William Stukeley and the search for lost knowledge

"It seems quite likely, that when Stonehenge was built, the Druids had some notice from Phoenician traders, of the nature of Solomon's temple…"

Quite likely? Such a sweeping assertion will be familiar to anyone acquainted with fringe archaeology. Wild, unsubstantiated claims of prehistoric cultural and religious connections that cross continents; the deep, magical significance of encoded geometry and number – all this has become part of the corpus of 'New Age Mysteries' which today sells books and fills seats at conferences. It would be natural to assume that interest in such stuff had its origins in the 1960s but is that really so? Surprisingly, the statement above was written in 1743 by Dr William Stukeley, who had some even stranger theories of prehistory. Born in Holbeach, Lincolnshire in 1687, Stukeley studied 'physic' at Cambridge and London, then practiced as a medical doctor, first in Lincolnshire and later in London. But it is as an Antiquary that Stukeley is known today: he is widely recognised for his contribution to the early study of archaeology and particularly for his methodical recording of the Avebury area in the 1720s, just as the monuments were being wantonly destroyed.

The great stone circle of Avebury in north Wiltshire is part of a vast complex of stone and earth monuments whose construction is now known to have begun around 6,000 years ago in the Late Neolithic and continued for two millennia into the Bronze Age. When William Stukeley began to investigate the mysteries of Avebury in the 1720s almost nothing was known about it; its age was uncertain and like nearby Stonehenge, it was considered by some authorities to have been built by the Romans. Stukeley communicated and met with others who shared his antiquarian interests and quizzed the Avebury locals, but his main written sources were the classical authors of ancient Greece and Rome. Stukeley recognised that Avebury was actually part of a related complex of monuments, which he thought to be far older than was generally believed; he reasoned that the Avebury monuments must have been built by the Druids, who were then regarded as the earliest inhabitants of Britain, but about whom very little was known. One of the fullest accounts was just a few paragraphs by Julius Caesar, who as the conqueror of Gaul had his own political agenda and was hardly impartial; many of his 'facts' were propaganda. Caesar was happy to portray the Druids as 'noble savages' who, as fierce and worthy adversaries, could be seen to have eventually benefited from the civilising influence of Rome. Reports from other ancient writers were sketchy. The Druids were said by some to have had a form of writing, but it was secret and none survived; they had a system of divination that involved examining the entrails of sacrificial animals; another involved stabbing a man in the back with a sword and studying his death throes.

From a few, largely negative, scraps of historical evidence Stukeley wove a complex picture of a noble, refined and educated druidic priesthood, skilled in mathematics and geometry. Stukeley's book *Abury, a Temple of the British Druids* has two distinct aspects: in part, it is seen as a useful, factual account of Avebury and its landscape as it was in the early 1700s. But much of the book is regarded as fanciful indulgence, of little practical value – Stukeley's 'interpretation' of the monuments is often dismissed as a bizarre hotchpotch of speculation, clumsily combining druidic, biblical and classical themes. Archaeologist Stuart Piggott produced a biography of Stukeley in 1950, revising it with new material in 1985. Piggott's rather haughty view was that the great Antiquary had started out sensibly enough, but had degenerated into Druid-obsessed madness, adopting progressively wilder ideas and struggling to reconcile them with his Christianity; for after his short medical career, Stukeley had taken holy orders and become a country parson.

Stukeley's interest in the Druids was probably fired initially by the writings of John Aubrey, who had 'discovered' Avebury on a hunting trip in 1649. Charles II and Aubrey's friends at court were fascinated by his reports of antiquities and urged Aubrey to publish something on the subject; he began by describing Stonehenge and Avebury in the manuscript *Templa Druidum*. Aubrey intended this to be part of a larger work, the *Monumenta Britannica*, which he continued to work on until his death in 1697. The manuscript, now in the Bodleian collection, shows that Aubrey spent many years speculating on the Druids and 'their' works. Although *Monumenta Britannica* was then unpublished, it is clear that Stukeley had seen notes made on it by Thomas Gale, and it was with Gale's two sons that Stukeley made his first visit to Avebury and Stonehenge in 1719. It is highly likely that it was Aubrey's account which prompted Stukeley's first trip to Wiltshire.

Although Stukeley published several books, he left a huge amount of unpublished material - maps, notes and sketches - most of it now held in the Bodleian Library in Oxford. Only a tiny fraction of this archive has ever been reproduced in print. Piggott's views on Stukeley went unchallenged until 1991 when Peter Ucko and others reviewed all the Antiquarian sources on Avebury anew *(Avebury Reconsidered.)* More material had since become available and Stukeley's alleged decline into madness was shown to have been a misinterpretation by Piggott, who to his credit, eventually ceded that he had been mistaken. It is true that Stukeley had constantly revised his ideas and opinions, but this is surely a sign of intelligence, not of madness. Piggott's initial view was that Stukeley began as a valuable and neutral observer, whose usefulness to modern archaeology lessened as he "became obsessed by the Druids, and created round them a crazy mythology". (*William Stukeley: an Eighteenth Century Antiquary,* Stuart Piggott, 1985, jacket liner) But it is now quite clear that Stukeley's fascination with Druidism and the esoteric did not just develop later in life, but was well established even before his first visit to Avebury.

