#### The Ancient Olympics: Events, Technology, Superstars, Women, Lessons for Them and for Us

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#### The Stadium at Olympia (I'd add beer and souvenir tents)



#### **Ancient Stadium Layout**

- There were 22 lanes divided by posts ( I counted them to be sure ).
- You could stick your toes into the parallel groves to start (I did that to be sure ).
- For a one-length race, 22 could run at once.
- For longer races, 11 could run at once, because each runner ran around an end post and then back in the adjoining lane.
- The 1896 Panathenaic Stadium was long and narrow as a simulation.

# Panathenaic Stadium (Made Entirely of Marble)



#### 4 Panhellenic Stadia and Length of a Greek Foot

- One plethron = 100 (Greek) feet
- One Stadion = 6 plethra = 600 (Greek) feet

Games	First	Stadium	Length of a	Wreath Given to
	Held	Length (m)	Greek foot (ft)	the Winner
Olympic	776 BC	192.28	1.050	Olive
Pythian (at	582 BC	177.55	0.971	Laurel
Delphi)				
Isthmian	581 BC	181.20	0.991	Pine
Nemean	573 BC	178.00	0.972	Wild Celery
Average			0.996	

#### Ancient Olympics: 776 BC to 393 AD (Winners recorded to 277 AD)

- After 582 BC, over each Olympiad, there were six Games at four locations.
  - Year 1: Olympic Games
  - Year 2: Nemean Games and Isthmian Games
  - Year 3: Phythian Games at Delphi
  - Year 4: Nemean Games and Isthmian Games
- These were the Panhellenic Games, Crown Games or Stephanitic (∑τεφανιται) Games.

### **Ancient Olympics**

- The Foundation of Hellenic Culture translated and listed all the winners of the Ancient Olympics from 776 BC to 277 AD.
- <u>http://www.fhw.gr/olympics/ancient/en/db.html</u>
- <u>https://en.wikipedia.org/wiki/List\_of\_ancient\_Olympic\_victors</u>
- I have sorted the events and winners.
- There were 5 sports and 30 events, 8 of which were held only once.
- There are 861 unambiguous results.

#### Distribution of all 861 Unambiguous Olympic Competitions

Sport/Competition	% of the 861 Competitions
Athletics	49%
Combat	32%
Chariot Racing	11%
Equestrian Racing	4%
Artistic Performance	4%

#### 7 Athletics Events (419, 49%)

Event	<b>Comments/Distance</b>	First	Last	Times
		Year	Year	Held
Stadion	X1, 192 m	776 BC	269 AD	254
Stadion-Boys	X1, 192 m	632 BC	133 AD	31
Diaulos	X2, 384 m	724 BC	153 AD	43
Diaulos in	X2, 384 m	520 BC	185 AD	28
Armor				
Dolichos	X7-24, 1344-4608 m	720 BC	221 AD	30
Pentathlon	Stadion, Discus,	708 BC	241 AD	32
	Javelin,			
	Long Jump, Wrestling			
Pentathlon-		628 BC	628 BC	1
Boys				

#### 6 Combat Events (279, 32%)

Event	<b>Comments/Distance</b>	First	Last	Times
		Year	Year	Held
Boxing		688 BC	25 AD	61
Boxing-Boys		540 BC	89 AD	40
Pankration	No holds barred.	648 BC	221 AD	70
Pankration- Boys	No holds barred.	200 BC	117 AD	7
Wrestling		708 BC	213 AD	68
Wrestling-Boys		632 BC	97 AD	33

#### Hippodrome 1.2 km



#### 10 Chariot Events (94,11%)

Event	<b>Comments/Distance</b>	First Year	Last Year	Times
Chariot Race		65 AD	129 AD	2
Chariot-Foals		65 AD	65 AD	1
10 Horse Char.		65 AD	65 AD	1
Apene	2 mules, x6, 7.2 km	500 BC	456 BC	4
Synoris	2 horses, x6, 7.2 km	408 BC	60 BC	14
Synoris-Foals	2 foals, x6, 7.2 km	96 BC	1 AD	3
Synoris-Colts	2 colts, x6, 7.2 km	264 BC	264 BC	1
Tethrippon	4 horses, x12, 14.4 km	680 BC	241 AD	60
Tethrippon-	4 foals, x12, 14.4 km	372 BC	153 AD	7
Foals				
Tethrippon-Colts	4 colts, x12, 14.4 km	384 BC	384 BC	1

