

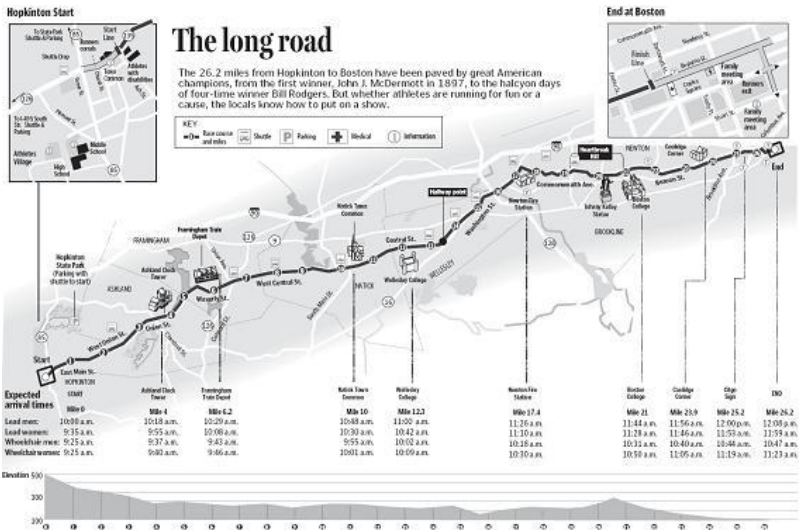
**Random Research for the
Arete of the Olympics
Booklet ...**

THE STORY OF AN ATHLETIC ASTERISK

And This Has Nothing To Do With Babe Ruth!

October 14, 2008

The Boston Marathon



Isaac got a sports book for his birthday, with statistics on every sport throughout the ages. He likes it. So do I! I was paging through it yesterday when I came upon winning times for the Boston Marathon. Historical data like this has always intrigued me ... it puts history in context, while showing how things change over time.

What have been the winning times? When did this race start? How have times improved? Let's get the data on the table!

THE BOSTON MARATHON

Year	Men's Winner			Female Winner		
	Winner	Country	Time	Winner	Country	Time
1897	John J. McDermott	New York	2:55:10			
1898	Ronald J. MacDonald	Canada	2:42:00			
1899	Lawrence Bignolia	Massachusetts	2:54:38			
1900	John Caffery	Canada	2:39:44			
1901	John Caffery	Canada	2:29:23			
1902	Sammy Mellor	New York	2:43:12			
1903	John Lorden	Massachusetts	2:41:29			
1904	Michael Spring	New York	2:38:04			
1905	Frederick Lorz	New York	2:38:25			
1906	Tim Ford	Massachusetts	2:45:45			
1907	Thomas Longboat	Canada	2:24:24			
1908	Thomas Morrissey	New York	2:25:43			
1909	Henri Renaud	New Hampshire	2:53:36			
1910	Fred Cameron	Canada	2:28:52			
1911	Clarence DeMar	Massachusetts	2:21:39			
1912	Michael Ryan	New York	2:21:18			
1913	Fritz Carlson	Minnesota	2:25:14			
1914	James Duffy	Canada	2:25:01			
1915	Edouard Fabre	Canada	2:31:41			
1916	Arthur Roth	Massachusetts	2:27:16			
1917	Bill Kennedy	New York	2:28:37			
1918	Military Relay	Camp Devens	2:29:53			
1919	Carl Linder	Massachusetts	2:29:13			
1920	Peter Trivoulides	New York	2:29:31			
1921	Frank Zuna	New York	2:18:57			
1922	Clarence DeMar	Massachusetts	2:18:10			
1923	Clarence DeMar	Massachusetts	2:23:47			
1924	Clarence DeMar	Massachusetts	2:29:40			
1925	Charles Mellor	Illinois	2:33:00			
1926	John C. Miles	Canada	2:25:40			
1927	Clarence DeMar	Massachusetts	2:40:22			
1928	Clarence DeMar	Massachusetts	2:37:07			
1929	John C. Miles	Canada	2:33:08			
1930	Clarence DeMar	Massachusetts	2:34:48			
1931	James P. Henigan	Massachusetts	2:46:45			
1932	Paul DeBruyn	Germany	2:33:36			
1933	Leslie S. Pawson	Rhode Island	2:31:01			
1934	Dave Komonen	Canada	2:32:53			
1935	John A. Kelley	Massachusetts	2:32:07			
1936	Ellison M. Brown	Rhode Island	2:33:40			
1937	Walter Young	Canada	2:33:20			
1938	Leslie S. Pawson	Rhode Island	2:35:34			
1939	Ellison M. Brown	Rhode Island	2:28:51			
1940	Gerard Cote	Canada	2:28:28			
1941	Leslie S. Pawson	Rhode Island	2:30:38			
1942	Joe Smith	Massachusetts	2:26:51			
1943	Gerard Cote	Canada	2:28:25			
1944	Gerard Cote	Canada	2:31:50			
1945	John A. Kelley	Massachusetts	2:30:40			
1946	Stylianos Kyriakides	Greece	2:29:27			
1947	Yun Bok Suh	Korea	2:25:39			
1948	Gerard Cote	Canada	2:31:02			
1949	Karl Leandersson	Sweden	2:31:50			
1950	Kee Yong Ham	Korea	2:32:39			
1951	Shigeki Tanaka	Japan	2:27:45			

