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HUMAN LIMITS

Forecasting the Fall of the Two-Hour Marathon

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Will the two-hour marathon be the four-minute mile of our day? Just as a sub-four-minute mile once seemed as if it might be beyond the limits of human speed and endurance, a sub-two hour marathon is both remarkably close yet seemingly impossible.

Yet after the Berlin marathon on Sunday, it now seems a whole lot more possible. Dennis Kimetto of Kenya knocked an astounding 26 seconds off the world record, finishing in 2 hours 2 minutes 57 seconds.

This means Kimetto ran at an average speed of 4 minutes 41 seconds per mile — over 26.2 miles. Few of us could withstand such a pace for even a quarter of a mile. Before 1861, no amateur had ever been recorded running that pace for even a single mile.

Breaking a world record by 26 seconds is an extraordinary achievement. But in fact, it's not that unusual. Since Khalid Khannouchi set the marathon

record in London in April 2002, the record has been broken half a dozen times — on average, once every two years, each time on the favorable Berlin course. And each of these records has, on average, beaten the previous mark by 27 seconds.

Following that trend suggests that a sub-two-hour marathon is no more than a decade or two away. Indeed, if the next dozen years follows the last dozen, then the world record will be lowered by around half a minute another half-dozen times — which will be enough to break the two-hour barrier.

Perhaps there's some point at which it no longer makes sense to use past trends to forecast future performance, and to squarely face the question: Is the human body capable of running that fast, for that long?

But the marathon is a relatively young sport, and there are billions of people who are yet to try it, and so it seems unlikely to me that we've plumbed the limits of human endurance. So while I don't know exactly when we'll see a sub-two-hour marathon, Kimetto's performance has made me increasingly confident that I'll see it in my lifetime.

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