Stukeley was not working in a vacuum, but was in regular contact with some of the greatest minds of his day: Isaac Newton was a personal friend and it was in Stukeley's biography of Newton that the now famous story of the connection between a falling apple and the discovery of gravity was first made. Stukeley claimed he had been told of this on a visit to Newton's London home: "…the weather being warm, we went into the garden, & drank thea [*sic*] under the shade of some appletrees". (*William Stukeley: Science, Religion and Archaeology in Eighteenth-Century England,* David Boyd Haycock, 2001) Stukeley also knew Christopher Wren; he pondered the magnetic alignment of Stonehenge with astronomer Edmund Halley. Many of Stukeley's learned associates shared his views on Natural Philosophy, as well as his interest in the Druids - views which in their time were not seen as weird or eccentric, but modern and sophisticated. Most significantly, Stukeley was an avid reader of Athanasius Kircher, and considered him a mentor. Many of Stukeley's more 'eccentric' ideas originated from Kircher.

Athanasius Kircher (1602 – 80) was an extraordinary figure - a Jesuit polymath living almost a century before Stukeley and therefore a contemporary of John Aubrey. This was a critical time, which saw the separation of science, art and religion as the Renaissance came to an end. Kircher's range of interests and abilities was vast: he has been described as 'the last man who wanted to know everything' and 'master of a thousand arts'. Founder of one the world's first museums, Kircher designed magnetic toys and magic lanterns to amuse cardinals and kings; he invented a system of logic and was one of the first to write about germs; he was the father of geology and the compiler of an exhaustive encyclopaedia of music which even included birdsong transcribed onto a musical stave. In his time, Kircher was regarded as the world's greatest linguist, as the first translator of Egyptian hieroglyphics. (*Athanasius Kircher: A Renaissance Man and the Quest for Lost Knowledge,* Joscelyn Godwin, 1979). Kircher did all this

and more, approaching his every subject with an enthusiastic zeal that inspired the same attitude in William Stukeley.

As a self-styled Renaissance Man, Stukeley wrote in emulation of Kircher and with equal passion for his many diverse interests. In 1720 Stukeley was able, with other medical men, to dissect an elephant, which after many years as a popular London exhibit had died of an illness that Stukeley suggests may have been "heightened by the great quantity of ale the spectators continually gave it". Stukeley made detailed drawings of the dissection, which were published with his *Essay towards the Anatomy of the Elephant* and another treatise on the spleen. Stukeley was an excellent draughtsman; probably through Kircher, he came to realise the importance of illustrating his books, as Kircher's works are unusually well-populated with engravings and woodcuts, many of them fantastical. Kircher had a habit of compensating for a lack of evidence with intuitive reasoning: his imagination could extrapolate a mass of detail from the barest of facts, something Stukeley also learned to do with great confidence. In Kircher's *Noah's Ark* of 1637, he authoritatively gives the precise date of the Flood as 2396 BC, based on his own biblical calculations. The animals stored in the Ark (which include a Mermaid and a Gryphon) are listed and illustrated. One absurdly detailed diagram shows how all the various species of animals, birds and insects were housed in the three storeys of the Ark, with some areas reserved for human cabins and the storage of food and supplies. There is a strange logic to it all: extra animals such as chickens have to be accommodated for the Ark's carnivores to eat.

Kircher taught Hebrew and studied the Cabbala; he also admired the works of *Hermes Trismegistus*, the 'thrice-great Hermes' who was then believed to have invented astrology and been a contemporary of Moses. The Hermetic texts are now known to date from around the 2nd century AD, and are thought to be the work of several different writers in Roman Egypt. Popular with mediaeval alchemists, some of the texts actually describe magic spells and potions; Kircher though, denounced alchemy and magic, despite including a good deal of magic in his books. Kircher believed in Atlantis; he had a great interest in comparative religion and thought that all classical deities were simply aspects of the sun and moon. To Kircher, all world religions had grown out of a *prisca theologia* - one ancient tradition, common to all mankind, that had originated from a source in ancient Egypt. Christianity was its ultimate and purest form, but Kircher recognised that 'inspired truth' existed in almost all previous religions, as well as the religions of cultures not yet reached by Christianity. *(Joscelyn Godwin)*

Stukeley must have found this both inspirational and reassuring – the Druidism of the ancient Britons could be regarded as a proto-Christianity. It was particularly significant to him that the Druids (he believed) revered the number three, as this showed that they knew and respected the principle of a Holy Trinity. Stukeley's notebooks reveal that he had a great interest in the esoteric, particularly in the 'lost knowledge' of the Pythagoreans, which had been preserved by Plato and secretly passed down the 'golden chain' over centuries by the Neo-Platonists and others. This body of knowledge included sacred number, geometry and proportion, all of which are referred to in Stukeley's field-notes and drawings of Avebury. Stukeley's arcane interests clearly developed quite early in his life – he visited Stonehenge and Avebury for the first time in 1719 and the following year wrote a treatise on the Music of the Spheres. Stukeley expected that this celestial harmony would have been encoded into the Avebury monuments by the learned Druids, and his field notes of 1722 show how he was measuring the stones and the spaces between them, looking for significant 'musical' ratios. The ratio of 4:3 was particularly important to Stukeley, as it was "the mysterious & sacred proportion of a 4th in music which Pythagoras held in utmost veneration & made it part of his oath at the initiation of his disciples". (*Ucko et al p. 81)* Curiously, this same ratio is expressed literally as a musical interval in the West Kennet long barrow, one of the oldest monuments of the Avebury Complex. Inside the

tomb are five stone chambers which function as Helmholtz resonators. Two chambers resonate clearly at the note E which is the lowest open string of the guitar; another chamber resonates at the note A which is a fourth higher in pitch. The tomb was constructed around 3,640 BC – some three millennia before the Pythagoreans.