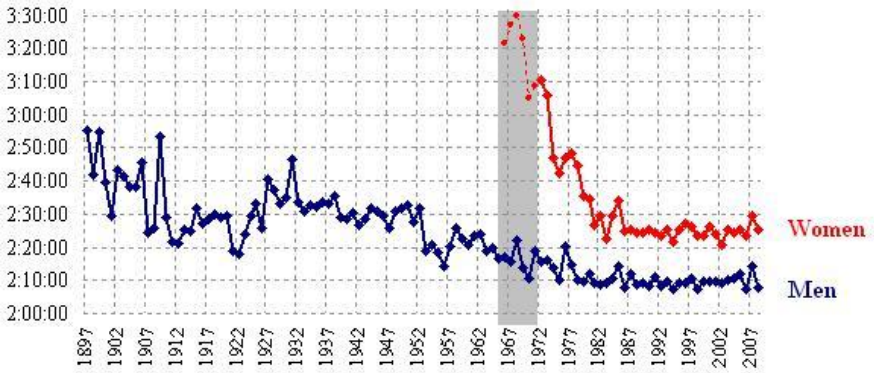
THE BOSTON MARATHON

Year	Men's Winner			Female Winner		
	Winner	Country	Time	Winner	Country	Time
1952	Doroteo Flores	Guatemala	2:31:53			
1953	Keizo Yamada	Japan	2:18:51			
1954	Veikko Karvonen	Finland	2:20:39			
1955	Hideo Hamamura	Japan	2:18:22			
1956	Antti Viskari	Finland	2:14:14			
1957	John J. Kelley	Connecticut	2:20:05			
1958	Franjo Mihalic	Yugoslavia	2:25:54			
1959	Eino Oksanen	Finland	2:22:42			
1960	Paavo Kotila	Finland	2:20:54			
1961	Eino Oksanen	Finland	2:23:39			
1962	Eino Oksanen	Finland	2:23:48			
1963	Aurele Vandendriessche	Belgium	2:18:58			
1964	Aurele Vandendriessche	Belgium	2:19:59			
1965	Morio Shigematsu	Japan	2:16:33			
1966	Kenji Kemihara	Japan	2:17:11	Roberta Gibb*	Massachusetts	3:21:40
1967	David McKenzie	New Zealand	2:15:45	Roberta Gibb*	California	3:27:17
1968	Amby Bluffoot	Connecticut	2:22:17	Roberta Gibb*	California	3:30:00
1969	Yoshiaki Unetani	Japan	2:13:49	Sara Mae Berman*	Massachusetts	3:22:46
1970	Ron Hill	Great Britain	2:10:30	Sara Mae Berman*	Massachusetts	3:05:07
1971	Alvaro Mejia	Colombia	2:18:45	Sara Mae Berman*	Massachusetts	3:08:30
1972	Olavi Suomalainen	Finland	2:15:39	Nina Kuscsik	New York	3:10:26
1973	Jon Anderson	Oregon	2:16:03	Jacqueline Hansen	California	3:05:59
1974	Neil Cusack	Ireland	2:13:39	Michiko Gorman	California	2:47:11
1975	Bill Rodgers	Massachusetts	2:09:55	Liane Winter	West Germany	2:42:24
1976	Jack Fultz	Virginia	2:20:19	Kim Merritt	Wisconsin	2:47:10
1977	Jerome Drayton	Canada	2:14:46	Michiko Gorman	California	2:48:33
1978	Bill Rodgers	Massachusetts	2:10:13	Gayle S. Barron	Georgia	2:44:52
1979	Bill Rodgers	Massachusetts	2:09:27	Joan Benoit	Maine	2:35:15
1980	Bill Rodgers	Massachusetts	2:12:11	Jacqueline Gareau	Canada	2:34:28
1981	Toshihiko Seko	Japan	2:09:26	Allison Roe	New Zealand	2:26:46
1982	Alberto Salazar	Massachusetts	2:08:52	Charlotte Teske	West Germany	2:29:33
1983	Greg Meyer	Massachusetts	2:09:00	Joan Benoit	Massachusetts	2:22:43
1984	Geoff Smith	Great Britain	2:10:34	Lorraine Moller	New Zealand	2:29:28
