

## EMPIRE OF THE SUN

Following the demise of Khafre, the trail of mathematical sophistication went cold and a thousand years of human endeavour slipped across the haughty, unfeeling countenance of the Sphinx, before there was to be a tentative return to geometric history. Scourged for a millennium by the windblown kiss of sand, the once imposing presence of the Giza guardian became merely a knob of rock jutting out of the sand dunes of the plateau. Where wrapped in a girdle of sand, it waited as a faint reminder to the Pharaohs of the Middle and New Kingdoms, of the prowess and antiquity of their forebears.

Around one hundred and fifty years after one of his predecessors Ahmose, had driven the hated Hyksos invaders from the sacred Egyptian soil, a young prince followed the accepted practice and sheltered in the shade of the Sphinx. Lying in its rotating shadow which gave a welcome comfort from the hot burning sun, Thutmose rested from a long day's hunting and soon slipped into a light sleep. Legend has it that he dreamed the Sphinx promised him the throne of Egypt if he would but clear the sand from around its body and restore it to its former glory. As he was merely a second son of the reigning King, Amenhotep II, this was quite an extraordinary promise, but one that was destined to be fulfilled.

Often interpreted literally, the 'Sphinx Dream', displays every indication of being an allegorical tale hiding a bitterly fought contest between rival religious factions. A rivalry that was exacerbated by an invasion of foreigners around 1650 BC, whose use of the chariot soon overwhelmed the less sophisticated military might of the Kings of the Egyptian Middle Kingdom. At the time of the invasion, a millennial long catharsis of religious difference had settled into a balance of religious power based on regional deities, helped by a backward looking Egyptian society that was contemptuous of the outside world.

The Egyptians believed that at the beginning of time, a mound had grown out of the primeval waters of Nun. This common belief was adapted by each of the important cult centres to support their own version of religious reality. Heliopolis, Hermopolis and Memphis all appropriated the location of this primeval mound, each with its own baggage of religious history. At Heliopolis, the creator was the supreme god Atum, who created Shu and Tefnut by ejaculation. At Memphis, the creation was caused by the god Ptah, who rather elegantly thought the world into being, together with all its contents by the power of speaking their names. At Hermopolis, eight paired deities called the Ogdoad, who existed in the waters of Nun, created life.

Amun, who would later become supreme deity in Ancient Egypt, with all the other gods subjugated as merely an aspect of him, was but one of these, together with his consort Amaunet. The southernmost cult centre of the three at Hermopolis was therefore the odd one out, as creation derives from a single creator god at the other two. There were other variations of course in the complicated religious mythology of the Egyptians, but potentially the most important concerned the role of the sun. At Heliopolis, the creative power of the sun, significantly in the form of Atum, created the universe, whereas in the other versions of creation, the sun was itself created along with all other matter.

Manetho dubbed the Hyksos 'The Shepherd Kings', but this was an incorrect interpretation of the Egyptian 'heqau-khasut', which more loosely should be interpreted as "Princes from foreign lands". Many theories exist as to the origin of these Asiatic invaders, none of which need trouble us here. What is not in doubt is that they conquered all of Lower Egypt, pushing the defeated Egyptians deep into the southern land, where demoralised and beaten, they founded a rival dynasty centred on Thebes. Unable, or perhaps merely unwilling to capture Upper Egypt, the Hyksos settled for a buffer zone where Hermopolis was the northern limit of Theban power.<sup>1</sup> To the south, beyond the first cataract, the Hyksos made a pact with the Nubians, thereby bottling up the native Egyptians into a third of their old territory, and consigning them to a century long skirmish war fought variously on two fronts. War is perhaps too strong a term for a sporadic process, where Theban kings at various times attempted to extend their influence. Sometimes by skirmish, more often by limited intermarriage, the ebb and flow of Egyptian politics was governed by the power of the Hyksos, and the three regimes that coexisted in an uneasy independence.

Unsurprisingly the Hyksos do not have a good reputation in Egyptian texts, where tradition has them as cruel, uncivilised people faithful to their god Set, who until the time of the Ramessides was considered by Egyptians to be the personification of the dark power.<sup>2</sup> It is probable that the Hyksos worshipped a similar deity to Set in their original homeland, perhaps Tešub, both of whom share similar traits. What is certain is that in a foreign land, they would have found it politically expedient to adopt the name and titles of Set, who despite his bad reputation was at least Egyptian. The Hyksos were similarly astute enough to govern Lower Egypt well, and there is every indication that their reign was politically sound, technically advanced, and culturally fruitful. By adopting state structures for example, and retaining the use of Re in their royal titles, they showed a sensibility that belies their fearsome reputation. An expediency that they amply countered by making the cult of Set an official religion, and by expanding and venerating his sanctuary at Avaris.

