The Myth of Prodigy and Why it Matters

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Judging from his boyish appearance and his voracious curiosity, it's easy to imagine Malcolm Gladwell as some sort of child prodigy. And he was. But not the way you imagined.

As a teenager growing up in rural Ontario, the bestselling author of Blink and The Tipping Point was a champion runner, the number-one Canadian runner of his age. He was encouraged to dream of Olympic gold, and indeed was flown to special training camps with the other elite runners of his generation — on the assumption that creating future world-class athletes meant recognizing and nurturing youthful talent.

Precocity was the subject of Gladwell's "Bring the Family Address" at this year's APS Convention, and the account of his own early athletic success served as a springboard. "I was a running prodigy," he said bluntly. But — and this "but" sounded the theme of his talk to the rapt audience filling the Marquis Marriott's Broadway Ballroom — being a prodigy didn't forecast future success in running. After losing a major race at age 15, then enduring other setbacks and loss of interest, Gladwell said, he gave up running for a few years. Taking it up again in college — with the same dedication as before — he faced a disappointing truth: "I realized I wasn't one of the best in the country ... I was simply okay."

The fall from childhood greatness to a middling state of "simply okay" is, Gladwell suggested, a recurring theme when the cherished notion of precocity is subjected to real scrutiny.

"I think we take it as an article of faith in our society that great ability in any given field is invariably manifested early on, that to be precocious at something is important because it's a predictor of future success," Gladwell said. "But is that really true? And what is the evidence for it? And what exactly is the meaning and value of mastering a particular skill very early on in your life?"

There are two ways of answering these questions. One is simply to track the achievements of precocious kids. Gladwell cited a mid-1980s study (Genius Revisited) of adults who had attended New York City's prestigious Hunter College Elementary School, which only admits children with an IQ of 155 or above. Hunter College was founded in the 1920s to be a training ground for the country's future intellectual elite. Yet the fate of its child-geniuses was, well, "simply okay." Thirty years down the road, the Hunter alums in the study were all doing pretty well, were reasonably well adjusted and happy, and most had good jobs and many had graduate degrees. But Gladwell was struck by what he called the "disappointed tone of the book": None of the Hunter alums were superstars or Nobel- or Pulitzer-prize winners; there were no people who were nationally known in their fields. "These were genius kids but they were not genius adults."

A similar pattern emerged when Gladwell examined his own cohort of elite teen runners in Ontario. Of the 15 nationally ranked runners in his age class at age 13 or 14, only one of that group had been a top runner in his running prime, at age 24. Indeed, the number-one miler at age 24 was someone Gladwell had known as one of the poorer runners when they were young — Doug Consiglio, a "gawky kid" of

whom all the other kids asked "Why does he even bother?"

Precociousness is a slipperier subject than we ordinarily think, Gladwell said. And the benefits of earlier mastery are overstated. "There are surprising numbers of people who either start good and go bad or start bad and end up good."

Gifted Learning vs. Gifted Doing

The other way to look at precocity is of course to work backward — to look at adult geniuses and see what they were like as kids. A number of studies have taken this approach, Gladwell said, and they find a similar pattern. A study of 200 highly accomplished adults found that just 34 percent had been considered in any way precocious as children. He also read a long list of historical geniuses who had been notably undistinguished as children — a list including Copernicus, Rembrandt, Bach, Newton, Beethoven, Kant, and Leonardo Da Vinci ("that famous code-maker"). "None of [them] would have made it into Hunter College," Gladwell observed.

We think of precociousness as an early form of adult achievement, and, according to Gladwell, that concept is much of the problem. "What a gifted child is, in many ways, is a gifted learner. And what a gifted adult is, is a gifted doer. And those are quite separate domains of achievement."

To be a prodigy in music, for example, is to be a mimic, to reproduce what you hear from grown-up musicians. Yet only rarely, according to Gladwell, do child musical prodigies manage to make the necessary transition from mimicry to creating a style of their own. The "prodigy midlife crisis," as it has been called, proves fatal to all but a handful would-be Mozarts. "Precociousness, in other words, is not necessarily or always a prelude to adult achievement. Sometimes it's just its own little discrete state."

Early acquisition of skills — which is often what we mean by precocity — may thus be a misleading indicator of later success, said Gladwell. "Sometimes we call a child precocious because they acquire a certain skill quickly, but that skill turns out to be something where speed of acquisition is not at all important. ... We don't say that someone who learned to walk at four months is a better walker than the rest of us. It's not really a meaningful category."