#### 3 Equestrian Events (36, 4%)

Event	<b>Comments/Distance</b>	First Year	Last Year	Times Held
Foals' Race	X6, 7.2 KM	256 BC	72 BC	7
Horse Race	X6, 7.2 KM	648 BC	197 AD	28
Mares' Race	X6, 7.2 KM	496 BC	496 BC	1

#### 4 Artistic Performance Events (33,4%)

Event	<b>Comments/Distance</b>	First	Last	Times
		Year	Year	Held
Herald	Gap of 420 years until	396 BC	261 AD	12
Competition	65 AD			
Lyre Playing		65 AD	65 AD	1
Tragedy		65 AD	65 AD	1
Competition				
Trumpeter		396 BC	217 AD	19
Competition				

#### What's Up With 65 AD?

Event	Winner
Herald Competition	Nero
Lyre Playing	Nero
Tragedy Competition	Nero
Chariot Race	Nero
Chariot Race for Foals	Nero
Race for 10 Horse Chariot	Nero

#### Only 3 Won More Events than Nero Only 4 Won 6 Events Like Nero

- Four other 6 event winners:
- Chionis of Sparta (664 656 BC), Diaulos
- Hipposthenes of Sparta (632 606 BC), Boys Wrestling and Wrestling
- Milon of Croton (540 516 BC), Boys Wrestling and Wrestling
- Hermogenes of Xanthes (81 89 AD), Stadion, Diaulos and Diaulos with Armor

#### King Philip of Macedon: Triple Winner

Event	Year	Winner
Horse Race	356 BC	King Philip II of Macedon
Tethrippon	352 BC	King Philip II of Macedon
Synoris	348 BC	King Philip II of Macedon
Conquer the Known World		King Philip's son, Alexander the Great

#### Women at Olympia

- At the games dedicated to Zeus (Olympic Games)
  - Men competed, unmarried women attended.
  - The High Priestess of Demeter was an official.
  - Married women were not to attend.
  - A married woman was double Olympic champion. Kyniska of Sparta trained the winning horses in the Tethrippon in 396 and 392 BC. She got her wreaths outside the stadium.
  - Kallipateira trained her son in the stadium. When she was "outed", she was pardoned. Her father, 3 brothers and son were champions. Trainers had to be naked after that.

#### Women at Olympia

- At the games dedicated to Hera (Heraea Games)
  - Unmarried women competed in 3 age groups in running events over 500 feet instead of 600 (83% as far). In 1928 when women returned to athletics at the Olympics, female champions were 83% as good as male champions across all the athletics events. Now women are 87% as good (90% at running).
  - Women ran the stadion (160 m), diaulos (x2), hippios (x4) and the dolichos (x18-24, 2880 m to 3840 m)
  - Married women were trainers, judges and officials.
  - The Greek government empowered the Council of 16 Women to officially handle women's competition.
- The torch for the current Olympics is lit at Hera's shrine. Happily, women receive a symbolic equality at long last.

#### What Do We Know About Performances?

- Phayllos of Croton won twice at Delphi in the pentathlon and once at the diaulos.
- An epigram says he long jumped 5 + 50 = 55 feet and threw the discus 100 - 5 = 95 feet.
- He made so much money in sports, he owned a battleship and fought for Alexander the Great at Salamis. Alexander sent all his loot to Phayllos in Croton from the next battle. It's good business to win a war.

