A Mid-Century Modern Education By Alison Gopnik

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Henry James once said that the James family was his native country and he knew no other. This is true of many close, large, talkative families, like the Jameses, and it was certainly true of the close, large, talkative Gopnik family. My parents, my five younger brothers and sisters, and I lived in our own native country, encircled though we were by the barbarous nation of 1960s Jewish middle-class Philadelphia. Our founding fathers were Galileo, Darwin, and Einstein; Shakespeare, T. S. Eliot and James Joyce; Picasso, Marcel Duchamps, and Mies Van der Rohe. Science, Art, and Modernity were our constitutional principles and Superstition, Vulgarity, and Sentimentality were our deadly enemies.

In retrospect, I realize that my parents were part of a much broader postwar social revolution. The traditions of high European modernism, the sensibilities of the Vienna Circle, Montmartre, and Weimar, were transplanted after the war to the children of poor Jewish immigrants in Philadelphia, Newark, and Brooklyn. My grandfather ran a corner grocery store in a rundown Philadelphia neighborhood and never finished elementary school. But my parents, like an entire generation of American intellectuals, discovered the booming postwar public libraries and museums and concert halls and ended up populating the booming American universities, first as scholarship students and later as professors. The comedy of Woody Allen and Philip Roth, who are my parent's contemporaries, is the comedy of this transformation; bagels and knishes meet Flaubert and Kafka. My parents

had the special enthusiasm of a generation who felt that they had created a new world all by themselves.

But my experience as the child of these children of immigrants was a bit different. All children see their parents *sub specie aeternitatis*—as unchanging, eternal elements of the natural world, rather than as particular people at a particular phase of history during a few particular years in their lives. And this is especially true in big families where all the background is shared. So for us kids the passionate intellectual life was just the way things were.

Historical context or no historical context, the intellectual enthusiasm in our house was idiosyncratically intense. In 1959, when I was four and my brother was three, my mother dressed us in gold velveteen outfits sewn for the occasion, and we piled into our battered VW bug, drove to New York, and stood in line for hours for the opening of the Guggenheim Museum. We walked through the museum, got in the car, and drove back to Philadelphia. (My parents disapproved of the architecture; they thought Frank Lloyd Wright was a little sentimental). At around the same age, we went trick or treating as Hamlet and Ophelia, in handmade wool wigs. For later Halloweens, my siblings and I dressed up as the Greek pantheon (I was Athena), an abstract-expressionist art gallery (I was a Franz Kline), and a fully articulated four-child-long version of the dragon in *Beowulf* (I was in the head and orchestrated both the flames and the smaller children behind me). When I was 10, the four oldest children appeared every night in Bertolt Brecht's *Galileo*, directed by Andre Gregory, then a young avant-garde director starting out in the Philadelphia boondocks.

Other families took their kids to the theatre to see *The Sound of Music* or *Carousel*; we saw Racine's *Phaedra* and Samuel Becket's *Endgame*. (My parents thought *Waiting for Godot* was a little sentimental.) Other families went to see the Statue of Liberty and the Empire State Building when they visited New York; we

went to see Lever House and the Seagrams Building. Other families listened to Beethoven or the Texaco-Metropolitan Opera Radio broadcasts; we listened to Alfred Deller singing John Dowland and Robert Craft's recordings of Gesualdo motets. Other little girls had pageboy hair-cuts and wore white socks and black patent-leather Mary Janes. My sisters and I all had very long, straight, dark hair, and my favorite outfit was a black leotard and tights under an olive-green jumper made of tent canvas. Our family read Henry Fielding's eighteenth-century novel *Joseph Andrews* out loud to each other around the fire on camping trips, and when we decided, like all those other kids, to put on a play, we chose the great screen scene from Sheridan's *The School for Scandal*.

The artistic and literary sides of our lives were most flamboyant; we were a theatrical family in more ways than one. But it was a mark of my parent's brand of modernism that science played an integral role in their vision of high culture. We were proud—and, indeed, practically religious—atheists, and the story of Galileo's persecution by the Inquisition was one of our founding mythologies. "And still it moves" was one of our catchphrases. My father became an English professor, but he took courses at Penn with Nelson Goodman, the great logical empiricist philosopher, and told us about the principles of verificationism and the problem of induction. My mother was in one of the first serious linguistics programs, also at Penn, just as Noam Chomsky, a fellow student a few years earlier, was revolutionizing the study of language. "The program is in formal linguistics and mathematical logic," she would say coolly when some rug-selling cousin asked how many languages she spoke. When my fourth-grade teacher defined a noun as a "person, place, or thing," I had to explain to her about distributional analysis and transformational grammar. (We alternately ignored and despised school, but at this remove one can't help feeling a bit sorry for the hapless teachers who found themselves with omniscient Gopnik children in their classes).

