December 20th 1912, The Piltdown Man Hoax.

• The Piltdown Man was a paleoanthropological hoax in which bone fragments were presented as the fossilised remains of a previously unknown early human.

- These fragments consisted of parts of a skull and jawbone, said to have been collected in 1912 from a gravel pit at Piltdown, East Sussex, England.
- Fragments that were found.

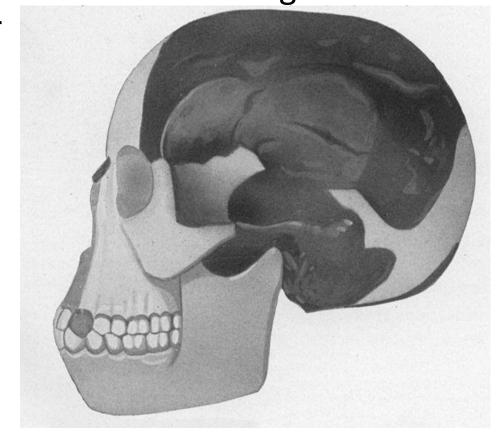


Reconstruction from (dark)fragments that were found.

At a meeting of the Geological Society of London on 18th December 1912, Charles Dawson claimed that a workman at the Piltdown gravel

pit had given him a fragment of the skull four years earlier.

According to Dawson, workmen at the site discovered the skull shortly before his visit and broke it up in the belief that it was a fossilised coconut.



The greatest hoax?

The Piltdown hoax is perhaps the most famous paleoanthropological hoax ever to have been perpetrated.

It is prominent for two reasons: the attention paid to the issue of human evolution, and the length of time (more than 40 years) that elapsed from its discovery to its full exposure as a forgery.



Learned Men fooled.

- The Latin name Eoanthropus dawsoni ("Dawson's dawn-man") was given to the specimen.
- Group portrait of the Piltdown skull being examined.
- Back row (from left): F. O. Barlow,
 G. Elliot Smith, Charles Dawson,
 Arthur Smith Woodward.
- Front row: A S Underwood, Arthur Keith, W. P. Pycraft, and Ray Lankester. Painting by John Cooke, 1915.



An expert recruited.

 Revisiting the site on several occasions, Dawson found further fragments of the skull and took them to Arthur Smith Woodward,

keeper of the geological department at the British Museum.

• Greatly interested by the finds, Woodward accompanied Dawson to the site.

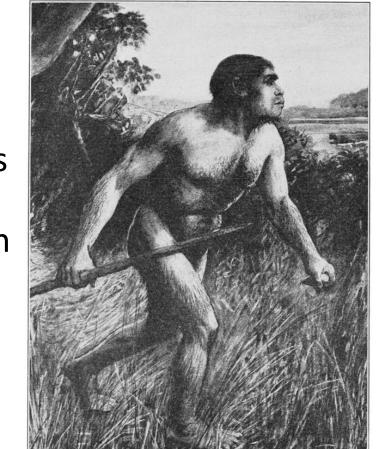
 Though the two worked together between June and September 1912, Dawson alone recovered more skull fragments and half of the lower jaw bone.
 Arthur Smith Woodward:



A shared delusion.

Arthur Smith Woodward, announced the find at a meeting of the Geological Society of London on December 18th 1912.

Woodward claimed that the fossils represented a previously unknown species of extinct hominin (Eoanthropus dawsoni) that could be the missing evolutionary link between apes and early humans since the combination of a human-like cranium with an ape-like jaw tended to support the notion then prevailing in England that human evolution began with the brain.



Wish fulfilment?

- His claims were eagerly and uncritically endorsed by some prominent English scientists, perhaps because the Piltdown fossils suggested that the British Isles had been an important site of early human evolution.
- Charles Dawson (left) and Arthur Smith Woodward searching for specimens at the gravel pit in Piltdown, Sussex.



Dispute lasted for years.

• The significance of the specimen remained the subject of controversy until it was exposed in 1953 as a forgery, consisting of the lower jawbone of an orangutan deliberately combined with the cranium of a fully developed modern human.



Evidence against authenticity strong.

- The first serious doubts about the authenticity of the skull were voiced in 1949.
- Chronologists reviewed the remaining evidence at the site and said that neither the skull cap nor the jaw was "particularly old."

• The Piltdown Man memorial stone.



Forty years on.

- In November 1953, The New York Times published evidence gathered variously by Kenneth Page Oakley, Sir Wilfrid Edward Le Gros Clark and Joseph Weiner proving that the Piltdown Man was a forgery.
- The specimens had been stained and chemically treated to make them appear old. Crucial anatomical details that would have given the game away had been broken off or filed down.





Definite proof of hoax.

- Any doubts that the fossils were fraudulent were finally removed by Dr Oakley, who tested all the bones for their relative content of fluorine absorbed from the soil.
- He found they contained "very little fluorine," a circumstance suggesting that the "relics" were relatively recent.



Unknown perpetrator.

- The identity of the perpetrator of the Piltdown hoax has remained a mystery.
- Speculation has most often focussed on Dawson himself, who may have been motivated by a desire for a coup that would gain him entrance into the Royal Society.



Woodward's role not at all clear.

• Some scholars have contended that Woodward, Dawson's chief collaborator, was innocent, and others have suspected that he was the intended victim of the hoax (to make him look ridiculous upon

exposure).



Two other possibilities.

- Some have contended that Samuel Allison Woodhead, principal of the Agricultural College in Uckfield, was a confederate, having access to bones and to chemicals for supplying and doctoring the specimens.
- Another possible participant in the scheme was Pierre Teilhard de Chardin, a French Jesuit priest and palaeontologist who accompanied Dawson on his first joint excavations at Piltdown with Woodward.

• Pierre Teilhard de Chardin.

And more.

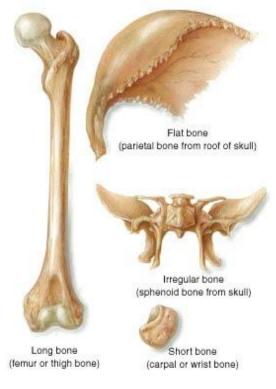
• Still other candidates have included the author Sir Arthur Conan Doyle, who lived near Piltdown, knew Dawson, and was interested in fossils, and Sir Arthur Keith, who was an anatomist and conservator of the Hunterian Museum of the Royal College of Surgeons at the time.

Sir Arthur Conan Doyle.



Clear evidence?

- The first solid evidence regarding the identity of the perpetrator emerged in 1996, two decades after a trunk marked with the initials M.A.C.H. had been discovered in storage at the British Museum.
- Upon analysing bones found in the trunk, the British palaeontologists Brian Gardiner and Andrew Currant found that they had been stained in the exact same way as the Piltdown fossils.



Hoaxer identified?

- The trunk apparently had belonged to Martin A.C. Hinton, who became keeper of zoology at the British Museum in 1936.
- Hinton, who in 1912 was working as a volunteer at the museum, may have treated and planted the Piltdown bones as a hoax in order to ensnare and embarrass Woodward, who had rebuffed Hinton's request for a weekly wage.

Martin A.C. Hinton.



Getting his own back.

- Hinton presumably used the bones in the steamer trunk for practice before treating the bones used in the actual hoax.
- Hinton's antipathy to Smith Woodward was well known as was his interest in hoaxes.

Too fool Smith Woodward with a phoney missing link would have

been a brilliant joke.