1985	Geoff Smith	Great Britain	2:14:05	Lisa Larsen Weidenbach	Michigan	2:34:06
1986	Robert de Castella	Australia	2:07:51	Ingrid Kristiansen	Norway	2:24:55
1987	Toshihiko Seko	Japan	2:11:50	Rosa Mota	Portugal	2:25:21
1988	Ibrahim Hussein	Kenya	2:08:43	Rosa Mota	Portugal	2:24:30
1989	Abebe Mekonnen	Ethiopia	2:09:06	Ingrid Kristiansen	Norway	2:24:33
1990	Gelindo Bordin	Italy	2:08:19	Rosa Mota	Portugal	2:25:24
1991	Ibrahim Hussein	Kenya	2:11:06	Wanda Panfil	Poland	2:24:18
1992	Ibrahim Hussein	Kenya	2:08:14	Olga Markova	CIS	2:23:43
1993	Cosmas Ndeti	Kenya	2:09:33	Olga Markova	CIS	2:25:27
1994	Cosmas Ndeti	Kenya	2:07:15	Uta Pippig	Germany	2:21:45
1995	Cosmas Ndeti	Kenya	2:09:22	Uta Pippig	Germany	2:25:11
1996	Moses Tanui	Kenya	2:09:15	Uta Pippig	Germany	2:27:12
1997	Lameck Aguta	Kenya	2:10:34	Fatuma Roba	Ethiopia	2:26:23
1998	Moses Tanui	Kenya	2:07:34	Fatuma Roba	Ethiopia	2:23:21
1999	Joseph Chebet	Kenya	2:09:52	Fatuma Roba	Ethiopia	2:23:25
2000	Elijah Lagat	Kenya	2:09:47	Catherine Ndereba	Kenya	2:26:11
2001	Lee Bong-Ju	Korea	2:09:43	Catherine Ndereba	Kenya	2:23:53
2002	Rodgers Rop	Kenya	2:09:02	Margaret Okayo	Kenya	2:20:43
2003	Robert Cheruiyot	Kenya	2:10:11	Svetlana Zakharova	Russia	2:25:20
2004	Timothy Cherigat	Kenya	2:10:37	Catherine Ndereba	Kenya	2:24:27
2005	Hailu Negussie	Ethiopia	2:11:45	Catherine Ndereba	Kenya	2:25:12
2006	Robert Cheruiyot	Kenya	2:07:14	Rita Jeptoo	Kenya	2:23:38
2007	Robert Cheruiyot	Kenya	2:14:13	Lidiya Grigoryeva	Russia	2:29:18
2008	Robert Cheruiyot	Kenya	2:07:46	Dire Tune	Ethiopia	2:25:25

The Boston Marathon also holds sentimental value for Lisa and I, as we actually ran on a 4-person relay with the great Bill Rodgers in Boston in 1995, I believe, as part of the “Team in Training” program to raise money for the Leukemia Society.



While looking through the winning times, it’s easy to see a marked drop in the times for the female winner versus the male winner. How did this compare over time? I decided to graph it and see.