#### Each Olympic Champion Received a Στεφανι (Stefani)



#### **Thank You Phayllos**

- Phayllos' Croton, was a Greek city in southern Italy.
- There were many athletes from Croton that earned a wreath called a ∑τεφανι (Stefani) for winning an event at the various Games. Thanks to Phayllos and them, anything important in Italy earned a Stefani.
- In the middle ages, scholars at Bologna were given a Stefani.
- My family name, Stefani, started in Bologna in 1350. My grandfather was born SW of Bologna.
- Without Phayllos, my name could have been Mussolini.

#### Pentathlon: Measuring Long Jump, Discus and Javelin Distance

- Based on Phayllos, they probably started with ½ plethron (50 foot) markers.
- They probably created a 25 foot measuring device.
- By trial and error, they probably marked every 5 feet.
- The pentathlon was an elimination event so they probably measured as with Phayllos' 50 + 5 feet and 100 – 5 feet.
- The first event was probably the stadion. We know the last event was wrestling.

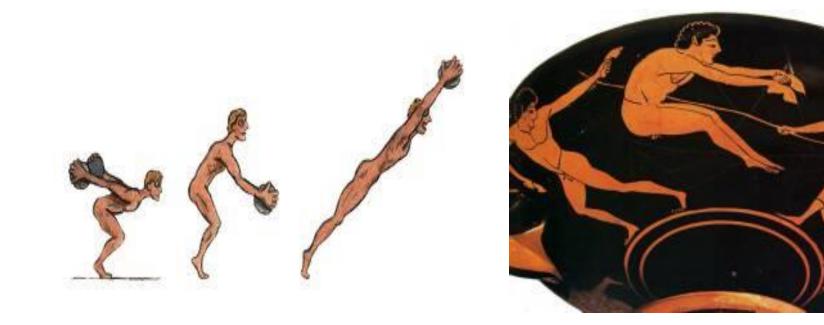
#### Technology of Long Jumping with Weights

- Halteres weighed 1.5 to 2 kg.
- <u>Researchers</u> Benefit with 2 kg Optimal <u>Huang et al.</u> 4.5% 8% of BW <u>Minetti and Ardigo</u> 5.7% 5-6 Kg
- Epigram says Phayllos of Croton jumped 55 ft (16.3 m), out jumping the pit. Probably 5 jumps (Pentathlon = 5 events). KU Leuven says that after 8 weeks of training, jumpers reached 15 m (50 ft) with 5 jumps.

#### How Could Phayllos Jump 55 feet: 5 Standing Jumps with Weights

**Standing Long Jump Takeoff** 

Landing



#### Ancient Technology: Starting Gates for Running

Crank up posts at either end and secure with rings

**Ropes hold back the runners** 



#### Ancient Technology: Starting Gates for Running

Pulling ropes released the posts, pulling down retaining ropes

**Outer lanes started first** 





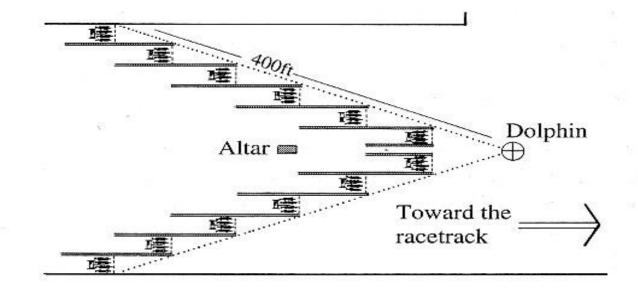
#### Advice to the Ancient Olympians: How to Beat the Start and Turn

- Practice watching the posts start to fall.
- Count seconds until the ropes hit the ground.
- Walk back a few steps and practice starting to run when the posts start to fall so you run right over the fallen ropes (maybe hop to be sure). This gives a head start.
- Practice a rapid stop and reverse of direction at the turning post. Don't just run around the post. After all, you want to win a ∑τεφανι.