In the light of what Stukeley believed he knew of the Druids, certain aspects of Avebury's design seemed particularly significant - such as the stones of Avebury's West Kennet Avenue, which he found were generally spaced at 70 ft intervals, and sometimes at 100 ft. Seven was the sum of four (the first even number and 'the idea of all created things') and three (the first odd number, central to the Druids' Trinitarian principles) – the combination of which "signifys the Universe". There were seven visible planets, seven days in the week and Stukeley really wanted the Avebury Complex to have seven component parts. The number ten was also significant: Stukeley's noted that ten was thought by "the Egyptians & from them the Pythagoreans" to be "symbolical of the complement of all things", crediting his mentor Kircher as the source of this knowledge. Stukeley saw the number ten encoded everywhere in Avebury – the Great Circle had 100 stones and was 1,000 ft in diameter; rather oddly, he once alleged the Avenue to be 1,000 ft long, a fraction of its actual length. Elsewhere he claimed that entire monument originally comprised 800 stones and so symbolised the musical octave. *(Ucko et al p. 80)* Although there was great significance in these multiples of the English Foot (a view shared by present-day metrologists) further numerological data could be extracted by using Stukeley's invented, or as he saw it 'discovered' measure of the *Celtic Cubit* - which has obvious parallels with the 20th century *Megalithic Yard* of Alexander Thom.

Stukeley did not stop at measures: he examined the geometry of the stone settings, looking particularly for angles of 90 and 120 degrees and believing that the Avenue's stones were arranged in parallelograms that could be subdivided into six squares. He considered the orientation of the monuments and of individual stones, presuming and finding regularity in their proportions; he took compass bearings and explored alignments to other monuments and to the sun. One of his drawings shows Avebury in plan with the positions of winter and summer solstice sunrise marked: here, as at Stonehenge, he saw that the solar alignments and the layout of the monuments corresponded to what he believed were the ten points of the 'Celtic Compass'. Stukeley also recorded the orientation of long barrows, which confirmed his belief that the Druids used a standard compass variation of six degrees, citing Kircher's description of a similarly-aligned obelisk in Alexandria. *(Ucko et al p. 81)* The Cove, a three-stone setting at the centre of Avebury's northern inner circle, was deemed by Stukeley to be lunar, hence the northern and southern inner circles became temples of the Moon and Sun respectively. They are still referred to as such by Neo-Pagans. Many of Stukeley's observations were directly in accord with modern landscape archaeology - he explored lines of sight and noted the correlation between the man-made structures and natural features of the surrounding landscape and the importance of springs and rivers, believing that Avebury may have been sited where it is specifically because of its natural supply of water, the temple being "placd near a spring head to indicate that water is the sustenance of all life". *(Ucko et al p. 83)* Stukeley had visited other stone circles including Stanton Drew, which he considered to be an Avebury prototype - noting that it too, was sited near the spring of a river, on a knoll in a large valley, with a three-stone cove and a ring of 30 stones.

In Stukeley's Avebury notes there are frequent references to Pythagoras, "the Arch-druid, as I venture to call him", asserting that "his doctrine is so like our druids that if he learnt it not from there its plain theirs & the Egyptian was the same". In *Celtic Temples*, one of Stukeley's early manuscripts, he compared Avebury with the *Bembine Table*, or *Mensa Isiaca*, a large tablet of bronze and silver adorned with hieroglyphics and figures from Egyptian mythology, now in the

Turin Museum. Stukeley had read of the Bembine Table in *Oedipus Aegyptiacus*, Athanasius Kircher's greatest work; Kircher believed that the Table, which came to light in 1527, was the richest source of Egyptian wisdom and his famed translation of hieroglyphics was largely based on those of the Table. Stukeley compared the stones of Avebury with the figures of the Bembine Table in great detail. The Druids, he believed, chose not to carve literal figures into stone as the Egyptians had done, but had immortalised the same beliefs and essential truths in the Avebury monuments by selecting and arranging sarsen stones left in their natural state; their wisdom was encoded in numerology and geometry. Stukeley's interpretation was essentially in the tradition of Pythagoras, who taught that all of creation is number. Underlying all of Stukeley's research was his conviction that Avebury was a mystery that could be solved - a notion that persists to this day.

Stukeley's frequent references to the Bible now seem oddly out of place, but in his time they were entirely relevant. Biblical authority was rarely questioned before the 1700s except by a small and colourful band of dissenters: most people regarded it as fact that God had created the world in seven days and that all humans were descended from Adam and Eve; fossils were believed to be clear evidence of the Flood. The fledgling sciences were beginning to strain against the bounds of religion, particularly on the issue of Bible chronology, as the date of Creation had been authoritatively calculated as the 23rd of October, 4004 BC - a Sunday, as clearly stated in The Bible. This date was determined after twenty years of intense study by Bishop James Ussher, an Irish Protestant who was keen to put one over on the Jesuits by demonstrating his superior knowledge of The Bible. Ussher's claim was published in 1650 and went largely unchallenged except by a few such as the Natural Philosopher Robert Hooke, who questioned how ancient civilisations such as those of Egypt and China could have thrived, thousands of years before the world was even created. (*David Haycock, Ch 4*).

