

The Four Minute Mile----And the Entire Sport World Is Changed

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1954 was a very good year.

Steve Allen and George Gobel were the big TV hits.

“On the Waterfront” became a classic.

Otto Graham was the premier quarterback in the NFL

Shelley Mann had survived a crippling bout with polio to
become the A.A.U. champion swimmer

Senator Joseph McCarthy dominated the news.

Perry O’Brien became the first to ever throw over 60 feet in the
shot put.

Brown v. Board of Education turned race relations in the U.S.
upside down.

Augustana had 841 full time students, 75 faculty, an
endowment of 2.25 million, and an 84,000 volume library.

The University of Iowa had 7390 students 1337 faculty, an
endowment of only 690,000 but it also had a 1.4 million
volume library.

Willie Mays won the MVP award and the National league
batting championship.

Everett Dirksen was the Illinois senator; Fred Schwenga was
the Davenport representative.

Field trials for the polio vaccine began in April.

Lionel Barrymore died; so did Enrico Fermi and Coach “Pop”
Warner

Emmet Kelly was world-famous clown.

The population of the U.S. was 162, 414,000.

Ernest Hemingway won the Nobel Prize for literature.

A stamp cost 4 cents.

Some of the goings-on of 1954 were more important than others, but surely near the top of that list belongs an achievement believed impossible by many: a 25 year old medical student ran the distance from here to the river in less than four minutes. **Four!---from here to the river!** He set aside his neurology labs and anatomy studies for a day and with the pacing of two other world-class runners set out to achieve what the sport world said couldn’t be done. Neither the windy weather that day nor mile-racing history even hinted at probable success: a sub-four minute mile was just something that couldn’t be done, even on a perfect day. But on this windy, rain-soaked track Roger Bannister changed all sport---not just track---for good. And he changed it because the power of his own imagination

achieved a feat that arguably was the most ground-breaking athletic achievement of the 20th century. This mile established a new athletic adage: “the impossible isn’t.” In addition to superb mental focus and rigorous training, the power of imagination carried Bannister through four laps around that track at Oxford University in 3 minutes and 59.4 seconds to set up hundreds of milers throughout the world to subsequently break that so called “impossible” barrier over a thousand times since. Even three U.S. high school trackmen have done it. After Bannister broke the barrier, almost immediately others did too. Four minutes was no longer “unimaginable.”

I often wonder what Bannister’s achievement contributed to those athletes who imagined----and then achieved----a 20-foot pole vault, an 8-foot high jump, 100 points in a basketball game. Poet Samuel Taylor Coleridge says in his “lectures on Shakespeare” that **“the imagination is the distinguishing characteristic of [humans] as progressive being[s].”**

Here I am reminded of a meal with the Augustana team the night before we were to compete. Pizza Hut had a sentence on their table mats that challenged impatient customers to try to find 20 different words by reordering any of the letters. 20 words got you a free Pepsi. Everybody except our table returned to the motel after supper, but four of us started to get creative: we upped the count to 40 in a couple minutes. In a few more minutes we had 100. We stayed working, using the French of one student, the Spanish of another, and we stopped when we had reached 420! The manager was so impressed that he gave us two free pizzas! I told a coach from another school of our accomplishment, and two weeks later he telephoned me to say his team found 430! Before our 420, I wonder if anyone went beyond 20!

Coleridge had been writing about literature, but he could have been talking about “progressive human beings” at a Pizza Hut. He could have been writing about the track world!

Bannister’s track world began as a kid. In his autobiography he recalls standing barefoot on the seashore when the beauty of the place just caused him to jump for joy. He was alone, and he looked around to see if anyone had seen him. No one there, so he broke into a run, and he remembers:

I was running now, and a fresh rhythm entered my body.

No longer conscious of my movement I discovered a new unity with nature. I had found a new source of power and beauty, a source I never dreamt existed (1,4MM).

This was the start of a consciousness that would take Bannister into rigorous training, intentional study of running physiology and neurology, and a complex philosophical understanding of that “new source of power and beauty.”

