changes our mind, but our minds can also change the world. Developing a new theory about the world allows us to imagine other ways the world might be. Understanding other people and ourselves lets us imagine new ways of being human. At the same time, to change our world, ourselves, and our society we have to think about what we ought to be like, as well as what we actually are like. This book is about how children develop minds that change the world. (p. 8).

Gopnik later synthesizes constructivist, nativist, and empiricist considerations more concisely: "The drive to experiment seems to be innate, but experimentation provides us with a way of learning things that are not innate" (p. 91). Her constructivism is stated in strong forms: "A single unified self is something we create—not something we are given" (p. 17). And she performs a valuable service in cautioning readers that brain changes, far from being the cause of psychological development, are often the result of experience.

And yet, Gopnik's nativist foundation is clear in her striking claims of early competence. The book begins with a description of a 1-month-old child who "stares at her mother's face with fixed, browwrinkling concentration, and suddenly produces a beatific smile" (p. 3). "Surely," writes Gopnik, "she must see her mother and feel love" (p. 3). Gopnik later acknowledges that some stodgy old psychologists (unlike her) prefer the term "attachment" for what "the rest of us call love" (p. 179). She is serious, however, about what modern science, in her view,

has shown: "Literally from the time they're born children are empathic. They identify with other people and recognize that their own feelings are shared by others" (p. 204). Further, we learn that "even nine-month-olds understand some important statistical ideas" (p. 83) and that "babies, like scientists, use statistics and experiments to learn about the world" (p. 16). And Gopnik leaves no doubt as to the innate basis of this competence: "The scientific answer" to the question of how we know so much about the world "is that methods of experimentation and statistical analysis seem to be programmed into our brains even when we are tiny babies" (p. 105). In fact, as the book jacket gushes, "there is good reason to believe that babies are actually smarter, more thoughtful, and more conscious than adults."

But it may not take much to be smarter than adults. Even as neonativists have accumulated evidence for infant competence since the 1980s, research on adult judgment, thinking, and reasoning over the same period has generated a huge literature showing woeful deficiencies in statistical judgment, skills of experimentation, and other competencies that Gopnik deems innate (Moshman, 2011; Stanovich, 2004). What are we to make of this? Are we born as smart as we ever get? Is it downhill all the way beyond infancy? If these two literature are both to be believed, we start remarkably high and fall remarkably far.

Gopnik hints occasionally at the possibility of development beyond early childhood. Babies, she acknowledges, are only "*unconsciously* the most rational beings on earth" (p. 162, emphasis added). "Very young children *unconsciously* use [experimentation and statistical analysis] to change their causal maps of the world" (p. 105, emphasis added). We must consider "the relationship between the baby's implicit ideas about his particular mom and the grown-up's much more explicit ideas about love in general" (p. 189). These reminders of the limited nature of early competence are relatively few and subtle, however, with hardly a hint of how much remains to develop. A constructivist elaboration would put more emphasis on the implicit nature of early competence, the automatic nature of early inferential processing, and the reflective developmental processes that render knowledge and inference increasingly (though far from totally) explicit, conscious, and controlled over the course of childhood and adolescence (Campbell & Bickhard, 1986; Karmiloff-Smith, 1992; Moshman, 2011; Müller,

Carpendale, & Smith, 2009). Adolescents and adults may be far from perfect, but they are far from infants.

A constructivist elaboration might also provide a more accurate account of Piaget (Moshman, 2011; Müller et al., 2009), who is presented throughout the book as if his main conclusion after 60 years of research on children was that they are utterly incompetent and irrational. This is repeatedly contrasted to the more respectful "modern" view of infants and young children as innately competent and rational. For example, Gopnik presents Piaget's theory as asserting that "young children are limited to the here and now—their immediate sensations and perceptions and experience" (p. 20) and counters this view with evidence that infants of 18 months can imagine possibilities and outcomes on concrete tasks where 15-month-olds are limited to trial-and-error solutions (p. 24). But her data are in fact fully consistent with Piaget's own infancy data and with his detailed account of the transition from sensorimotor to representational intelligence in the first 18–24 months of life. Similarly, with regard to morality, Gopnik writes, "Piaget thought that children didn't have genuine moral knowledge because he thought that they couldn't take the perspective of others, infer intentions, and followabstract rules" (p. 20). But in fact, Piaget thought children actively construct increasingly advanced competencies in all of these areas (Müller et al., 2009). Where Piaget differed from Gopnik is in how little he thought we know at birth and how much he thought we actively construct through many years of interaction, coordination, and reflection. Ironically, it may be Piaget, rather than Gopnik, whose theory most fully respects the creative rationality of the developing mind.

But Gopnik certainly respects this, too. "The great evolutionary advantage of human beings," she writes, "is their ability to escape from the constraints of evolution" (p. 7). She does not take this as far as some (Stanovich, 2004), but her neonativism clearly demonstrates that we can take evolution seriously without succumbing to genetic determinism.

References

Bjorklund, D. F., & Pellegrini, A. D. (2002). *The origins of human nature: Evolutionary developmental psychology*. Washington, DC: American Psychological Association.

Campbell, R. L., & Bickhard, M. H. (1986). *Knowing levels and developmental stages.* Basel, Switzerland: Karger.

Gopnik, A., Meltzoff, A. N., & Kuhl, P. K. (2001). *The scientist in the crib: What early learning tells us about the mind.* New York: Perennial.

Karmiloff-Smith, A. (1992). *Beyond modularity: A developmental perspective on cognitive science.* Cambridge, MA: MIT Press.

Moshman, D. (2011). *Adolescent rationality and development: Cognition, morality, and identity* (3rd edition). New York: Psychology Press.

Müller, U., Carpendale, J. I. M., & Smith, L. (2009). *The Cambridge companion to Piaget.* New York: Cambridge University Press.

Stanovich, K. E. (2004). *The robot's rebellion: Finding meaning in the age of Darwin.* Chicago: University of Chicago Press.

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