They introduced bronze metallurgy, making stronger weaponry, including the compound bow, spear-thrower, and scale armour, and probably introduced both the horse and chariot to Egypt. They extended the sphere of Egyptian trade, and it is from this period that Minoan artefacts first appear in Egyptian history. At Avaris, excavators have found numerous fragments of Minoan-style wall paintings and Minoan pottery; and an alabaster jar unearthed at Knossos carries the cartouche of the third Hyksos king, Khyan. The extent of their influence is amply illustrated by the presence of a sphinx at Baghdad bearing king Khyan's name. Elsewhere many scarabs have been found in foreign countries bearing Hyksos signatures, notably the kings Khyan, and Apop.<sup>3</sup> They are also credited with advances in agriculture, amongst which they introduced the shaduf water-lifting device, whose revolutionary effect on crop yield should not lightly be dismissed.

The Hyksos ruled Lower Egypt for a hundred years, which is a very long time in ancient history. During this period, the impoverished Theban kings bided their time, adopted Hyksos weaponry and tactics, and dreamed of ridding Egypt of their hated enemy. This thorough grounding in warfare would pay dividends after the reunification, when Egypt became a territorially aggressive nation that yearned for empire. Arguably however, the most significant legacy of the Hyksos invasion, was religious not military. Falling back into Upper Egypt, the native Egyptians could quite naturally wonder what they had done to displease the gods, who gave swift victory to the Hyksos foe. Pushed firmly into the Amun heartland, they had lost the important religious centres of Heliopolis and Memphis, which fell under Hyksos control. Memphis, which had been the seat of scribal learning, and the location of their religious archives, was now denied to the Theban kings. Unable to consult the archives, these kings may have had no option but to create a whole new compilation of texts, as the Egyptologist Janine Bourriau suggests.<sup>4</sup> They would also have seen the hated enemy slipping easily into the Heliopolitan clothes of Ra, which would further have exacerbated their enmity, and enhanced the role of Amun.

In 1550 BC, the Theban King Ahmose finally expelled the Hyksos from Egyptian soil. Significantly the Theban scribes had officially credited the victory against the Hyksos to Amun's divine intervention and support. This clear acknowledgement of the deity's power put the Heliopolitan and Memphite traditions firmly on the back seat, and gave the Amun priesthood who had prospered in isolation, the opportunity to reap the benefits. These benefits were substantial, even in the early days of the New Kingdom inaugurated by Ahmose, but would grow over time and with subsequent Egyptian conquests, to become a power that dwarfed even that of the King. All temples required offerings, and to meet these needs they invariably had their own estates. In the reign of Ramesses III for example, the domain of Amun contained 9,000 square miles of agricultural land, vineyards, quarries, mines and marshland. Some temples had fleets of riverboats, and much of a temple's property would be rented out, with up to a third of the harvest, or production being paid in rent.<sup>5</sup> This was augmented by the spoils of war, much of which found its way into the temples as offerings. All of which vividly demonstrates that Egyptian temples grew into monstrous enterprises, which sucked in all of the economy of the local area.

Amun had entered the hundred-year 'conflict' as little more than a regional deity, he emerged fully prepared to assume the role of supreme god in the pantheon of Egyptian religion. To achieve this, the fragile balance of religious deity would need to be tipped further in his favour, for although his clergy were the dominant force, they were not yet all powerful. In the years following the Hyksos

expulsion, Ahmose and his son and successor Amenhotep I, began to rebuild Egypt, and expand it into a true regional power by foreign conquest. Although these military campaigns were limited, they did make a valuable contribution to Egypt's wealth, much of which naturally flowed into the coffers of the Amun clergy. Most of Amenhotep's building programme was aimed at Karnak, and largely he ignored Lower Egypt. We can only guess what affect this had on the Heliopolitan priesthood, who must have viewed the growing dominance of the Amun cult with dread. It is however clear, that by the end of Amenhotep I's reign, the ruling kingship was inextricably embroiled with the Amun cult.