But it didn't take long before competition became a part of the “beauty” of running. When he was 16 his father took him to watch a meet. He later reflected on what that first meet meant:

*I watched an English runner called Sidney Wooderson, who **had** held the world record [4:06.4] for the mile. . . He was [now] not in the same league, but he came up and challenged the [current] world record holder on the last bend. The challenge was easily fought off by the Swede, but there was a feeling of courage that he showed in tackling the Swede But this exchange, this battle was, I think, the thing which led me to go on from simple running for pleasure to running with this target of records, Olympic games and other events in mind. (Interview, 8).*

At 17 he was accepted at Oxford, a rare honor because only ten percent of the places were open to students from schools; the rest were reserved for ex-service men. He was put on the track team only as a gesture of kindness because the team captain saw him shoveling snow with a special vigor. Bannister had previously run a 5-minute mile in a freshman race, but that time (which is slower than the pace of the first mile in a 5-mile college cross country race today) surely was not impressive. As the team's 3rd entry, he was not expected to do anything. But, he won the race in 4:30, and was never again a 3rd string anything (Interview, 12). Oxford had a coach, but Bannister fell out with him early-on simply because that coach was authoritarian and secretive. When Bannister asked about why he assigned a given workout, the coach would answer “because I'm the coach.” When he asked the time of a given repeat on the track, the coach responded with “don't worry about that.” Bannister decided then that he would go it alone on what would be the beginning of his eight-year career that would turn him into a world-class miler.

But the mile race presented an elusive dream. The best runners throughout the world for many years had attempted to run

1,760 yards---4 laps around the track---in less than four minutes, but all the failures and the few close calls made many think it was physically impossible.

Among the famous runners who held the record before WWII were Paavo Nurmi of Finland (*who ran 4:10 2/5 in 1923*) and Glenn Cunningham of the U.S. (*who in 1934 ran 4:06.8*). Two Swedes (Arne Andersson and Gunder Hagg) alternately lowered this record until Hagg finally ran a brilliant 4:01.4 in 1945. That record would last almost 9 years. The very best attempted and failed to break the barrier, and it began to seem impossible to go faster.

Australian John Landy had run 4:02 on six occasions, and Wes Santee, the son of a Kansas ranch hand who according to one sports writer “flat out believed he was better than anybody else” held the American record at 4:02.4 (Chase 70). And there was Bannister studying medicine at Oxford. He had run a disappointing 4th in the 52 Olympics, but since had lowered the British record to 4:02.0. So by 1954 after nine years of trying, still no one had run faster than Hagg’s 4:01 and the “barrier” myth grew bigger and bigger. Landy himself said “two little seconds are not much. But when you are on the track those 15 yards seem solid and impenetrable---like a cement wall” (Schulman). Maybe it really was impossible to make a human body run (from here to the river) 5280 feet in less than 4 minutes.

But if it was impossible, something in the imagination of these runners compelled them to continue the pursuit almost relentlessly.

Bannister himself says,

Now logically, I could not understand, as a physiologist, why a human being can run a mile in four minutes and two seconds, and four minutes and one second, and why somebody else won't inevitably come along, train a little better, know that there's a target to be beaten, and beat it. So that was my mental approach to it. It was just fortunate for me that the pathway of record breaking, which continues in all aspects of athletics, had just reached this magical critical four minutes; four laps of one minute each, on a quarter mile track. That was really the reason why it had conspired to become a possible barrier, physical or psychological. It wasn't, in my view, physical, but it did become to some extent psychological. And it was really an example—I don't know whether the word paradigm is correct---paradigm of human achievement in a

purely athletic sense. What limits are there to what the body can do?" (Interview)

Theories and psychology put aside, there was work to be done. Lacing up the shoes to hit the track unwaveringly, day after day--- and facing the media's fixation on "failure" every time someone missed the magic 3:59---even if a world record were the outcome---made up the burdensome atmosphere. And in the midst of this toil and pressure were these amateurs---no million dollar contracts, no bonus gifts for records or wins, no advertising perks, no 5 star locker rooms---"they had to scrape around for pocket change, relying on their hosts at races for decent room and board. The prize for winning a meet was usually a watch or small trophy." For Landy, Santee, Bannister, and anyone else bold enough to try, it was only for the sake of the attempt: "the reward was the effort" (Bascomb 71).

