Here Come the Olympics

The Olympics are upon us, and we sports fans can’t wait for the nonstop television diet of sports molded from the classic Greek tradition, like wrestling and track, and of others added to the occasion, like rhythmic gymnastics, synchronized swimming, and even baseball. Political pressure in support of a primarily national sport can put it on the list, just as can the appeal of the sport itself. And the Olympics have shown little capacity to resist either the proliferation of new sports or the professionalization of old ones. How long, one wonders, will they be able to hold out against the “extreme sports” categories now represented in the X Games?

What drives this diversification is partly revenue, which of course means television. But there are other forces that have much to do with science. The Olympics selects athletes performing at the edge of their physical capacity, pushing competitors into training regimes unheard of decades ago. The same urge has moved the Olympic Committees toward accepting professional athletes as competitors, which surely has the sometime Olympic czar Avery Brundage revolving in his grave. This oddly sporadic surge toward professional acceptance yields a perplexing heterogeneity of treatment: “Dream teams” of National Basketball Association players are dispatched to represent the U.S. and set up in luxury hotels, while America’s college baseball players bunk with the rest of the plebeians.

Here’s another science-based change in the Games: it’s how materials science has transformed some of the traditional sports. I actually can remember the first 15-foot pole vault, but after the properties of fiberglass converted the vaulter’s instrument from a pole to a catapult, we entered a new record-setting domain. In cycling and yachting, technology probably accounts for more of the variance in outcome than in other Olympic sports. (A friend of mine resents this, refusing to take seriously any sport that depends on the device as well as the athlete.)

The big science problem, though, is that in the sports that most directly measure individual athletic ability, there is no guarantee that the playing field is level. Drug violations are not new to the Games; some winning distance runners were charged with blood doping decades ago, and more recently the Canadian sprinter Ben Johnson was stripped of his medal because of steroid abuse. Now several U.S. track and field athletes, including a few prospective Olympic competitors, are under suspicion, and others will remain radioactive until the testing regime improves enough to earn public trust. What we now have is a pharmacological arms race between the detection technology of the anti-dopers and the inventiveness of the designer-steroid mavens. It is a close contest, and if past is prologue, we cannot know who is ahead at any given moment. I liked track and field a lot more before they took it into the lab.

Fortunately, the really significant performance gains have come not from drugs but from better understanding of the body’s limits and the role of training in overcoming them. Dr. Roger Bannister used elegant experiments on his own respiratory physiology to help shatter a record once thought unbreakable. Now dozens of runners from around the world can beat his time by 15 seconds or so. And there has been a remarkable change in our ideas about what women can do in events previously dominated by men, exemplified by the rapid convergence of the women’s times in distance races toward the best men’s times.

Science surely has had a mixed impact on the Games: It has been used to enhance human capacity through improved training and better technology, but it has also brought us clever ways to cheat. As for me, even though I know that everything may not be on the level, I really am looking forward to the Olympics. So let the Games begin! I plan to adopt the English poet Samuel Taylor Coleridge’s advice and follow the events having willingly suspended disbelief, confident that the playing field is level, that no one is on drugs, and that no athlete has a concealed bionic assist. Don’t laugh; it works for me.

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