What I also saw was the first female winner wasn't until 1972, in Isaac's book. Why was this? Grabbing the data from an internet site to make it easier to graph the data, I saw 6 "female winners" *prior to 1972* - all with asterisks! What was this about?

Herein lies a wonderful story.

The story of Bobbi Gibb.

Bobbi Gibb was a woman who could run 40 miles at a time. She first saw the Boston Marathon in 1964, and, two years later, wrote a letter requesting an application to compete.

She received a letter from the race director, saying women could not run the marathon. Literally. Women could not run in the marathon because women could not run a marathon!

How does one change such a perception?

She was driven to the start line, and then, when the gun went off, she simply jumped in!

I can't imagine!

As she tells the story, men around her immediately knew she was a female, but supported her nonetheless. Good for them!

She finished ahead of two-thirds of the pack, in a time of 3:21.

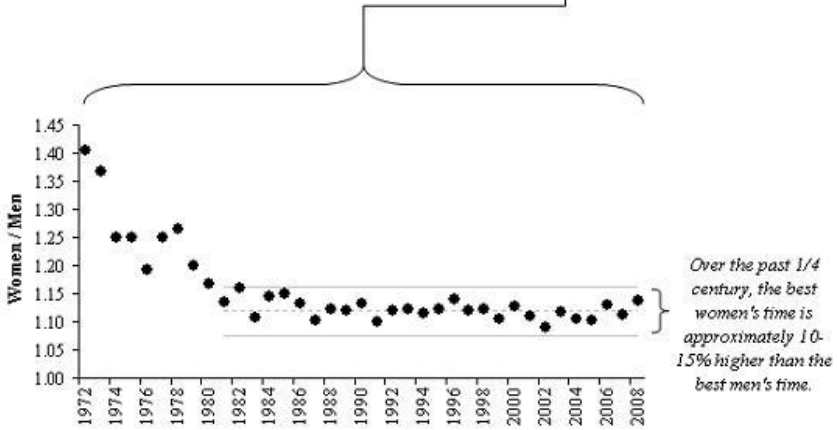
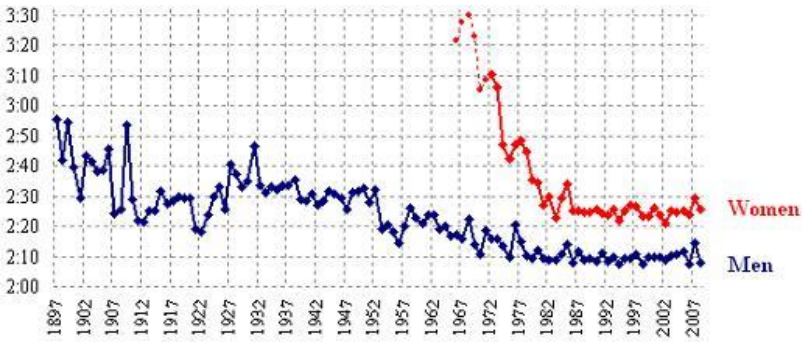
She “unofficially” finished first among women two more years, and women were officially allowed to enter in 1972.

And what became of Bobbi Gibb? At this same time, she was attending the University of California in La Jolla, studying pre-med and mathematics. After receiving her degree, she was denied entrance to medical school because she was a woman.

Politicians now are talking about making a crack in the “glass ceiling” and shattering it. Here was a woman doing it 40 years ago!

Whatever she's doing now, likely she's an unbelievable success!

And women in the Boston Marathon? How are *they* doing? Let's graph not only the winning times, but also how much difference there is between the two winning times.

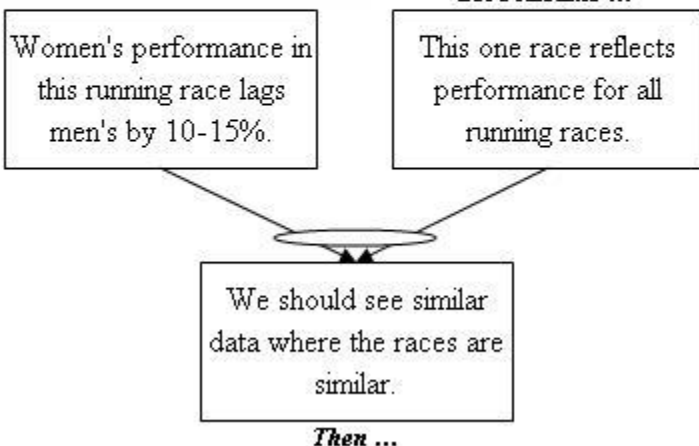
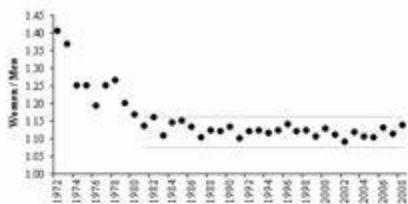