Believing implicitly that biblical chronology was correct, Stukeley devoted much time to studying it, as did Isaac Newton and other of his contemporaries. Stukeley's repeated claim that the number three had held special importance for the Druids, and for the Egyptians before them, was not just a personal obsession: in the early 1700s it was central to a bitter religious debate. Stukeley was a Protestant, and in common with Catholics he supported *Trinitarianism* – the orthodox belief that Father, Son and Holy Spirit existed as three equal aspects of the same one God. But this was but one of many diverse and often opposing Christian philosophies, all of which Stukeley was well acquainted with. Athanasius Kircher's theory of a *prisca theologia* – a divine truth known to so many ancient cultures and philosophers – held that after the Flood, Noah's disgraced son Ham had gone on to found the nation of Egypt, from whence polytheism and idolatry had spread around the world, corrupting the original truth whose ultimate manifestation was Christianity; thus many of the world's religions could be regarded as proto-Christian. The concept of a one true world religion was explored further by two Dutch scholars whose work remained influential for many years, particularly at Cambridge during Stukeley's time there. Gerard Vossius had published his *De Theologia Gentili et Physiologia Christiana* in 1641; the book examined pagan beliefs around the world for traces of the *prisca theologia*. Hugo Grotius's 1625 *De Origine Gentium Americarnum* considered how the Americas may have been populated by a diaspora after the Flood (or the fall of the Tower of Babel) and "aimed to prove the truth of the Christian religion". (Haycock Ch 6)

Edward Herbert, first Lord Cherbury, had become a friend of Vossius whilst living in France and there was inspired to write his own book: *The Antient Religion of the Gentiles, and Causes of their Errors Consider'd. The Mistakes and Failures of the Heathen Priests and Wise-Men, in their Notions of the Deity, and Matters of Divine Worship, are Examin'd; With regard to their being altogether destitute of Divine Revelation.* Cherbury's view was that it was unfair to condemn a large portion of the

world's population to eternal damnation simply because they had not been exposed to the Christian Message; a caring God surely would not do this. Cherbury argued that anyone could attain Eternal Salvation if they observed just five tenets – they should acknowledge the one true God and worship Him; be virtuous and pious, repent their sins and recognise God's power to judge in this life and the next. Cherbury inspired a generation of *Deists*, who further argued that it was enough to simply observe the natural world and through reason, deduce the existence of a Creator. Organising religions was not necessary - their God was a *Demiurge* whose role was simply to create; in the Deists' 'clockwork universe' God wound up the mechanism, then stepped back to let it run uninterrupted. There were many schisms even within Deism: some Deists declared themselves to be Christians but others were Atheists. Deism could also be regarded as an extreme and heretical form of *Natural Religion*.

Central to the philosophy of *Natural Religion* was the question of 'Divine Revelation' which had been raised by Cherbury: if all of mankind possessed an innate truth and awareness of a Creator, could eternal salvation be made possible by 'natural' means, without the Revelation of Christ's message? William Stukeley certainly believed that the truth must be divinely revealed, even though he agreed with many of Cherbury's views. On his death, Stukeley owned three copies of Cherbury's book, in English and Latin. (Haycock Ch 6) Most of the writers on these controversial religious issues had been educated at Cambridge University, where a group known as 'The Cambridge Platonists' had flourished. Most were of the generation before Stukeley's, but he did know some of them personally. William Whiston was a former teacher and friend of Stukeley, but Whiston's open belief in *Arianism* led to his expulsion from the university and a rift with Stukeley. Arius had taught, in Alexandria around 300 AD, that Jesus was not an eternal and equal part of the Holy Trinity, but was a lesser being who had been created by God. Arius was declared a heretic for his beliefs, which even by the 1700s were still hotly controversial. Historian David Boyd Haycock has claimed that it was Stukeley's deep and long-held animosity towards Whiston that drove his mission to prove an ancient belief in the Trinity by the Druids - the earliest inhabitants of Britain - thus establishing an historic precedent over the Arians.

Newtonian philosophy reigned supreme in both Cambridge University and the Royal Society, of which Stukeley became a proud member in 1717. William Whiston, despite his intellectual prowess, was deliberately kept out of the society by Newton, who was President from 1703 until his death in 1727. Whiston, Newton and Samuel Clarke had often discussed the merits of Arianism together at Cambridge in the 1690s, but although Whiston and Clarke were prepared to be pilloried for publishing their beliefs, Newton was not, and he kept his views to himself. Newton was a secret *Antitrinitarian*: he believed, quite logically, that to accept that there was but one God was incompatible with the idea of a Trinity: belief in a Trinity was therefore equivalent to polytheism. Newton's beliefs were known to his immediate circle and could be deduced from his writings, so Stukeley must have been aware of them; his biography of Newton though, specifically refutes any connection with Arianism. (Haycock) Newton was forty years older than Stukeley and there was a strong element of hero-worship – it seems possible that Stukeley may not even have dared to broach the subject during their many discussions.