We were weird, no question about it. We were "precocious children," "child prodigies," and, according to the pop psychology of the day, we should have been twisted neurotics. But the truly extraordinary, really weird thing about our upbringing was my parents' gift for making this weirdness seem absolutely natural and normal—the accepted, ordinary, happy way that civilized people went about their lives. They were devoted to their children's intellectual lives all right, but their devotion was utterly unlike the twenty-first-century, upwardly mobile, middle-class parental obsession with "enrichment" and "achievement."

My parents met when they were eighteen, dropped out of college, and had six children in the next eleven years. When I was a child, my father worked several clerical jobs, often at once, and my mother took care of us, while they both went back to school and got PhD's. We never had much money, and when I was growing up we were positively poor, though my parents somehow always managed to surround us with good art and well-designed modern furniture. Until I was five, we lived in a public housing project. Then my parents bought a big dilapidated old Victorian house at 41st and Locust St. (then a very dubious neighborhood) for \$9,000 and knocked down walls, exposed brick, and painted everything white, long before that was fashionable.

We went to ordinary Philadelphia public schools and never were in a "gifted" program or an after-school class or summer camp. In school, during the hopelessly dull classes, I hid a book under my desk and read. After school, I came home and curled up in the mid-century-modern Bertoia chair and read. In the summer, I sat in the garden in the Eames chair and read. After elementary school I never got particularly good grades, and this was never a big deal. I would not have been admitted to Berkeley, where I now teach. For me, intellectual life wasn't something you achieved, it was something you breathed. I never felt "enriched,"

though I did sometimes notice that other kids seemed oddly, peculiarly, impoverished. And I was very happy.

I never decided to become a scientist. I did know that I wanted to be a philosopher and spend my life thinking, and that I wanted to think about children. Becoming a developmental psychologist just turned out to be the best way to do that. Philosophy, particularly rigorous analytical philosophy of the Nelson Goodman sort, was very much part of the background of our house. But then just about every discipline was part of the background of our house. My little brothers and sisters grew up to be a *New Yorker* writer, the head of the National Academy of Sciences ocean studies board, a Near Eastern archaeologist, the *Washington Post* art critic, and a public-health manager, and I feel sure that each of them could find the roots of their vocation somewhere in the polymath atmosphere of the Gopnik household.

I was an omnivorous reader and devoured science books, but then I devoured everything. I read the wonderful George Gamow "Mr. Tompkins" books, with their vivid visualizations of quantum theory and relativity, which still provide me with my mental images of physics—I still think of electrons as naked, mustachioed, middle-aged men whirling through space. I read Eve Curie's biography of her mother, *Madame Curie*, many times over. (I wonder whether there is any woman in science today who didn't read *Madame Curie* many times over.) But I wasn't the sort of kid who did chemistry projects or collected beetles, and while I liked to read about Marie Curie painstakingly distilling the giant heap of pitchblende to find the teaspoonful of radium, I thought it sounded like rather tedious work. (It was only in graduate school, when I switched from philosophy to psychology, that I discovered that distilling the pitchblende to find the radium—in psychology, we use control conditions and pilot studies—could actually be fun.)

My favorite science book was called *Discovering Scientific Method* by Hy

Ruchlis, —a book that was not about any science in particular but that explained the philosophy of science and showed how to apply scientific thinking to everyday life.

My most memorable encounter with philosophy, though, came—oddly enough—through TV. One night when I was ten we watched a dramatization of Socrates' last days, and though my parents thought it was a little sentimental, I loved it. I have always wondered how Socrates got on prime-time TV in 1966, and as I was writing this essay I e-mailed my family to see if they remembered any more details. My writer brother Adam immediately reported that what we had seen was actually a play called *Barefoot in Athens* by Maxwell Anderson, with Peter Ustinov in the lead. He remembered the drama, but I remembered only the argument and had entirely erased the literary details (though this does explain why I have always imagined Socrates with a blond beard and an English accent). It wasn't so much the heroic story I liked, as the idea that these people did nothing but think and talk all day.

Typically, my parents handed me a copy of the Penguin collection of Plato's works, a battered paperback with Raphael's famous picture of the Academy on the cover; they never thought that anything was too difficult or grown-up for their children to read. This, I decided, was how I wanted to live. Ancient Athens, like eighteenth-century London and 1920s Paris, was clearly a province of Gopnik country, and I made models of the Acropolis in the backyard with sticks and rocks figuring as arguing philosophers.

