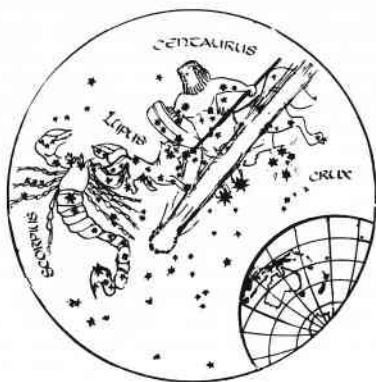


The *COMET*



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This year we are all comet-watching without fear, mercifully free from mediaeval beliefs that whenever something unusual happens it is bound to be disastrous. Why is it that human beings, left to themselves and not dazzled by science, believe that any change is for the worse? And it is so hard to believe that any harm should accompany this familiar and famous comet which, if the newspaper articles and television programmes are to be believed, has accompanied every important event in history from the Battle of Hastings onward, and which is so fortunately recorded in the Bayeux Tapestry.

Prompted by the number of Halley's Comet medallions around town (including our own, pictured here, which is the biggest and best!) I decided to investigate a few early historical references to comets, see if the ancient writers were really frightened by the appearance of a new heavenly body, and - if so - whether any of the known sightings of comets were of the one we now know as Edmond Halley's.

We have been told that the ancient Chinese observed comets and described them in their writings. We cannot be sure if any of those was Halley's, because there are a large number of known, named comets, and some of them are larger and brighter than Halley's. For instance, there are photos of the comets Mrkos and Arend-Roland which appear to be brighter and with a larger tail than Halley's. However, the fascination of Halley's is its predictability: while some comets have such vast orbits that we cannot track enough of their parabola to be able to estimate their return, and others burn themselves out in a few years and are never seen again. Halley called "his" comet "Mercury among comets", supposing it had the shortest period of any; but this was proved incorrect by the discovery of Encke's comet early in the 19th century.

Working out the arithmetic, not all the famous sightings of the past could have been Halley. Going backwards from 1456, which was the first of the appearances which Halley used for his calculations, 75 to 76 years does not work out to anywhere around 1066. However, there certainly was a comet around at the time, and Harold's army took it as an ill omen; which is difficult to understand when you consider that the army on the other side saw it too. I think it likely that any unusual natural events were used as excuses by the losing side.

John Speed, writing his "Historie of Great Britaine" in 1625, describes its influence:

"The messengers returned, and Harold's answer declared [i.e. he rejected the claims made by William's ambassadors] William lionlike, enraged, casteth his thoughts about plotting revenge, and making some odds even that might impeach his designs, prepared all things for open war. Harold likewise not sleeping his business, made ready his fleet, mustered his soldiers, and planted his garrisons along the sea coast. But in these his proceedings, behold a great and fearful comet appeared (seldom a sign to princes of fortunate success) upon the 24th of April, and lasted until seven days, which drew the minds of the English into great suspense, now ready to enter into a double war".

Note that the comet was only seen for seven days. Surely not Halley's!

Another sighting in 1337 during the reign of Edward III was also a different comet. Once again, the arithmetic does not work out. Halley based his predictions on sightings starting from 1456, so that the comet would have appeared in 1380 and 1304, give or take a few months. However, the chronicler reports:

"The war which all this while seemed but to be talked of, did now begin to blaze (and indeed a blazing star of thirty days continuance was supposed by some to foreshow it) whose first torch was laid by the French at Southampton, which they almost wholly consumed to ashes".

It should be noted that the history in which these episodes are related is a volume of over 1200 large pages, which delve into fascinating detail of the reigns of British monarchs from Roman times until about 1620; and in all that mass of detail only three mentions of comets or blazing stars can be found, in spite of evidence that the author's research has been done very thoroughly. Possibly only the most noticeable comets were seen with the naked eye, although in mediaeval and ancient times natural phenomena were observed with enormous interest by outdoor workers who were familiar with the night skies and were not dazzled by the lights of great cities. I conclude from this lack of importance given to heavenly bodies in a work of some scholarship, and from the fact that Speed says that the blazing star was only "supposed by some", etc., that perhaps this type of omen was not really as much feared as we have been led to understand.

Shakespeare, writing at the same time as Speed was compiling his history, and probably using the same source for much of it (Holinshed), uses witchcraft, omens, and augury in his plays; but it should be remembered that his references are either referring to times long past (e.g. Julius Caesar or Macbeth), or are spoken by lower-class characters who might be supposed to be more superstitious.

I found one reference to a comet which must be Halley' because it occurred in 1456. Speed, recording Henry VI's battles with the Yorkists, says:

"The King himself was shot in the neck with an arrow, and other of his chief friends were likewise sore wounded and taken ... The Duke of York, the Earls of Salisbury and Warwick, with the King (whom they in show did use most reverently, and as if they had meant nothing unto him but good faith), upon the morrow ride to London, where in July immediately following, the Parliament is held in King Henry's name. The fore-runner whereof was a comet, or blazing star, which appeared in the month of June, the beams whereof extended themselves into the south".

Halley's predictions were closely allied to the work of Sir Isaac Newton, who was a great personal friend. Edmond Halley paid for the publication of Newton's "Principia", after giving Newton great encouragement to complete his theories and publish them; and Halley in his turn was assisted by using Newton's theory to predict the return of the comet in 1758 (sixteen years after he died). This was the first public application of Newton's laws of motion.

The N.A.V. medallion pictured at the beginning of these notes shows the comet as it moved through the skies over southern Australia in April 1986.

Finally, as an example of Halley's being recorded in what is probably the earliest instance of a comet being used numismatically, there is the "Kometenthaler". This was the name given to a medallic thaler issued by the city of Strasburg in 1681 when the town surrendered to the French. It has on the obverse a picture of a comet which appeared in the preceding year, and which superstitious people associated with the calamity which had befallen the city. Work out the arithmetic: it must have been Halley's. I wonder if there are people who think that in 1986 it pointed the way to Chernobyl?

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S O V E R E I G N L O V E

By DANNY McGRATH

Love is like a one cent coin
Spinning, in delirious ecstasy
It describes a circle
of Infinite Possibility
and defied impossibility.

It grows beyond and beyond,
forever on ---
Boundless and beautiful
Disarrayed copper - no!
gold!

A sovereign,
queen of coins;
Love -- ruler of hearts!