Amenhotep I was succeeded by Thutmose I, whose father is unknown, but who in his short reign carried on the kingly tradition and extended Egyptian influence abroad. His most notable achievement was an expedition into Syria. His other claim to fame might be that he was the father of Hatshepsut. Yet in this obscure king, we may glimpse the first signs of a Heliopolitan comeback, for he was the first king of the New Kingdom to display an interest in the Giza monuments. His building works in the region are classed as insignificant, yet the fact remains that his interest was the first sign of a New Kingdom phenomenon, whereby Giza became a major pilgrimage site. The pilgrims revered both Khufu and Khafre, but the major thrust of their devotion was directed towards the cult centre of the god associated with the Sphinx, as Horemakhet. Furthermore, although Thutmose I's major building works were carried out in the Amun heartland at Karnak, it is perhaps significant that he chose to distance himself from his immediate predecessors of the Ahmosid family line to which he did not belong. Choosing instead to associate himself with the distant kings of Egypt, this is usually interpreted as a method of legitimizing his regnal right, but it could just possibly be the first tentative sign of the Heliopolitan priesthood fighting back. His son Thutmose II, who installed his older half sister Hatshepsut, as his Great Royal wife, (though whether this was his decision, or that of the clergy is unknown) followed him briefly and without note. His rule was exceedingly brief, and although no evidence has ever been found of foul play, his demise was to thrust Hatshepsut into a limelight which she craved. It is also clear that Hatshepsut's reign is characterized by total subservience to the Amun clergy, and the suspicion exists that the priesthood acted swiftly to counteract Thutmose I's putative association with the northern sun cult.

Thutmose II was succeeded by his son Thutmose III, who significantly was a mere child when he gained the throne. His reign therefore began as a co-regency with his aunt Hatshepsut acting as Regent, for which she had both the ambition and talent. Hatshepsut served as high priestess of the Amun cult, and in Nicholas Reeves' view, she clearly owed her rise to power to 'behind the scenes power broking' by the priesthood of Amun.<sup>6</sup> Whether this was entirely due to an acquired taste for power amongst the Amun clergy, or a reaction to a perceived resurgence amongst the Heliopolitan priesthood no one can say. Yet having acquired the control of Egypt's vast temple wealth, it is unlikely they would have wanted to see it diminished. Reeves goes further, and identifies the high priest of Amun, Hapuseneb, as the power behind the throne of Tutmosis III and Hatshepsut, and is quite candid in saying that he conspired to keep her on the throne.<sup>7</sup> He sees the formalisation of the relationship between the King and Amun, as the price Hatshepsut had to pay for Hapuseneb's support.<sup>8</sup> The announcement of this interdependence clearly compromised the kingship, but while his aunt was alive, Thutmose III was powerless to act.

On Hatshepsut's death, some twenty-one years into the co-regency with her stepson, the Amun clergy was all-powerful. During this time, Karnak had grown extensively, gaining lands and precincts, and became virtually a state within a state. Such an exponential rise in power and political interference was an obvious threat to the Egyptian idea of kingship, and would prove to be a salient lesson which Thutmose III and his successors would neither forget, nor forgive. It is probable that shackled by the co-regency; Thutmose III was tightly watched and monitored. When he attained sole kingship after his aunt's death, he began a series of military campaigns in the Levant. Whether this was to escape the stifling presence of the ever-watchful priesthood, or a shrewder attempt to bolster the support of the army, we cannot say. However we can say that Thutmose III demonstrated a rare talent for warfare, which has often led to him being dubbed the Napoleon of Egypt, as the extent of his conquests was extraordinary. He reaffirmed Egyptian rule in Palestine and Syria after three decades of inaction, and finally defeating the Mitanni Empire at the

battle of Megiddo. In the course of which he destroyed the 'Asiatics' strongholds at Gaza, and Yehem, and finally expunged the bitterness of the Hyksos expulsion, of eighty years before.

Reeves suggests that this military success enabled him to reverse the entrenched dependence on the priesthood of Amun, and from that point on, rather than Amun bestowing power on the king, it would once again be king who would patronise Amun.<sup>9</sup> This major blow to the Amun clergy was not fatal, as they were still the most dominant force in the Egyptian state, but it is the first overt sign that Thutmose III was beginning to exercise independent power. The degree of his success is questionable, but he began the trend to place more emphasis on the king's male offspring, and to sideline the consorts. A move which was clearly aimed at reducing the potential for another female usurpation of kingship, and the danger of power slipping into the hands of a priesthood that was still immensely powerful, calculating and manipulative.