And the effort was tremendous. Bannister's training log shows up to 53 miles per week and 3 very intense workouts in 4 days (Bannister, 116+). But he thought he had to. On the other side of the Atlantic, Wes Santee, running under the famous coach Bill Easton at the University of Kansas, was also training somewhat like Bannister--moderately high mileage coupled with fast shorter repeats on the track. Their plan for the season focused on the Compton Invitational in Los Angeles in June. Santee's main competition would be the Finish miler Denis Johansson who had---by earlier remarks in an interview---almost ensured that the race would be more about winning than about breaking 4 minutes. Johansson had said that he thought Santee would someday be a great miler, but now he was too "unstable, flighty, and cocky" (Bascomb 73). Santee then had one focus: crush Johansson. The Compton mile now had become a personal vendetta, not a race against the clock, so the racers set a slow pace, and hit the half mile mark at 2:05. No hope now for a sub-four, and the crowd began to boo. That brought out Santee's fight and he shot past Johansson, passed the three-quarter mark in good shape, and tried to maintain what was now a very wild and fast pace. He won, but he couldn't maintain that reckless pace and his time was 4:02.4 (Bascomb 72). Bannister had always thought that if ever the 4-minute mark would be broken, it would have to be even splits throughout: 60---2:00---3:00 and then all energy in reserve would have to help gut-out the last lap in just below 60. Santee's race seemed to confirm that.

On the other side of the world, John Landy, the Australian who also was in this race for the dream mile had a different training routine. He had both quantity and quality! He is reported to have said that when his “daily mileage was released to the world it would show that he had covered greater distances than any other first-class runner with the exception of Emil Zatopek,” the iconic Czech long distance runner who had won the 5000, 10,000, and marathon in the 1952 Olympics. In the December Australian summer of 1953 Landy was training at a 20-miles-a-session rate (nearly 120 miles a week) that daily included over 11 miles of hard, fast shorter repeats in the mix of the 20 miles total! (Bascomb, 73). This obsessive workload paid off immediately, and Landy opened his competitive season with a blazing 4:02.0. By April Landy had won six races in less than 4:03, something no other athlete had ever done, but he was no closer to the magic mark, and all the headlines repeatedly read “Landy fails” (Bannister, 161).

One of Landy’s races seemed to be the perfect set-up, and anticipation turned into expectation. A clear, windless summer day in Melbourne brought out the hopes of thousands of fans who literally “knocked down the fence” and “climbed on top of the roof of the tin grandstand” to see it happen. Landy refused all offers of pacing which meant he would probably lead from start to finish, a strategy that rarely leads to record-breaking times because of the psychological stress from leading. As usual, he led at the first turn, came by the first lap in 59, and when the half-mile split read 2:00, a sub-four potential was underway. At the three-quarter mark he was 3:02, so he needed a sub 58 for his last 400. World-class runners can finish in 58, but the cost of lead-running the entire race (as much of racing history has shown) was too high: his time at the finish matched Santee’s Compton mile exactly---4:02.4. All the many attempts over almost eleven years had demonstrated the complex conditions that had to all match-up perfectly. Are the winds calm? Is the track firm or soft? Will the pace be erratic or steady? What is the public’s expectation? Is there adequate competition? Solo attempts don’t work; neither does competition that points only to winning. What is the best training regimen—speed and quality or high mileage? Santee had college requirements; Landy was studying agricultural science; Bannister was in med school----how does the athlete balance all that? Then there is the history, that barrier, and that nagging notion that it was impossible. Now after Landy’s attempt in

Melbourne he said referring to the 4-minute barrier, "It's a brick wall. I shall not attempt it again."

But "say" and "do" are different, for Landy was already planning a summer in Scandinavia where the tracks are perfect, the athletic support by fans unmatchable, and the climate cooperative. Bannister too had not given up. Bannister had not won the gold medal in the 1952 Olympics, and one headline read "No---Roger wasn't nearly tough enough" and another writer ended his criticism with "I feel like suing British athletes for breach of promise." Many thought Bannister's training methods were wrong because he had put such a priority on his medical studies and on the priority of "staying fresh" (Slot, 2), and therefore his training sessions were too short. There might have been some truth to that as Bannister himself admits, but only because the Olympic Games committee changed the racing schedule nine days before the competition began. Instead of the usual semi-final heats, a day of rest, and then the final with the 12 who had advanced, in 1952 there would be quarter-finals, semi-finals, and finals---three days in a row without a break. Bannister later recalls in his autobiography that "No man who trained as I did could possibly run three good races in three consecutive days." Obviously the physical plan had to be perfect.