Egypt was never far from Stukeley's thoughts. Athanasius Kircher's *Oedipus Aegyptiacus* was a great inspiration to Stukeley, who in 1724 wrote his own treatise on hieroglyphics. But Stukeley would never know that his mentor had been completely wrong in his Egyptian 'translations'. Kircher's reputation as the world's great linguist would crumble a century later in 1822, when Champollion began to properly solve the mystery of hieroglyphics using the Rosetta Stone. Kircher had assumed that Egyptian pictograms must be purely symbolic, each

signifying some lofty principle or concept; he was not to know that most hieroglyphic texts are dreary lists of kings and their over-exaggerated achievements, and that others are little more than shopping lists. Even though Kircher understood Coptic, the language of the Egyptians, it did not occur to him that hieroglyphics were a phonetic rendition of that same language. Kircher was also unaware that the Bembine Table, crucial to his 'translation', is not actually Egyptian, but dates from the late Roman decadent period. The hieroglyphics on the Table are invented and have no known meaning; the 'mythological figures' depicted do not correspond to the real Egyptian Pantheon. It may be that the table does have some symbolic and esoteric meaning, but if so, it relates to an obscure Roman cult rather than the wisdom of ancient Egypt.

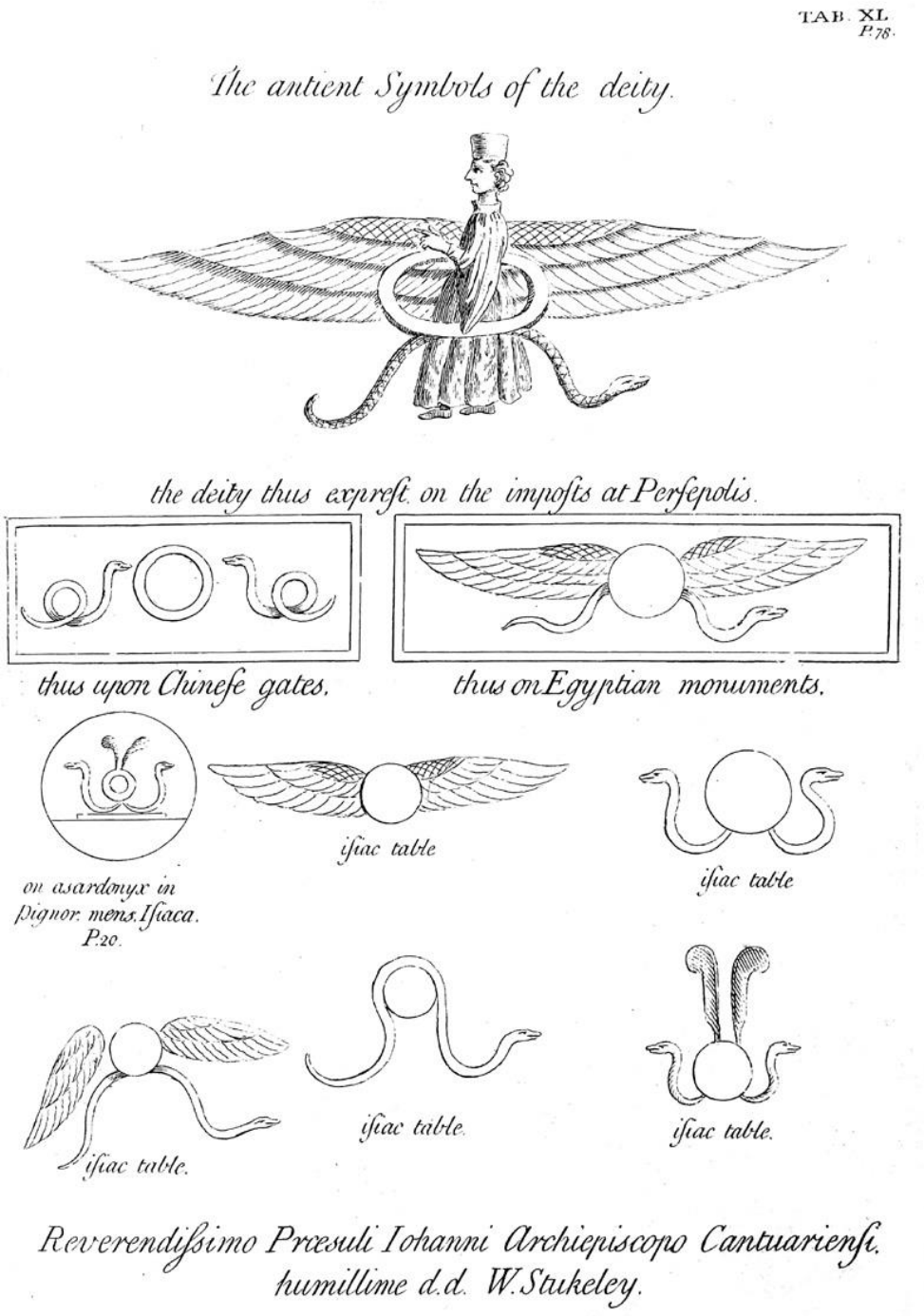
Stukeley was blissfully unaware of all this. The Bembine Table, as analysed and interpreted by Kircher, was the key to Stukeley's understanding of Egypt; he saw a clear connection between 'Celtic' megaliths and the Egyptian tradition and set about compiling lists of their similarities. Most importantly, he saw that an Egyptian mystical symbol was represented in the layout of the Avebury Complex, and on a colossal scale: it was a symbol known as the 'winged-globe and serpent', commonly found above the entrances of Egyptian temples - but in Avebury's case the entire figure measured several miles across. This revelation came to Stukeley during his 1723 visit to Avebury and it is clear from his notes and letters of the time that he considered it to be the key to understanding the entire Avebury Complex.