The improvement is rapid, and women now are within 10-15% of the male winning time. As this has been stable over the past quarter-century, it's tempting to say this is the best women will be able to do - relative to men.

However, just thinking of the story of Bobbi Gibb, I wouldn't rule anything out!

One Step Further

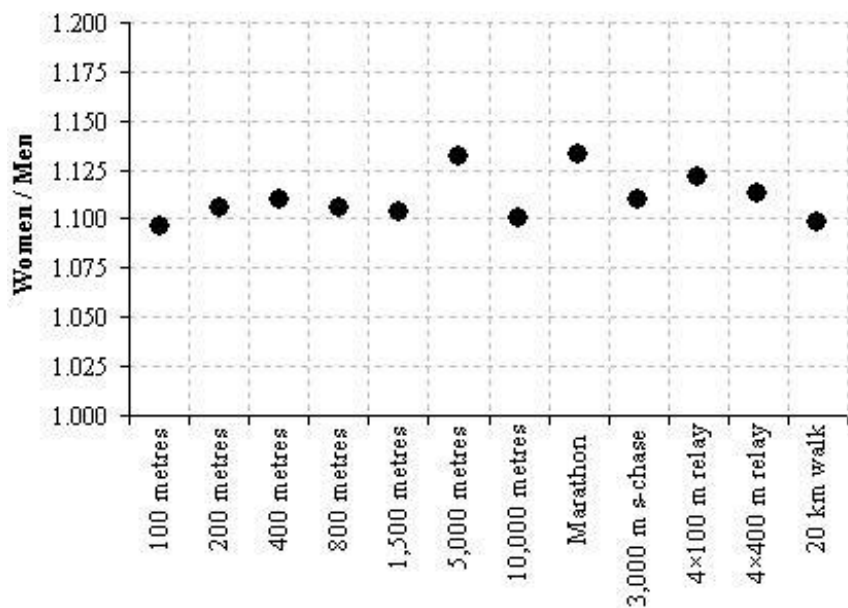
The evidence suggests an “athletic 10-15%” rule, with many years of data supporting the claim. However, this is only for one type of race. Does this relationship hold true for *other* types of races? If it’s true “this one race” is reflective of performance in general, then we should expect to see similar relationships in other races.



With the Olympics just over, the obvious choice is Olympic data. How does historic Olympic record data - men versus women - compare, not just for long races but all races of movement?

Let's see:

Olympic Records			
Event	Men	Women	% Diff
100 metres	9.69	10.62	9.6%
200 metres	19.30	21.34	10.6%
400 metres	43.49	48.25	10.9%
800 metres	1:42.58	1:53.43	10.6%
1,500 metres	3:32.07	3:53.96	10.3%
5,000 metres	12:57.82	14:40.79	13.2%
10,000 metres	27:01.17	29:54.66	10.0%
Marathon	2:06:32	2:23:14	13.3%
3,000 m s-chase	8:05.51	8:58.81	11.0%
4×100 m relay	37.10	41.60	12.1%
4×400 m relay	2:55.39	3:15.27	11.3%
20 km walk	1:18:59	1:26:31	9.8%



Our theory is remarkably consistent. But this is just for running / walking races. How does the graph look, if contests like swimming, jumping, throwing, etc., are included? A later time ...

Records are Made to be Broken

The Remarkable Bob Beamon

February 23, 2010

The Winter Olympics and a coincidental article on non-record-setting performances gives rise to this thought:

The remarkable Bob Beamon.

Mexico City.