Moreover, Bannister's autobiography demonstrates in detail the psychological anxiety among all the Olympic athletes. He discusses his sleepless nights and the races run in his imagination and then run again and again---each time with a new strategy. The stress of three days in a row was not only physical! Watching other events only added to the anxiety, as Bannister recalls his teammate's ordeal in the 5000, a race that is just 180 meters longer than 3 miles. Chris Chataway, who was to be one of Bannister's pacers in the Oxford mile in two years, was one of the favorites. Bannister describes Chataway's last lap of the 5000:

Zatopek, Mimoun (France) and Schade (Germany) were all together. Chris tried to run clear of them in the back straight, and his magnificent effort carried him to the front. But his burst had come too soon and he could not maintain it to the tape. I called out, almost yelled to Chris to keep going but could feel within me that his strength was fading and his legs wavering.

The three giants passed him. . . .Chris stumbled and collapsed on the last bend. He recovered courageously and

finished fifth. 60 yard behind the first three runners. I felt sick and hollow with sympathy for him.

It made me appreciate how fatal it could be to make my finishing effort too soon in a field of this standard. . . . The finalists in the 1500 would have no second innings in which to redeem a failure.

The pressure was palpable, and when Bannister's turn came, he advanced through the first two days, but on the day of the finals he says he "hardly had the strength to warm up." Of course he competed, but he says at the crucial moment "for which I had waited so long . . . my legs were aching, and I had no strength left to force them faster. I had a sickening feeling of exhaustion and powerlessness as Barthel came past me, chased by McMillen (USA). . . .I came fourth" (Bannister 140-141). The first 8 runners had broken the Olympic Record that had held for 14 years. But of course that wasn't good enough for the press that would soon be so critical.

For all three of these men there was a lot of history, a lot of negative atmosphere, and many personal reasons to stop the chase. But it was their imagination that would not let them. There would be no Olympics until 1956, and no Empire games, and no European games in 1953, and as Bannister later reflected,

Whether as athletes we liked it or not, the four-minute mile had become rather like an Everest—a challenge to the human spirit. It was a barrier that seemed to defy all attempts to break it—an irksome reminder that man's striving might be in vain. The Scandinavians, with their almost excessive reverence for the magic of sport, called it the 'Dream Mile'" (Bannister 150).

He decided then that the Oxford track would be where he would make his attempt. His training went well that year as did his preparatory races. His first race at Oxford was an attempt to break the British mile record of 4:06.4 (*held by Sydney Wooderson*) and with friendly competition from his teammate Chris Chataway, he smashed the record in 4:03.6. Two weeks later he teamed up with 3 others to break a relay world record by 6 seconds. Still later in May he ran a special invitation $\frac{3}{4}$ mile in a "gale" to record a superb 2:59.8. A sub-four minute mile was looking possible. Later he won the British Games mile, finishing with a 56 second last quarter. Then came a very fast 800 in another wind-storm. His speed at the shorter races in unfavorable weather was increasing his confidence, until he

pulled a hamstring in an even shorter race: his muscles were unaccustomed to sprinting at that speed. He rested two weeks, returned to good workouts at below 4-minute mile pace and was again convinced physiologically a 3:59 was possible---the biggest barrier still was psychological.

Friends convinced him to run a mile with pacers to test even further the injured leg. He was paced through each 400 by a different runner, and he turned out 59—60—62---60 to total a 4:02.0, the third fastest mile of all time. The British Amateur Athletic Board refused to ratify the paced time, and Bannister felt said later that he felt “great relief that [he] did not run a four-minute mile under such artificial circumstances” (Bannister, 157). Now the “dream mile” had to contend with controversial training, racing tactics, and weather obstacles, AND now it had to be honorable. Bannister recalls, “I knew the attempt would be meaningless unless it were achieved in a bona fide race, in which all runners set out to finish, although the lead might be shared at different stages by various competitors ... to ensure a fast, even pace. I decided that unless these conditions could be fulfilled I would rather not make the attempt” (Bannister, 159).

