

‘A Debt Was Paid Off in Tears:’ The Debate about High Altitude at the 1968 Mexico City Olympics

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Although a number of histories examine elite and Olympic sport as a social phenomenon, few researchers have given attention to the types of lengthy and intense preparation that athletes must endure to achieve these heights; or to the individuals and institutions that have contributed to enhanced performance. There are many things that go into making a successful athlete. Advances in the “science” of training is one.

With the exception of John Hoberman’s Mortal Engines: The Science of Performance and the Dehumanization of Sport (1992) little historical literature has examined the effect that advances in scientific research have had on human performance. To date, little historical attention has been devoted to relations between science and athletics in English-speaking countries; or to how athletes (and their trainers) regarded the findings of researchers. The instance of the 1968 Mexico Olympics provides an opportunity to examine this around the issue of human performance at high altitudes.

Interest in the effect of high altitude on the human body has a long history. In the 1880s, the Italian physiologist Angelo Mosso conducted a series of experiments on the physiological effects of high altitude in the Alps.

By the 1968 Olympics in Mexico City, coaches and athletes were coming to see the advantage of the sport sciences. The awarding of the XIX Olympiad to Mexico City, whose altitude is just over 7500 feet, created a considerable reaction among scientists, physicians, athletes and coaches. In the popular press, including the New York Times and Sports Illustrated, athletes expressed the belief that the altitude would have a detrimental effect on many of their performances. The Olympics, of 1968. however, would not be the first time athletic events have taken place at high altitude In 1955 the Pan American Games had been held in Mexico City and few scientists or athletes had complained about the contesting of the games at high altitude. In 1960 Per-Olof Astrand, a Swedish physiologist, examined the effect of high altitude on cross country skiers at the 1960 Winter Olympics in Squaw Valley. He concluded that hypoxia had induced many of the competitors to collapse and that it was fortunate that

all the participants in cross country had survived. In 1965 Mexico City hosted a “Little Olympics” so that physiologists and physicians could study the effects of altitude on athletes. Researchers diligently collected the expired air of runners following their races and gave heart, breathing and blood tests as well.

The International Olympic Committee decreed that athletes could train for only one month at altitude in the twelve months preceding the Games. This limit caused athletes and coaches to question the IOC decision to hold the games in Mexico City. During the Games themselves there were numerous complaints from athletes who performed in the distance races. Australian Ron Clarke, who had set 17 world records in his career, was unconscious following his 10,000 meter race, a result of the great “oxygen debt” his body had developed during the race. The Kenyan and Ethiopian runners easily won the events over 800 meters. Following the Games, Roger Bannister, the first four-minute miler, bitterly analyzed the Olympic competition at altitude. Bannister, who was in 1968 a noted physician, claimed that the IOC was to be blamed for allowing the games to be contested at altitude.

The 1968 Olympic Games in Mexico City are best remembered for the student riots that occurred outside the venues, the protests by black athletes, the sex-testing of female athletes and the superb performance by Bob Beamon in the long jump. Prior to the games, however, the most hotly debated topic surrounding the Games was the question of the effect of high altitude on athletic performance. This paper makes a valuable contribution to both the history of sport as a social institution and the history of physiological research in relation to athletic performance by examining the debates between the IOC, USOC, athletes, coaches and scientists over the appropriateness of holding the Games at high altitude.