At some point the Theban clergy moved to reinforce their god by assimilating Re into his nomenclature, re-naming him Amun-Re. This was ineffectually countered by the Heliopolitan priesthood, who initiated a rival theology that assimilated all gods under Re's patronage. Such obvious machination serves only to emphasise that the north-south divide was a very real dichotomy of religious fervour, whose theological battleground made pawns of kings and queens. In Thutmose III's 51<sup>st</sup> regnal year he appointed his son Amenophis II as co-regent, and began to systematically remove all traces of Hatshepsut's name from history. Betsy Bryan argues that this dishonouring of Hatshepsut paved the way for joint rule. Her argument is based primarily on the fact that it was only after twenty-five years that Thutmose III had bothered to remove her name, and was therefore unlikely to have been spiteful.<sup>10</sup> Nicholas Reeves takes the opposite view and believes that it was only then that Thutmose III felt confident enough to attack the memory of his hated stepmother by attacking her cartouches, images, and sculptures.<sup>11</sup>

As the incoming king, Amenhotep II, took steps to associate himself with the northern sun cult, it must remain probable that the desecration of Hatshepsut's name was as much a vicarious attack on the Amun priesthood, as an attack on her. Amenhotep II, who built a temple at Giza dedicated to the Sphinx as Horemakhet and set up a stela in honour of Khufu and Khafre, is known to have venerated the Sphinx as the sun god Ra. Interestingly he also created what is probably the first representation of the Aten disk as a human armed sun disk, which also appears on a stele of his son Thutmose IV, who despite the fact that he had at least one older brother, was to succeed his father to the throne of Egypt.<sup>12</sup> Many have puzzled over this succession, wondering whether the young prince Thutmose in some way disposed of his rivals to the throne. We might postulate that the Amun clergy, grooming the rightful heir to the throne, were caught off guard by such a move. It is certainly possible, but unlikely we will ever know. What is important is the clear association with the northern sun cult, which the Sphinx dream implies. As such, it heralds a shift in religious power away from the Amun clergy at Thebes that would serve to eat away at the fabric of Egyptian religion until it became the full-blown cult of the Aten disc.

The Dream Stele states, "I am your father Horemakhet-Khepri-Ra-Atum." The wording of the phrase, and the absence of Amun terminology, provides tacit acknowledgement in Reeves' view, of the role of the Heliopolitan priesthood in the succession of Thutmose IV.<sup>13</sup> A view, which implies that having learned the lesson of Hatshepsut, the Heliopolitan priesthood was acting as behind-the-scenes power brokers in a similar manner to their rivals. Although whether the Heliopolitan clergy desired a return to the simpler religion of the past, or merely wanted to counterbalance the growing power of Amun is not clear. From Thutmose IV however, we begin to see a new solar manifestation the Aten, which was seen as being the sun god's visible body. Over time this increased tendency to identify the king with the sun god, would bring about the cult of the Aten. A universal symbol visible in all countries that would be a permanent reminder of both god and Egyptian might, which would attain its sublime height under Thutmose IV's grandson, Akhenaten.

The question of Thutmose IV's covert allegiance to the northern sun cult would appear therefore to be settled, but the degree of his resolve is not. The evidence has often been interpreted to mean that Amenhotep II conspired with the Heliopolitan priesthood to produce a king who was opposed to the Amun clergy. Any such deliberate intent could merely be a kingly attempt to wrest power from the Amun clergy, and to put them in their place by utilising the growing and popular cult of the Sphinx. Equally, but perhaps implausibly, the succession of Thutmose IV could be entirely

innocent, and the Sphinx dream would in that event have to be interpreted literally. The dream could also of course be evidence that they were true believers. In which case the question must be posed, "what made them believe in the northern sun cult, and in particular, the cult of the Sphinx"? It is a question, which would appear to be unanswerable, but as we shall soon discover, there is some evidence to suggest this was indeed the case, although Akhenaten's extreme culmination of the cult was to be the religions undoing.