The Wiltshire Heritage Museum, Devizes, holds Stukeley's folio 'commonplace book' begun in 1719 – the year of his first visit to Avebury. In it Stukeley drew sketches and plans of the monuments and made notes which demonstrate that his head was already filled with notions of a universal religion, as evidenced by The Bible, ancient Egypt and the druidic monuments he was exploring so excitedly in Wiltshire. On page 106 are written some notes, in a stream-of-consciousness that shows how Stukeley's mind was racing with ideas and connections:

"Imitations of Mosaic rites – brazen serpent, Elijah's fiery chariot, the Egyptian trias, tho crab from the winged globes. Minerva the virgin mother; Messiah born at the sun's entry into Capricorn, the house of Saturn says Porphyry do anthronymph, whence called Saturn rogna. David with a lock of hair turned in form of a horn: unction, imitated in Jupiter Ammon. Alexander, Sylimetry…"

Avebury's well known southern avenue was still reasonably well preserved in the 1720s; Stukeley had already recorded its curving south-east route to East Kennet, where it terminated in a small stone circle referred to as 'The Sanctuary' (as with other sites, Stukeley claimed a local origin for the name but had almost certainly invented it himself). Stukeley had become aware that Avebury once had another avenue, this one running south-west from the western entrance of the Henge towards Beckhampton. Although almost all of its stones had been removed, the course of the avenue seemed clear to Stukeley, who assumed it to have been symmetrical with its southern partner; it must therefore have ended at a 'temple' matching the Sanctuary. As Stukeley saw it, the circular Avebury Henge was the globe of the Egyptian symbol and the two curving avenues were the serpent, which was always depicted symmetrically with a head at either end. The two temples would represent the serpent's heads. It mattered not to Stukeley that this great winged-globe and serpent lacked wings, for they "could not well be expressed in stones".

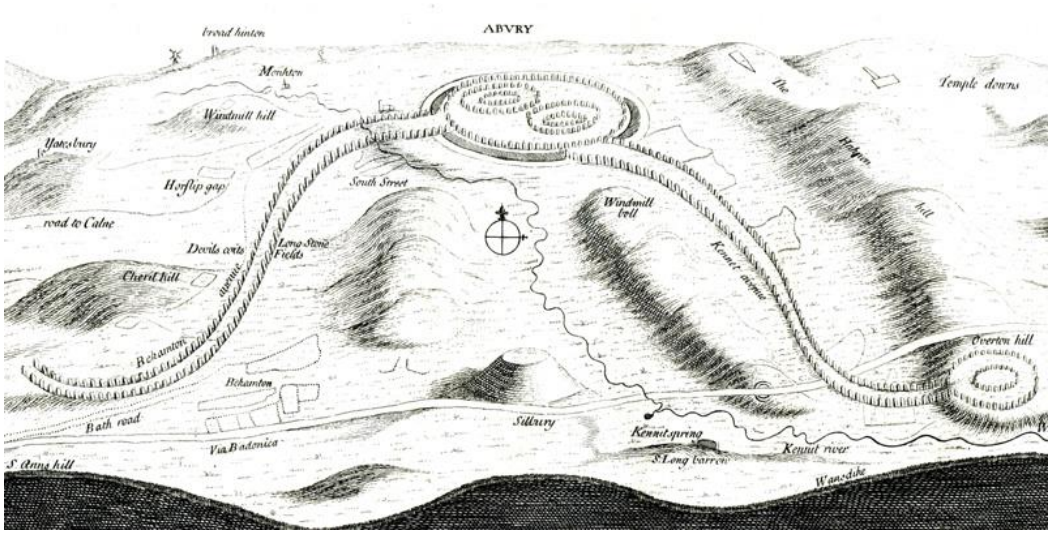
Below: Winged Serpents from Stukeley's 'Abury'.



Stukeley returned to Avebury in the summer of 1724, confident of finding the western temple and using his knowledge of Egypto-druidic measure, number and geometry to calculate its position. But he was unable to find it and was eventually forced to concede that the temple did not exist, so revised his theory accordingly. Stukeley's theories were under constant revision anyway: the year before visualising Avebury as a winged-globe and serpent he had considered that the entire Avebury Complex was a two-dimensional representation of Silbury Hill, with the two avenues as its sloping sides. Stukeley experimented with several variations on the serpent theory over the next few years and it is the work from this period of his life which was to bring notoriety and criticism from archaeologists in the centuries to come – not least from his biographer Stuart Piggott, who saw it as confirmation that Stukeley had indeed gone mad. In the revised serpent theory (the version eventually published some 20 years later) the serpent

had only one head, represented by the stone circle of the Sanctuary. The serpent's body headed north-west to Avebury as the West Kennet Avenue, where the Henge appeared to be a circular bulge in its belly; it then wound south-west as the Beckhampton Avenue into a shallow valley to the west of Beckhampton. There the serpent's tail tapered, ending at a small copse known as 'Fox Covert'. Stukeley made many plans and drawings of the Avebury area to illustrate this, using his own novel technique of aerial perspective. He also produced hand-drawn panoramas in a variety of formats, some of them circular.