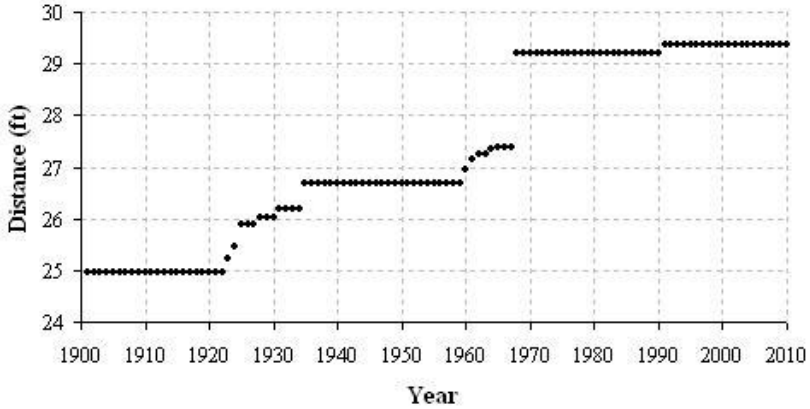
1968.

29 feet 2 1/2 inches.

Here it is ...



It's mostly remarkable both for how it shattered the previous mark, and how long it took to be broken itself. A graphical depiction of the record over time ...



A couple things stand out: the record lasts a long time, then is broken by a significant amount, and then there's decreasing – but continual improvement, until the next “great leap”.

This is true in the first part of the 20th century, and the mid 20th century. It's not true *after* Beamon, however.

Why is this?

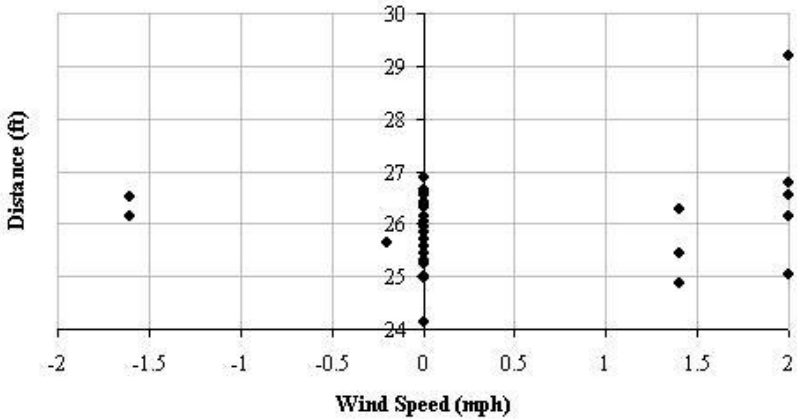
The altitude in Mexico City, we're told, is one possibility.

Mexico City is about 7,500 feet above sea level. The air is thinner. Jumps *should* be better.

His was.

But if this explanation is reasonable, then we should expect to see *other* tremendous leaps from the 1968 Olympics. *Were there?*

Here are the other jumps:



The claim the cause was “altitude” doesn't seem to hold much water. Likely it helped Beamon, but he already must have been head-and shoulders above the competition; otherwise, we would have seen other great jumps. We didn't.

One final note regarding the chronological graphic above. It's remarkable Beamon's mark stood for 23 years. However, there was a longer stretch earlier in the century: 25 years.

Who was this?

The great Jesse Owens!

The World Record Over Time

MARK	ATHLETE	VENUE	DATE	FEET
7.61	 Peter O'Connor (IRL)*	Dublin	8/5/1901	24.97
7.69	 Edward Gourdin (USA)	Cambridge	7/23/1923	25.23
7.76	 Robert LeGendre (USA)	Paris	7/7/1924	25.46
7.89	 William DeHart Hubbard (USA)	Chicago	6/13/1925	25.89
7.90	 Edward Hamm (USA)	Cambridge	7/7/1928	25.92
7.93	 Sylvio Cator (HAI)	Paris	9/9/1928	26.02
7.98	 Chuhei Nambu (JPN)	Tokyo	10/27/1931	26.18
8.13	 Jesse Owens (USA)	Ann Arbor	5/25/1935	26.67
8.21	 Ralph Boston (USA)	Walnut	8/12/1960	26.94
8.24	 Ralph Boston (USA)	Modesto	5/27/1961	27.03
8.28	 Ralph Boston (USA)	Moscow	7/16/1961	27.17
8.31	 Igor Ter-Ovanesyan (URS)	Yerevan	6/10/1962	27.26
8.31	 Ralph Boston (USA)	Kingston	8/15/1964	27.26
8.34	 Ralph Boston (USA)	Los Angeles	9/12/1964	27.36
8.35	 Ralph Boston (USA)	Modesto	5/29/1965	27.40
8.35	 Igor Ter-Ovanesyan (URS)	Mexico City	10/19/1967	27.40
8.90	 Bob Beamon (USA)	Mexico City	10/18/1968	29.20
8.95	 Mike Powell (USA)	Tokyo	8/30/1991	29.36