When Thutmose IV died, around 1390 BC, his son Amenhotep III was still a boy of eleven, and the power once more would have resided in others. It seems likely that the new king would have been guided by Yuya, and Tjuya, his new in-laws, following his early marriage to their daughter Tiye. Moreover, this could imply a direct association with the northern sun cult, as Yuya; who many believe was a key officer in the military, had estates at Akhmim deep into northern territory 160 miles north of Thebes. Tiye was to become the new king's 'Great Royal Wife', interestingly breaking with the recent tradition of distancing women from the centre of power. It has long been suspected that the neutralisation of the Amun priesthood's power was in part due to military influence, and the key role played by such a prominent military general in the early days of Amenhotep III's reign cannot be ignored. The adoption once more of a 'Great Royal Wife' could be interpreted as evidence that the power of the clergy had been quashed. Yet, it seems more plausible, that it was merely a strategy to lock Yuya to the throne through his daughter, and to ensure his continuing influence at court.

If Thutmose III can be termed the 'Napoleon of Egypt', then Amenhotep III truly deserves the similar French epithet of 'Sun King', for throughout his reign Egypt remained at a pinnacle of wealth and prestige that dwarfed even the later Ramessides. Slowly and systematically, and guided by the unseen hand of the Heliopolitan priesthood, belief in the divinity of the king was raised to unprecedented heights during his sixty-two year reign. Usually interpreted as a deliberate and slow process of re-establishing kingly authority, it is also acknowledged that the growing resurgence of sun religion was at least a by-product. Yet from an early age decisions were taken on his behalf, with the likely aim of melding the disparate religious experiences into a coherent balance once more. Such a move could only be contemplated from a position of strength, and it would seem likely that Yuya, considering he had already won the power battle was therefore prone to conciliation.

The first sign of this occurs when Amenhotep was thirteen, when he began an addition to the Karnak temple.<sup>14</sup> This was hardly unusual as each King invariably bolted a bit on. What is somewhat more extraordinary given his court's predilection for the sun cult, is what followed shortly after when he was fourteen. Inspired by a vision of his ancestor Hatshepsut, he built the north-south processional way that she had planned, thereby reversing the east-west 'sun' orientation that had been imposed. Clearly, as he was still a minor, it would have been undertaken on his behalf and serves to illuminate the problem of deciding who commissioned what in ancient Egypt, and under whose influence. As Amenhotep III constructed temples across Egypt according to an open-air style Heliopolitan plan, it seems unlikely to have been anything other than a move by Yuya to placate the priests of Amun.

Amenhotep III's principal architectural achievement was the Temple of Luxor, built three miles to the north of Karnak, and connected by a processional road. It is often seen as part of a complex plan to ensure Amun would be worshipped continually as the sun god Amun-Ra, yet the evidence could suggest otherwise. For example, one of the finest of all Egyptian statues was unearthed here, of Amenhotep III in the guise of Ra-Atum; although as the texts make clear the statue was nominally dedicated to Amun. His throne name is similarly a puzzle, being Nebmaatre, which as Nicholas Reeves' points out may be translated as 'possessor of the maat (truth) of Re'.<sup>15</sup> At an early point in his reign, he transferred his capital to Thebes, which could be interpreted either in honour of the Amun clergy, or to keep them in check by imposing his court in their midst. Yet on the whole it seems clear that he changed much about the traditional Egyptian temples from layout to decoration, and it seems likely that this was a continuing process of assimilating Egyptian religion into the cult of the Sun god.

It is still possible however given Yuya's military affiliations, that he was more conservative than we have so far supposed. At an early stage Amenhotep gave sweeping powers to his namesake, Amenhotep son of Hapu, who he made his chief minister. It would be tempting to suppose some

power play resulted in the marginalisation of Yuya, but subsequent events would suggest otherwise. Amenhotep for example, made his brother-in-law, Anen, second prophet of Amun at Karnak. A granite portrait of Anen in priestly attire portrays some sort of astronomical role within the temple, as his robes are adorned with stars. More significantly he was the first priest in Thebes to hold a northern title, 'chief of sightings', which had previously only been held by priests of Ra at Heliopolis.<sup>16</sup> As second prophet, Anen was responsible for the economic organisation of the Karnak temple, which at best shows the increasing dominance of the Heliopolitan religion, and at worst is a superb example of nepotism.