Reading may be like walking in this respect. Gladwell cited one study comparing French-speaking Swiss children, who are taught to read early, with German-speaking Swiss children, who are taught to read later but show far fewer learning problems than their French-speaking counterparts; he also mentioned other research finding little if any correlation between early reading and ease or love of reading at later ages.

When we call a child "precocious," Gladwell said, "we have a very sloppy definition of what we mean. Generally what we mean is that a person has an unusual level of intellectual ability for their age." But adult success has to do with a lot more than that. "In our obsession with precociousness we are overstating the importance of being smart." In this regard, Gladwell noted research by Carol Dweck and Martin Seligman indicating that different dimensions such as explanatory styles and attitudes and approaches to learning may have as much to do with learning ability as does innate intelligence. And when it comes to musicians, the strongest predictor of ability is the same mundane thing that gets you to Carnegie Hall: "Really what we mean ... when we say that someone is 'naturally gifted' is that they

practice a lot, that they want to practice a lot, that they like to practice a lot."

So what about the ur-child-prodigy, Mozart? Famously, Mozart started to compose music at age four; by six, he is supposed to have traveled around Europe giving special performances with his father, Leopold. "He is of course the great poster child for precociousness," Gladwell said. "More Upper West Side adults have pointed to Mozart, I'm quite sure, as a justification for sending their kids to excruciating early music programs, than almost any other historical figure."

Yet Gladwell deftly debunked the Mozart myth. "First of all, the music he composes at four isn't any good," he stated bluntly. "They're basically arrangements of works by other composers. And also, rather suspiciously, they're written down by his father. ... And Leopold, it must be clear, is the 18th-century equivalent of a little league father." Indeed Wolfgang's storied performing precocity was exaggerated somewhat by his father's probable lying about his age. ("Mozart was the Danny Almonte of his time," Gladwell quipped, referring to the Bronx little league pitcher whose perfect game in 2001 was thrown out of the record books when it was revealed that he was 14, not 12, and thus too old for little league.)

But most importantly, the young Mozart's prowess can be chalked up to practice, practice, practice. Compelled to practice three hours a day from age three on, by age six the young Wolfgang had logged an astonishing 3,500 hours — "three times more than anybody else in his peer group. No wonder they thought he was a genius." So Mozart's famous precociousness as a musician was not innate musical ability but rather his ability to work hard, and circumstances (i.e., his father) that pushed him to do so.

"That is a very different definition of precociousness than I think the one that we generally deal with."

A better poster child for what precociousness really entails, Gladwell hinted, may thus be the famous intellectual late-bloomer, Einstein. Gladwell cited a biographer's description of the future physicist, who displayed no remarkable native intelligence as a child but whose success seems to have derived from certain habits and personality traits — curiosity, doggedness, determinedness — that are the less glamorous but perhaps more essential components of genius.

Precocious is Pernicious

Our romanticized view of precociousness matters. When certain kids are singled out as gifted or talented, Gladwell suggested, it creates an environment that may be subtly discouraging to those who are just average. "In singling out people like me at age 13 for special treatment, we discouraged other kids from ever taking up running at all. And we will never know how many kids who might have been great milers had they been encouraged and not discouraged from joining running, might have ended up as being very successful 10 years down the road."

Although Gladwell acknowledged the wisdom of wanting to provide learning environments suited to different paces of achievement, he suggested that "that very worthy goal is overwhelmed by ... our irresistible desire to look at precociousness as a prediction."

"We thought that Doug Consiglio was a runner without talent," he said, returning to his earlier example. "But what if he just didn't take running seriously until he was 16 or 17? What if he suddenly found a

coach who inspired him?" Predictions from childhood about adult performance can only be made based on relatively fixed traits, he said. "Unfortunately ... many of the things that really matter in predicting adult success are not fixed at all. And once you begin to concede the importance of these kinds of non-intellectual, highly variable traits, you have to give up your love of precociousness."

Gladwell concluded his talk with a story he said his brother, an elementary school principal, likes to tell — "the story of two buildings. One is built ahead of schedule, and one is being built in New York City and comes in two years late and several million dollars over budget. Does anyone really care, 10 years down the road, which building was built early and which building was built late? … But somehow I think when it comes to children we feel the other way, that we get obsessed with schedules, and not with buildings. I think that's a shame. … If you want to know whether a 13-year-old runner will be a good runner when they're 23, you should wait until they're 23."