But even in that very first encounter with philosophy there was a catch. The argument in the Penguin Plato that impressed me the most was Socrates' case, in the *Phaedo*, for immortality and against death. Like practically all ten-year-olds, precocious or not, I worried a lot about death, and as a committed atheist I was certainly in the market for a good argument for immortality. Socrates argues that

something as complex as the soul can't appear and vanish out of nowhere, and therefore it must exist, before and after our individual lives, in an abstract Platonic heaven. What struck me about the argument was that there was no mention anywhere of children. It seemed obvious to me that your soul was created at least in part by the genes you inherited and the ideas you acquired from your parents, and that it continued after death in the genes and ideas you passed on to your children. Of course, this idea depended on scientific concepts that weren't available to Socrates. But what really struck me was that even if Socrates didn't know about genes, he must have known about children, and yet they were never even mentioned in the *Phaedo*.

This seemed particularly strange because—in our family, and for me in particular—children were so obviously important and interesting. Like many oldest sisters, I was an unofficial parent (according to my younger siblings, considerably stricter and bossier than the official ones). I had my own first child soon after I left home, and my youngest is still only fifteen. I have never lived a life in which I was not taking care of children, and babies and young children have always seemed to me to be the most surprising, unpredictable, and interesting of companions.

Many scientists report that they first became fascinated by their subject matter long before they understood much about science as an institution—all those child stargazers and butterfly collectors and dinosaur maniacs. I suspect that there are few reports of scientists with a childhood fascination for babies, because most of those children turned into nursery school teachers or children's librarians or just stay-at-home mothers. An intelligent girl who was fascinated by stars might well brave the hurdles that face a woman in science. What else could she do? An intelligent girl who was fascinated by children was behaving just the way girls were supposed to behave and wouldn't even have thought about science as a possible career. And this is particularly true because children are actually the

biggest hurdle facing women in science. Scientific institutions make it very difficult for women to combine child rearing and a scientific career. It seems to me now that I was destined to become either a psychologically minded philosopher or a philosophically minded psychologist. But I think, in fact, that given very slightly different contingencies, I might have become a rather frustrated preschool teacher or faculty wife.

Just when childhood ends is a difficult question, especially for precocious children who (depending on your point of view) have always been grown up or never grow up at all. For me, there was a sharp dividing line at twelve, when we moved from Philadelphia to Montreal and I entered a mercifully short period of high school misery. But I was still only fifteen in 1970 when, through a weird combination of Quebec politics and bureaucratic fluke, I entered McGill University. My parents had faculty jobs there by then, and I learned early that I could take any course I wanted to if I was determined enough. My freshman year was an annus mirabilis. I attended a graduate seminar that combined faculty from philosophy, computer science, psychology, and linguistics —it must have been one of the first cognitive science courses anywhere in North America —and became a philosophy honors student and founder, president, chief activist, and head cook of the Philosophy Students Association. McGill might not seem an obvious home of the cognitive revolution, but there was certainly something in the air; a remarkably large number of my undergraduate contemporaries there went on to become accomplished cognitive scientists.

I also had a lot of other kinds of informal tuition in my teens. I suppose I agree with policies that ban undergraduates from sleeping with their teaching assistants, but "Introductory Syntax," "Philosophical Logic," and "The Psychology of Language" would have been a lot duller if those policies had been in force at McGill. For about five minutes in the seventies, after the pill but before AIDS, it

was possible for fifteen-year-old girls to experience genuinely carefree sexual adventure for the first and only time in history. I'm glad I was fifteen then. I also agree in general with policies that ban minors from bars, but I'm glad that they weren't in force at the legendary Le Bistro on Mountain Street. Students like me—and artists and journalists, scientists and political activists—drank Pernod and Labatt's 50 beer at the zinc bar, smoked evil-smelling Gauloises and Gitanes at the marble tables, and talked late into the cold Montreal winter night. There was a general glow and excitement and sense of possibility in Montreal then, in the bars and in the streets as well as in the classrooms. Politics and philosophy, sex and science, all seemed expressions of the same underlying revolutionary spirit.

As a developmental psychologist, I am often called upon to pontificate about how science education in America could be reformed. There were aspects of my own education that could perhaps have been improved. I might have been a better scientist if I had learned to be more disciplined and hardworking—less of a fox and more of a hedgehog. I certainly wish I had been forced to do more mathematics. But in general I think the education most children get should be more like my informal education. My siblings and I weren't prodigies by nature. We were ordinary children who had rich opportunities to learn and who were taken seriously by people who cared about us. I think preschools and elementary schools should be much more like that big Victorian house with the modern furniture on Locust St., and high schools and universities should be much more like Le Bistro, though perhaps with somewhat less smoke and alcohol. And I think young women shouldn't feel that they are defying the odds if they try to combine motherhood and a scientific career. I was lucky—but children, and science, shouldn't have to rely on luck.

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