Bannister knew that the summer of 1954 would be his last shot at this almost otherworldly goal because medical school demands were increasing. He decided to no longer train alone. For years his “lone-wolf” approach had served him well (Bascomb, 71), but now between 12:30 and 1:30 daily he trained on a track in Paddington with others who called themselves the “Paddington Lunch time club.” Chris Brasher who was also a world-class runner joined him on his hardest workouts, and on weekends Chatham (remember he was the British 5000 meter Olympian) would join them both.

Basher talked Bannister into meeting his coach, Franz Stampfl. This was an even bigger step away from the lone wolf approach, and in their first meeting Stampfl simply said “You have to train harder.” Bannister brought up the difficulty of his medical-school studies, and unblinkingly the coach’s reply was, “do both” (Bascomb,74). Already the time constraints kept his sessions so short that he didn’t even warm up or cool down (Slot 1), so to increase his workload was a stretch for Bannister’s imagination. But, he was fascinated with his coach’s passion, and he embraced the new training regimen, and in December of 1953 Bannister’s training program reached a new intensity. Several times a week, he would run a series of 10

consecutive quarter-miles in 66 seconds with a 2-minute rest interval. Through the months they gradually picked up the pace, and by April they could do them in 61 seconds (Bannister 164). But their training went stale, and they couldn't advance to 60 second pace, and to top off the anxiety about this plateau, news reports were out that Landy was heading to Finland for a race in May, and Santee was entered in the mile at the Kansas Relays in April. Santee was first to go for it in this new season, and despite a rainstorm 15 minutes before the race, he thought he was ready, but a soft track helped produce a slow 3rd lap, and he finished in 4:03.1. It was absolutely clear that the weather and the track condition had to be perfect if, indeed, this goal was even possible (Bascomb, 74).

And now Bannister's training plateau gnawed at his confidence. What to do? An approach so radical that it seemed beyond imagination: stop training, and head for Scotland to do some hiking and climbing. At the risk of ankle-sprain and muscle-strain, three weeks before the scheduled May 6 attempt, Brasher and Bannister stayed away from any running for three full days, slept little, ate irregular meals, and climbed, even, up a steep rock face. Basher fell, and though he was not hurt, their heightened awareness of the risks taken pushed them back to the track. Their first attempt at those repeat 400s this time produced 10 at 59! (Bannister, 164). The diversion had worked physically and psychologically---they were back on target.

Now Chataway joined in on the 4-minute plan even though (as a long distance runner) he doubted that he could run a 3:00 1200 (Bannister, 166). Their focus on shorter races and speed in training over these last three weeks was paying off, and four back-to-back 60 second quarters seemed feasible----at least physically!

Race day was six days away, and since the earlier hiking break from the track had paid good dividends, he now he took five (!) full days of complete rest, a strategy almost unheard of today. The day of the race, he went into St. Mary's Hospital for rounds, but instead went into the physiological technician's lab and sharpened his spikes (interview). The weather conditions were worse than for Santee's attempt in Kansas, and to even try seemed unwise. A world-class runner does not want to waste the physical and psychological effort, an effort that cannot be called up on impulse. The dilemma was profound. Bannister says, *"I couldn't disappoint people. But I would have disappointed them, because I would not have made a record*

attempt. I did not want to fail and exhaust myself, because I was the kind of runner who trained so little that I couldn't race again within another ten days if I had put all my hopes and energy into it" (Interview, 4).

He watched the weather obsessively, and unlike every athlete I have coached, Bannister felt at peace in this uncertainty. He says, "*It was so strange really, to be able to withhold the decision. You might think that you have to have it in your mind, to actually be set on doing it continuously. But I my case that wasn't true*" (Interview 4).

Bannister's long-held belief that an athlete could "be [as he says] sufficient unto himself" at first outweighed his desire to ask his coach Franz Stampfl for advice, but when he re considered the positive philosophical approach of his coach, he consulted with him. That philosophical approach was that track is a means of "re-creation," a "result of the liberation and expression of the latent power within" (Bannister, 167).

