When Hartwig Gauder won a gold medal as a racewalker for East Germany in 1980, he covered 31 miles in an Olympic-record 3 hours 49 minutes 24 seconds. In Sunday's New York City Marathon, Gauder will struggle to complete 26.2 miles in seven hours.

"The win is the finish for me," said Gauder, 43, who is using the race to celebrate his recovery from a heart transplant in 1997, and to honor a dead friend.

Gauder competed in the New York City Marathon in the early 90's when it still had a racewalking division. Each year, he would meet Ron Barber, a racewalker and special education teacher from Stony Brook, N.Y., who volunteered to pick up athletes at the airport, and he and Gauder would discuss racewalking and their families. Gauder's appreciation of his American friend turned to admiration when he learned that Barber had received a heart transplant and was still competing.

At the time, Gauder had no idea he would live Barber's ordeal. Gauder's training made him a picture of robust health. He was competing at an elite level as late as 1993, when he participated in the world championships but was too exhausted to finish the 50-kilometer (31-mile) race.

In late 1994, Gauder noticed he was becoming short of breath in everyday activities. When he went to the doctor in March 1995, the diagnosis was staggering: Gauder had an inflammation of the heart, probably caused by a virus. He would need a new heart.

"It was very strange," said Gauder's son, Marcus, 15. "I never thought he'd get sick."
Gauder's condition declined so severely that he could not climb the stairs. In the spring of 1996, surgeons in Berlin inserted an artificial pump to assist his failing heart, and Gauder would remain in the hospital until a donor could be found.

Later that year, he developed an infection around the artificial pump and was close to death.

"I am married and have one son," he said last week by telephone from his hometown of Erfurt, in eastern Germany. "I'm an Olympic champion. I have good friends. All things were complete and optimal. I was not afraid to die."

The year marched by without a donor. Then Gauder received a letter from Helene Britton, a track and field official in Manhattan. Barber had died while waiting for a second heart. Gauder made a deal with himself.

"When I get the new heart, then I go back to the New York marathon to run in Ron Barber's ghost, with the spirit of Ron Barber," he said.

A month later, on Jan. 30, 1997, Gauder got his heart. In three days, he was walking in the hospital. In six months Gauder, an architect, began running in the local soccer stadium, which he helped design.

Sunday's marathon will be his first competition of any kind since he became ill. He plans to walk and run the course with Barber's 21-year-old son, Matthew.

"It shows that my husband was very special," Barber's widow, Honey, said. "It makes me very proud."

Gauder, who also captured a bronze medal in the 50-kilometer walk at the 1988 Seoul Olympics and participated in the '92 Games, wrote a best-seller in Germany, "The Second Chance: My Life With a Second Heart." Now a celebrity in his united homeland, Gauder said his trip through the five boroughs would be chronicled by several German television crews.

He is not out of danger. Seventy percent of heart transplant patients survive five years and 50 percent live 10 years, according to Dr. Sudhir Kushwaha, a transplant cardiologist at Mount Sinai Medical Center in Manhattan.

Gauder has his own timetable.

"I think really I live 42 years with my own heart, and 43 with a heart from another person," he said.
Photo: Hartwig Gauder, a racewalking gold medalist in 1980, has entered the marathon 19 months after a heart transplant. (Ralf Hirschberger for The New York Times)