A side note about Jesse Owens and this world record above, from Wikipedia:

“Owens's greatest achievement came in a span of 45 minutes on May 25, 1935 at the Big Ten meet in Ann Arbor, Michigan, where he set three world records and tied a fourth. He equaled the world record for the 100-yard sprint (9.4 seconds) and set world records in the long jump (26 feet 8¼ inches, a world record that would last 25 years), 220-yard sprint (20.7 seconds), and 220-yard low

hurdles (22.6 seconds to become the first person to break 23 seconds). In 2005, both NBC sports announcer Bob Costas and University of Central Florida professor of sports history Richard C. Crepeau chose this as the most impressive athletic achievement since 1850.”

A CLOSING THOUGHT

I'd always thought the world record was 29'2.5". However, all records show it as 8.9 meters. *How do I convert metric to British?*

I'm not alone here. When his distance was announced as 8.9 meters, Beamon was unaffected. *He didn't know, either!* It wasn't until teammate and coach Ralph Boston told him the distance in feet Beamon collapsed to his knees, hands over his face!

How do I convert metric to British?

Here's my favorite way, which requires only the knowledge of 2.54 cm = 1 in. Every other conceivable combination I can derive from this, using unit fractions ...

$$8.9m = 8.9m$$

$$= (8.9\cancel{m}) \left(\frac{1000\cancel{mm}}{1\cancel{m}} \right) \left(\frac{1\cancel{cm}}{10\cancel{mm}} \right) \underbrace{\left(\frac{1\cancel{in}}{2.54\cancel{cm}} \right) \left(\frac{1ft}{12\cancel{in}} \right)}_{\text{This is what I was working towards - my link between metric and British systems}}$$

$$= 29.2ft$$

This is what I was working towards - my link between metric and British systems

The World's Greatest Athlete

August 14, 2008

Michael Phelps' phenomenal success, workout regimen, diet, and physical anomalies have been well documented during these Olympic games.

His career total of 11 gold medals will possibly rise to 13 this weekend.

This sheer total has earned him "The Greatest Olympian Ever".

Close.

The 1912 Summer Olympics (the Games of the V Olympiad) were host to what may be the greatest athletic performance, certainly in the history of the Olympics, but also world athletic competition!

The legendary Jim Thorpe won not only the decathlon, but also the 5-event pentathlon!





For the 1912 Summer Olympics in Stockholm, Sweden, two new multi-event disciplines were on the program, the pentathlon and the decathlon. A pentathlon based on the ancient Greek event had been organized at the 1906 Summer Olympics, but the 1912 edition would consist of the long jump, the javelin throw, 200-meter dash, the discus throw and the 1500-meter run.

The decathlon was an entirely new event in athletics, although it had been competed in

American track meets since the 1880s and a version had been featured on the program of the 1904 St. Louis Olympics. However, the events of the new decathlon were slightly different from the U.S. version. Both events seemed a fit for Thorpe, who was so versatile that he alone had formed Carlisle's team in several track meets. He could run the 100-yard dash in 10 seconds flat, the 220 in 21.8 seconds, the 440 in 51.8 seconds, the 880 in 1:57, the mile in 4:35, the 120-yard high hurdles in 15 seconds, and the 220-yard low hurdles in 24 seconds. He could long jump 23 ft 6 in and high-jump 6 ft 5 in.[3] He could pole vault 11 feet, put the shot 47 ft 9 in, throw the javelin 163 feet, and throw the discus 136 feet. Thorpe entered the U.S. Olympic trials for both the pentathlon and the decathlon.