There was one problem: whether or not he did it knowingly, Stukeley cheated. His drawings of this vast serpent, over three miles long, illustrate its elegant symmetry; the two graceful, curving avenues radiating from the Henge are perfectly balanced to each other and to the landscape. It certainly looks serpent-like and mystical. Even the circular bulge in its middle looks stylised rather than unnatural – it could be taken to represent pregnancy, with the two inner circles as eggs. Stukeley's 'scenographic' drawings, though they must have been very unusual at the time, appear not so strange to us because they resemble the aerial photographs we are so accustomed to. There are several versions, all drawn as if from a vantage point some 1,000 ft above the ground. The first pencil sketches are from a position about three miles to the west of the Henge and show the western avenue to be longer than the southern, but not unnaturally so: it appears that they are both really the same length and that perspective has produced a foreshortening of the southern avenue. The smaller circles within the Henge are ellipses, which again looks like a natural perspective effect. The stone circle of the Sanctuary though, has been squashed well beyond what is natural and looks far more like the head of a serpent than it should. In striving to make the two avenues symmetrical, Stukeley has exploited the perspective effect; the landscape has perspective foreshortening, but not the serpent – it is actually drawn in plan. If the western avenue really did stretch to Fox Covert, it would have to have been significantly longer than its southern counterpart. In Stukeley's final published engraving, the viewpoint is still up in the air but has moved eastward to be almost due south of the Henge: now the two avenues are shown as being exactly the same length. In order to achieve this, Stukeley altered the proportions of the surrounding landscape and moved the roads.



But for the archaeologists that were to ridicule Stukeley in coming centuries the issue was not the length of this western avenue, but whether there had even been one at all. For up until its discovery by excavation in 1999, many archaeologists refused to believe that Avebury's western Beckhampton Avenue had ever existed – it was dismissed as Stukeley's fantasy, a mere product of his over-active imagination. But finally it was seen that Stukeley's avenue had indeed existed,

and that it broadly followed his claimed route from the Henge. It was far shorter than Stukeley believed though, as no traces of it were found beyond the Longstones Cove – so it stopped well short of Fox Covert. It would have been shorter than the southern avenue and also of a shape that made the overall design asymmetrical. Still, even today some researchers refuse to believe that the avenue really did end at the Longstones Cove, preferring that it once continued to Fox Covert exactly as Stukeley had claimed: they argue that the 1999 excavation may have been in the wrong place, which is always possible, but not likely unless the avenue had deviated from its supposed course. Even for those who accept the current archaeological view there is a slight sense of disappointment in knowing that Fox Covert was not the terminus of the Beckhampton Avenue after all, if only for Stukeley's sake.

Can archaeological interpretation ever be completely objective? It is extremely difficult to imagine the beliefs and motives of our ancestors without superimposing those of our own time and culture. We like symmetry and would like to see it in the design of Avebury – our culture finds symmetry 'satisfying'. Avebury's two avenues are made of double stone rows which display a kind of symmetry; its great stone circle also contains two smaller circles, but symmetry is largely absent. The builders of Avebury evidently did not think the plan of the greater Avebury Complex needed to be symmetrical either, probably because they cared more about its relationship to the landscape and did not think as we do, in terms of aerial plans and maps with north always at the top. There are very few locations around Avebury from where both avenues would ever have been simultaneously visible, and even they offered only glimpses. To those who built Avebury, its two avenues did not need to be symmetrical.

Although Stukeley's serpent theory is well known, its Egyptian origins are not, and there can be few today who would seriously regard Avebury to be a mystical symbol from ancient Egypt, rendered in stone and three miles across. But Stukeley, working three hundred years ago, was acting intelligently and creatively. His belief in the Druid builders of megalithic monuments was wrong, but he at least recognised a prehistoric origin, at a time when many experts thought Avebury and Stonehenge to have been built by the Romans. Unlike some of his wealthier contemporaries, Stukeley had not taken the Grand Tour; he often claimed that this was because he was so occupied with exploring the wonders of Britain. It was particularly important to him that the ancients monuments had a truly British origin and had not been built by invading foreigners. Stukeley's admiration for the religious beliefs of the Egyptians, Greeks and Druids caused him no crisis of faith – he saw in them all the central principle of a Trinity, which made them entirely compatible with his orthodox Christianity. In 1725 Stukeley surprised his London friends by suddenly returning home to Lincolnshire; two years later he married a local girl and started a family. Stukeley complained bitterly that he was unable to make to make a decent living as a doctor outside London. To be able to continue his studies and book-writing he needed a regular income, preferably from working only at weekends, with a free house thrown in… He would become a country parson.