The wind had now reached what Bannister called a "gale force" that they calculated would slow him at least one second per lap. That meant he had to run the equivalent of a 3:56 mile, a time beyond imagination for sure. Stampfl understood Bannister's apprehension, and told him that he believed he **could** run 3:56, and he added that "your mind can overcome any sort of adversity." Then he whispered, anyway "the wind might drop" (Bannister 168). The five days rest; the speed races leading up to this day; the eagerness of his teammates; the excitement of the fans; and modified shoes that reduced their weight from 6 to 4 ounces all suggested that this was the time. But, the flag on a nearby church still stood straight out from the pole. At 5:15 there was a brief shower. The wind was strong, but now in gusts, not steady. One source said 1200 another said three thousand spectators were in the stands at Oxford. In the face of all this Stampfl told him that if he didn't take this chance he could regret it for the rest of his life. Just after six P.M. the wind fell, and Bannister said, "yes, let's do it" ("Fifty years on").

This was the meet between the Amateur Athletic Association and Oxford University, and six runners approached the line. Bannister wore a green, gold, and blue striped singlet and the number 41 was pinned to his chest. Now the flag barely fluttered. Brasher in his eagerness false started, and the tension increased ten-fold, and not the least was Bannister's worry about how long this wind would stay calm. They lined up again. Brasher led the first lap and

Bannister's rested legs felt so effortless that he thought they were going too slowly. He shouted "faster," but Brasher kept calm, and they crossed the first lap in 57.5. This was indeed fast enough, and if they had gone any faster, the price would be paid during the last lap. Coach Stampfl shouted "relax" as they came through the half-mile in 1:58. Chataway took the lead for the next lap and they slowed only slightly to come by in 3:00.7 (one source said 3:00.4). But in any case, he needed a 59 last lap. The crowd had been clapping, but now they stood to their feet to cheer. One more curve with Chataway in the lead, and then down the back stretch Bannister pounced past with 300 yards to go. He remembers:

"There was no pain, only a great unity of movement and aim. The world seemed to stand still, or did not exist. The only reality was the next two hundred yards of track under my feet. . . I drove on, impelled by a combination of fear and pride. . . . I now turned the last bend and there was only 50 yards more. . . With 5 yards to go the tape seemed almost to recede. Would I ever reach it?" (Bannister 172).

This is the moment every racer has felt: the taste of blood in the throat; the legs that feel awkward, heavy, and tight; the straining of the neck and arms. Only the imagination that set all this in motion minutes, days, weeks, years ago keeps the body from falling too soon. Perhaps it is to this day fitting that a Roger Bannister was the first to open this door because he also was able to articulate the deep philosophical approach that was unconsciously revealed in those last seconds, those last few steps. He says

Sport is not better or worse than other human activities. It is no better or worse than we are ourselves . . . In the end, sport in the round shows us something about ourselves, about our society, and about our world that is, in the main, well worth the striving for, well worth preserving, and well worth perfecting. (Deminoff 4).

We take part in sport because we enjoy it . . . [and] whatever the source of the pleasure, it seems that there may be rhythms arising from nerve impulses and contracting muscles which interact with some rhythms inherent in our own nervous system. The pleasure is rather similar to listening to music. . . . But however we attempt to explain it, it can fill us with a feeling of power and beauty that is difficult otherwise to experience and which might otherwise remain locked away inside ourselves. (Deminoff, 12).

When he crossed the finish line, his legs buckled and he collapsed almost unconscious into the arms of two supporters. For a moment he could see only black and white. Brasher and Chataway struggled for breath on the infield and couldn't get to Bannister because of the crowd around him. Bannister dropped his forehead into the crook of Stampfl's neck and coughed out, "did I do it?"

And the announcer began—in typical British formality:

"Ladies and gentlemen, here is the result of event number nine, the one-mile. First, number 41, R.G.Bannister, of the AAA, and formerly of Exeter and Merton Colleges, with a time which is a new meeting and track record, and which subject to ratification, will be a new English Native, British National, British All-Comers, European, British Empire and World's record. The time is three . . .

No one heard any more.

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