He easily won the awards, winning three events, and was named to the pentathlon team, which also included future International Olympic Committee (IOC) president Avery Brundage. There were only a few candidates for the decathlon team, and the trials were cancelled. Thorpe would contest his first—and, as it turned out, only—decathlon in the Olympics. Thorpe's Olympic record 8,413 points would stand for nearly two decades.

wikipedia



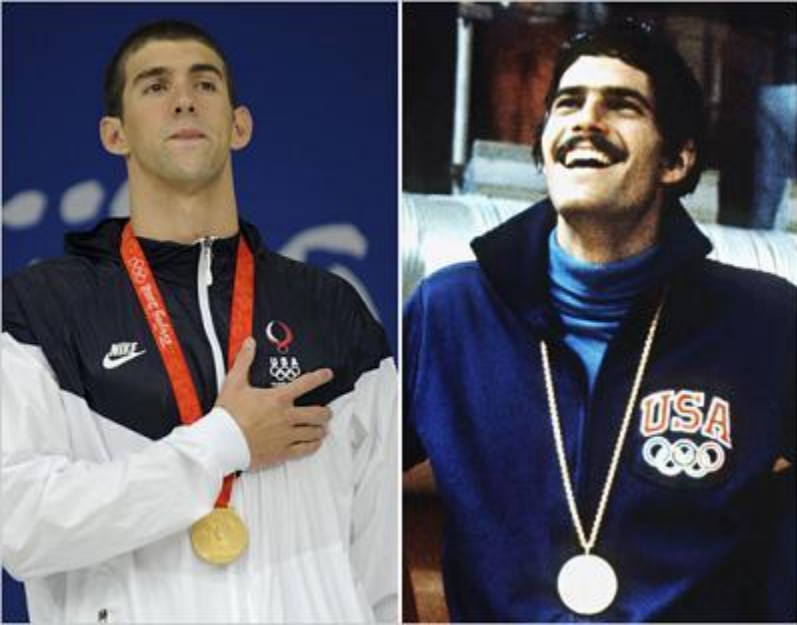
King Gustaf V of Sweden

Legend has it that, when awarding Thorpe his prize, King Gustav said, "You, sir, are the greatest athlete in the world."

Proper Context

The Truth, The Whole Truth, and Nothing But the Truth

September 4, 2008



Michael Phelps' quest for eight gold medals at the Beijing Olympics dominated coverage. It had been 36 years, after all, since the phenomenal performance of Mark Spitz at the 1972 games in Munich.

Phelps got eight - Spitz seven. According to the media, that's the end of the story.

What *is* the rest of the story, as our good friend, Paul Harvey, might say?

In preparation for the Olympics, according to Phelps, his life consisted of “swim, eat, and sleep”. A mighty convenient schedule, if you can pull it off! Who pays for the accommodations? Where does the food and shelter come from? The training facilities? The coaching? How is this paid for if one only “swims, eats, and sleeps”? Corporate sponsorship.

But surely Spitz had access to such accommodations, right?

Wrong.

Sponsorship for amateur athletes made the athlete a professional - and therefore, not eligible for the Olympics. It was only years later the rules were changed, allowing one to “swim, eat, and sleep.”

What was Spitz doing while Phelps was “swimming, eating, and sleeping”? Spitz was attending Indiana University in pursuit of a career as a dentist!

So they're each off to the Olympics, Spitz to Munich, Phelps to Beijing, the backgrounds vastly different. One attending IU, the other not attending - anything - I guess.

Is *that* the rest of the story?

Hardly. You see, Spitz is Jewish, and the 1972 Olympics are sadly remembered for the terrorist act by Yasser Arafat's Black

September, where 11 Israeli athletes and coaches were killed. Munich, Germany. What was the atmosphere for Jewish athletes going to Germany? I don't know. I can only guess.

So while Phelps' post Olympic trip was highlighted with a ceremony kicking off the London 2012 games, Spitz' post-Olympic journey consisted of being secretly whisked back to the safety of the States.

Is this intended to belittle the performance of Phelps? Of course not. But it is intended to put into proper context the remarkable accomplishments of Spitz. The medals and world records were remarkable in-and-of-themselves. The background of his story makes his accomplishments all-the-more remarkable.