Drawing on his influential London contacts, Stukeley was soon corresponding with the Archbishop of Canterbury and offering his unique skills as an Antiquarian to the service of the Church of England. It was a tempting offer:

"…My disquisitions into the history of our Celtic ancestors, &their religion, have led me into them, & given me the opportunity of discovering some notions about the Doctrine of the Trinity which I think are not common. If I be not mistaken, I can prove it to be so far from contrary to, or above, human reason, that 'tis deducible from reason its self. What else can we think, my Lord, of the explicit sentiments the antient Egyptians, Plato, our old Druids, &all the heathen philosophers, had of this divine truth, as I can show in

a thousand instances? For 'tis not necessary to suppose, nor can it easily be proved, that they had it from inspiration." (Haycock Ch 8)

Stukeley was duly ordained. In 1740 his *Stonehenge, a Temple Restor'd to the British Druids* was published, followed three years later by *Abury, A Temple of the British Druids*. Both were critically acclaimed and Stukeley became a popular and respected Man of Learning, despite his insistence on calling himself 'The Arch-Druid'. Stukeley's fieldwork has since proved immeasurably valuable to modern archaeologists, as he scrupulously recorded so many monuments that have since been damaged or destroyed.

There is another curious aspect to all of this. Anyone familiar with the alternative, or 'fringe' archaeology that sprung up in the 1960s and thrives today, will recognise many of Stukeley's fixations of the 1720s. First there is numerology: the idea that certain numbers are significant because they had mystical or symbolic importance to previous cultures – particularly to the Egyptians, Greeks or Hebrews (and therefore to Stukeley's Druids). It is interesting to note that Stukeley believed Avebury's two inner circles to have each comprised 30 stones. This figure came partly from common sense and measurement, but also because 30 derived from "twice 12 & 6". This accorded with the Trinitarian principle and to Stukeley, it had further significant associations derived from reading Kircher, Plato and others. Many researchers today would find the numbers 28 or 29 more appealing, but for a different reason – they are both numbers relating to cycles of the Moon and we nowadays favour only astronomical, not numerological, secrets to be encoded in our ancient monuments. We too, are of our time.

Stukeley believed that Avebury's features and proportions were charged with an ancient, secret wisdom that was inherited from the priests of Egypt, or perhaps even came from before the Flood. He thought that the builders had used geometry on a vast scale in laying out the overall plan of their Complex, using significantly-numbered angles to align features which he admitted were not visible from each other but were separated by hills, rivers and valleys. He believed that this, like the numerology, originated from Egypt, the Cabbala and Pythagoras. To the question of what or whom the temple of Avebury was dedicated to, Stukeley offered several suggestions including the Sun, Moon and *Erthus* or 'Mother Earth'. The Moon he saw personified either as *Horus* or as *Isis* - the feminine principle or 'Great Goddess'. Musical ratios he thought were encoded in the arrangement of stones; Stukeley also saw in them the zodiac, the Celtic compass and solstical alignments. The distances between the stones, and all of Avebury's proportions, were thought to have great mystical significance, whether measured in English feet or by Stukeley's invented measure, the Celtic Cubit. With the exception of ley-lines, Stukeley was exploring almost all the themes of today's alternative archaeology – it is the corpus of allegedly hidden and secret ancient knowledge that fills the shelves of New Age bookshops. That this knowledge has come down to us is not due to Stukeley's published writings, as until very recently his arcane interests were hardly known or recognised. So how was it transmitted?

Freemasonry in England is documented from 1646. It grew slowly until 1717, when four established London Lodges united to form the world's first Grand Lodge in London, of which William Stukeley was one the earliest members. Other early members were connected to Stukeley's circle, and to the Royal Society. Freemasons believed themselves to be the recipients of 'lost' wisdom, claiming that their roots lay in the building of Solomon's Temple, but many of their 'secrets' were derived from the very same Classical and Hermetic sources that had fired Athanasius Kircher and others. In 1897 a London Freemason anonymously published a book laying down all the arcane mysteries of Freemasonry as *The Canon. An Exposition of the Pagan*

Mystery Perpetuated in the Cabala as the Rule of All the Arts. The author was later found to be William Stirling, about whom nothing is known except that he eventually shot himself in his rooms at the Adelphi. Writer John Michell stumbled on *The Canon* in the early 1960s and began delving into its mysteries, which were many; it was the book that kick-started the New Age. Michell was able to see that the material was garbled, but the book led him to other sources; some of *The Canon*'s detail was wrong but Michell dug deep enough to eventually re-publish the book with corrections. Most of the familiar themes connecting mysticism and archaeology were brought to the attention of modern readers initially by the books of John Michell *(see 'The Last Word' Steve Marshall's interview with JM in Fortean Times, 2009).*

How much of this 'lost' knowledge had actually survived the centuries through Freemasonry is debatable, as 'The Craft' of Stukeley's time had only recently evolved into an esoteric gentleman's club from its humbler beginnings as a secretive trade association for actual stone masons. The Masons' claimed 'lost' knowledge had plainly not been lost at all, but simply mislaid for a few centuries. So where did it actually come from? Stukeley was by no means alone in his arcane interests: he would discuss the sacred geometry of Solomon's Temple with learned friends such as Newton, who at his death owned 169 books on alchemy, having already sold off many more. As well as being a fellow member of the Royal Society, Newton was a Rosicrucian and is also thought to have also been a Freemason. Considering the range of esoteric interests held by Stukeley and his circle of friends, and the contents of their libraries, it seems highly likely that rather than drawing from Freemasonry's store of secrets, they actually added to it. If so, then the similarity between the themes of modern fringe archaeology and Stukeley's obsessions of three centuries ago is no accident: today's canon of 'lost' knowledge may well be directly attributed, at least in part, to William Stukeley himself.

Steve Marshall 8/7/11