

Prior Walcher of Lorraine(Lotharingia) 2nd Prior of Great Malvern Priory 1091-1125
whose Tomb lid is on the South side, in St Ann's Chapel Chantry, Gt.Malvern Priory

When Lord Rees – the present Astronomer Royal – read the first draft of this article; he commented that the celebrated Geoffrey Chaucer wrote about Gt. Malvern's second Prior, Dr.Walcher, in the C14th.

Why might Chaucer have done this ?

Modern Muslims often seem to have little or no idea of the very rich past of their learning and culture. However, the **Second Prior of Gt. Malvern's monastery, Walcher of Lorraine** – probably this priory's most famous son - who knew about it, and brought his knowledge not only to early 12th century Britain, but here to Great Malvern Priory, a daughter House of Westminster Abbey .

In the Tenth century, parts of Muslim Spain had great aqueducts and fountains, with city streets paved and patrolled: whereas it was a further four hundred years before London had paving for its still unlit thoroughfares. And, even then, the polluted water contributed to plague after plague. In the Tenth century there were scores of public baths in the capital of Muslim Spain, but even several centuries later, the capitals of Christian Europe could not compete with this kind of provision.

When we consider learning in Christian Britain of the Tenth century, we discover it to be lamentable, with only the monasteries carrying the flame of academe and culture; surrounded by ignorance, barbarism, violence, lawlessness, superstition and poverty. One of the most important translators, who transmitted Arabic science to the Latin West, was the C12th teacher/writer **Petrus Alphonsi**, an emigrant from Moslem Spain, who brought Arabic texts to Aragon, England and France.

In 1116, Alphonsi had translated and adapted a series of astronomical tables from Al-Khwarizmi's "*Zij Al-Sindhind*" from Arabic into Latin. This work combined Ptolemaic & Hindu elements, and was the best kind of Sindhin astronomy. Alphonsi's translation into Latin introduced a new concept of planetary motion to Western astronomy. A convert to Christianity from Judaism. Alphonsi's attitude towards astrology –*the predictive aspect to astronomy* - was quite different to that of others, like Ghazzali, Alphonsi considered astrology a part of God's Grand Design; and defended it against its detractors, believing the stars were ordained by God to influence the terrestrial world.

Alphonsi had particular influence in England: his translations were reworked by **Adelard** of Bath: and Prior WALCHER of Great Malvern learned from Alphonsi to predict solar and lunar eclipses. From north east France (Lotharingia), and after astronomical observations in Italy, he came to England in about 1091, and was noted for using an astrolabe to measure the time of several solar and lunar eclipses, within an accuracy of about 15 minutes.(*Heffeman*)

Using early observations, he computed a set of tables giving the time of new moons from 1036 to 1111, which he considered to be important for purposes of medical astrology. His later observations revealed significant errors in his tables – reflecting the limitations of early medieval astronomical theory. (*association of mental ill-health with moon “lunacy”?*)

In some of his later writings – which drew on Arabic astronomy (Spain) – he recorded angles in degrees, minutes, and seconds – although he still wrote these numbers in Roman rather than Arabic numerals.

Travellers, like **Adelard**, re-visiting Britain in the reign of William the Conqueror’s son, Henry, could only write of the wonderful learning and scientific progress of the East, where he had seen something of the vast libraries of Egypt, Baghdad, and the Caliphate of Spain.

However, in most of Christian Europe there were few, if any, such stores of learning, and they appertained to royalty and the monasteries, and were largely concerned with theological and devotional treatises. Whilst for further centuries – unlike many poorer Muslims who might even study astronomy – apart from a few of the English nobility, virtually no one could read or write outside the monastery walls of this country.

As Prior **Walcher**’s appellation ‘*of Lotharingia or Lorraine*’ indicates; this area of North East France became a bridge between Islam and the West from about 850AD, partly through men like the Jew, **Hasdeu**, who was also a cultured scholar who understood both Arabic and Latin; and also through an abbot who was already keenly interested in mathematics and some of the basic sciences, including astronomy, and who spent time with Hasdeu, as well as in Cordoba.

So how does all this connect with the small monastic house at Gt. Malvern ? Well, it was through religious houses like Malvern that the scientific and mathematical progress of the Islamic East penetrated this country – partly through the Second Prior here. Scholars from **Lorraine**, having begun to explore the treasures of Muslim Spain, carried *new* mathematics and astronomy, etc. westward through the monasteries.

King Canute, for example, set a fashion of showing strong preference for church leaders from the Lorraine area – which continued long after his death – by which time he had already appointed some bishops and scholars, from Lorraine, to English positions, including the sees of Ramsey, Wells, and Exeter.

Under **Edward the Confessor**, this trend continued, with men from Lorraine bringing their books with them. The last Saxon king, having travelled and seen the superior educational progress of parts of Europe, appointed Walter to Hereford, Gisa to Wells, and Athelard of Liege as Head of the college of canons.

During the reign of the **Conqueror**, and that of his son, more leaders from Lorraine were appointed, including Robert, the mathematician, to the see of Hereford in 1079, followed by Samson of Worcester, Walcher of Durham, Thom of York, and **Walcher of Malvern**.

Of these last four, **Walcher** of Malvern was probably the greatest figure of the time to arrive in England from Lorraine; with his remarkable grasp of **Arabic** learning, his ability to translate it into Latin, his use of the astrolabe; and also sowing the seed for replacing **Roman** mathematical calculations with **Arabic** equivalents. He also introduced the lunar calendar to England.

He is now also considered to have been the **first English astronomer/astrologer**, and he had in fact been observing eclipses of the moon, in Italy, with an **astrolabe** c 1090, before travelling all the way to Gt.Malvern, where he would follow Aldwin, the founding prior of this **royal** foundation (through the great +**Wulfstan of Worcester**) and daughter house, of St.Peter's **Westminster**, as its Second Prior, from 1091 – 1125+.

William of Malmesbury, who met him, was struck by his piety; but he is far better known as a mathematician and astronomer/astrologer, who translated into Latin an astronomical work of **Peter Anfusi**, which introduced into Britain **Arabic** mathematical figures and calculations, and the present use of degrees, minutes, and seconds.

Thus Gt.Malvern was intimately connected with the greatest mathematical revolution of the mediaeval world, the replacement of the unwieldy Roman numerals by Arabic, just as it has witnessed mathematical and scientific advances of the 20th and 21st centuries, here at *Qinetiq*.

Inscription on the coffin lid in St Anne's chapel – rescued from burial at the site of the South Transept cloister garth c1711.-

“PHILOSOPHUS DIGNUS BONUS ASTROLOGUS LOTHERING VS/VIR
PIUS AC HUMILIUS MONARCHUS PRIOR HUIUS OVILIS
HIC JACET IN CISTA GEOMETRICUS AC ABACISTA DOCTOR
WALCHERUS FLET PLEBS DOLET UNDIQUE CLERUS HUIC LUX
PRIMA MORI DEDIT OCTOBRIS SENIORI
VIVAT UT IN COELIS EXORET QUISQUE FIDELIS MCXXXV?”

“Worthy philosopher, good astrologer, born in Lorraine, a pious humble man (monk): Prior of this sheepfold (monastery); here lies in his coffin, a geometrician and mathematician.

For Walcherus the people weep: the clergy everywhere grieve. The first light of October brought this old man death. Let every faithful man pray that he lives in Heaven.”

(there is no translation available in St Anne's chapel chantry)

Brian Stowe: (contact the Priory Secretary via *Contact Us on the website*) See “*A History of Malvern*” Brian Smith, etc.