#### What They Could Teach Us

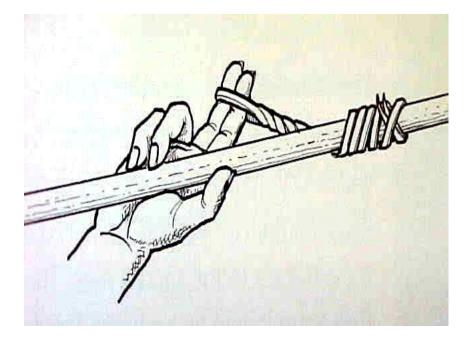
- Leonidis of Rhodes (the Carl Lewis of old) had 12 wins, the Stadion, Diaulos and Diaulos in Armor four consecutive times each from 164 BC. We could learn much from his training methods, his starting techniques and his turning techniques.
- We could also learn from Astylos of Croton, who had 7 wins, including 3 in the Stadion, 3 in the Diaulos and 1 in the Diaulos in Armor from 480 BC.

#### Technology Staggered Start for Chariot Racing (Compensates for Outer and Inner Lanes Being Worst)



#### Ancient Technology: Spin Stabilizing the Javelin

#### **Rope and finger loop**



Throwing made it spin (I'd be careful with that point)



# Statue at the National Archaeological Museum: Zeus, Poseidon or Phayllos?

**Zeus or Poseidon?** 

Javelin Thrower as a Model? Maybe a Statue of Phayllos?



#### Advice to the Ancient Olympians: How to Improve Your Javelin Throw

- Reverse the direction of the cords and loop.
- Close the your hand comfortably over the javelin. Raising the finger or two stresses tendons.
- Put your thumb in the loop. The throw should be much more natural and you should gain distance. Win that ∑τεφανι!

#### Wrestling Advice from Mr. Fingertips

- Sostratos of Sikyon won the Pankration (no holds barred) three times in a row at Olympia in 364, 360 and 356 BC, the Isthmian + Nemean Games 12 times total and the Pythian Games 2 times. That's 17 wins. He found a technique for breaking his opponents' fingertips. Ouch!
- They must not have had to shake hands afterward.

#### **Advice for the Trumpeter Competition**

- Today's trumpeters learn circular breathing where air can be expelled and a note retained while breathing in for part of a breathing cycle. That might have helped the ancient Olympic trumpeters.
- On the other hand, the ancient Louie Armstrong, Herodoros of Megara, won 9 consecutive times over a 32-year span from 328 BC. Imagine what techniques he must have had and what innovative sounds he must have made to win 9 times in a row. What a shame: no You Tube.

#### Advice on What Can Be Done in One Day

- From the Isthmian Games, we should ask one athlete to teach us how to have one amazing day of accomplishment.
- Kleitomachos of Thebes won in boxing, wrestling and the pankration, all in one day.
- Not a bad day.

#### **Nutrition at the Ancient Games**

- They ate large amounts of meat
  - They understood the need for animal protein, but did not know about effective use of carbohydrates and fruit.
- They ate heart
  - They knew they needed oxygen transfer (nice try), but did not know about aerobic training and anaerobic training.
- They ate animal testicles
  - They understood (roughly) hormones (nice try), but did not know about steroids (which would have been legal).

#### **Training at the Ancient Olympics**

http://ancientolympics.arts.kuleuven.be/eng/TC021EN.html

• A four-day cycle was used

Day 1: Preparatory exercises

Day 2: Heavy training

Day 3: Rest

Day 4: Light exercise

#### **Training at the Ancient Olympics**

- Many athletes used halteras (1.5 to 2 kg)
- Weightlifters used heavier weights: Bubon lifted a 143 kg stone and threw it.
- Boxers shadow boxed with a bag.
- Pankration athletes used a heavier bag.
- Runners had muscular legs, thin upper bodies.
- Fighters had thick upper bodies, skinny legs.
- Galen said exercises should have been more balanced. Who are we to disagree with Galen?

#### **Psychology+ at the Ancient Olympics**

- PEDs were not illegal, only bribery.
- They took opium juice.
- The took hallucinogens.
- We know that chariot drivers in Ancient Rome took strychnine as a stimulant (but using strychnine didn't end in the Ancient World).

#### Strychnine

## Thomas Hicks used it with brandy to win the Olympic Marathon in 1904. He almost died.



### Thank you from a Στεφανι!