In this way it could be considered that Amenhotep's plan was not necessarily religious, and that by encompassing the throne under an umbrella of religion, he was merely an astute politician raising his own profile. Perhaps a better interpretation however, might be that it was both. By his choice of names, Amenhotep had publicly proclaimed his solar allegiance, consistently and repeatedly confirming that he was Ra's chosen one. A favourite and much used appellation of his was 'Aten-Tjehen' meaning 'the dazzling sun disk'.<sup>17</sup> Similarly, his palace at Thebes was called the 'Splendour of the Aten', and throughout his reign he systematically, and consistently raised the profile of the Aten. A process that culminated in the last decade of his rule, when he officially identified himself as the sun god the Aten.<sup>18</sup> This long and careful process had begun with his father and grandfather, and had the aim of re-instating the ancient solar cult of the Old Kingdom, by the curtailment of the dominance of the cult of Amun.

Yet if I am right in my presumption of Heliopolitan influence in the machinations of these early New Kingdom Kings, then we should expect to see a similar overt manifestation of the geometric signature that we have found within the Old Kingdom monuments. Other than the undoubted solar orientation of many of Amenhotep III's temples, including his funereal temple at Kom el-Hetan, which is oriented to the winter solstice position, there is little to connect him geometrically to the Old Kingdom, except for one almost incredible fact.<sup>19</sup>

In the eleventh year of his reign, probably only to cement relations with the Mitanni Empire, he married a Mitannian princess called Kiluhepa. In order to honour, or pacify his 'Great Wife' Tiye, he ordered the construction of a lake. It might have been a boating lake, or merely a method of irrigation whereby some of her land could be made more profitable. Nobody knows what its function was or indeed where this lake was built, but we do have some particulars about it that were recorded on a commemorative scarab. Its length was 3700 cubits, by 700 wide.<sup>20</sup>

Having previously demonstrated that the Giza monuments can be positioned upon a Golden Rectangular grid whose size is between 3694 and 3702 cubits, you can imagine my surprise when I chanced upon this fact. Of course, it could be coincidence that the lengths of both the hypothetical Giza Plan and this long vanished lake are effectively identical. However, the number 3700 does not have any particular logic in isolation, therefore it is either one of the most incredible pieces of coincidence in history or it was deliberately chosen in honour of the Old Kingdom kings. If the latter is correct, then there are only two likely possibilities. The first, that the hidden knowledge of the Heliopolitan priesthood manifested itself in the cardinal works of Amenhotep III. The second, that either Amenhotep II, or his son Thutmose IV, happened to discover this ancient knowledge, which makes more interesting, any interpretation of the Sphinx dream.

The full title of the *Amduat*, the secret book of the Egyptian underworld, whose heading in later periods was abbreviated to 'that which is in the underworld', is perhaps revealing. The original first paragraph of which reads:

'The writings of the Hidden Chamber. The positions of the Powers, Gods, Shades, Transfigured Dead, Created Forms. The beginning is the Opening of the West, door of the Eastern Horizon. The end is outer darkness, door of the Western Horizon....'<sup>21</sup>

Once more, we have a clear reference to a hidden chamber, and we know that Thutmose IV, cleared away the sand from the Sphinx, and repaired it. Was this an entirely literal interpretation of his dream and merely an altruistic act, or was he searching for something? There is of course, no evidence to support either suggestion, and the issue of the origin of 3700 for the length of Queen Tiye's lake must remain hypothetical. Yet, from New Kingdom times at least, the Sphinx was

venerated as a solar god, Horemakhet, meaning 'Horus on the horizon'. The Sphinx as guardian of the entrance to the underworld could in this event be literally interpreted as the guardian of the Hidden Chamber of the Amduat.

We also know that Amenhotep III had a great interest in the monuments of his ancestors, and it is therefore possible that he stumbled upon the knowledge himself. In preparing for his Sed festival, or jubilee for example which occurred in the 30th year of his reign, he took steps to distance himself from the practices of his immediate predecessors. An inscription in the tomb of Kheruef (Queen Tiye's steward), declares, 'generations of men since the time of the ancestors had not celebrated Sed-festival rites, but it was commanded for Amenhotep, son of Amun... his majesty did this in accordance with the ancient writings.'<sup>22</sup>

In researching the practice of this rite, Amenhotep sent scribes out to all the ancient sites, and it is reported that he found Saqqara particularly informative.<sup>23</sup> We are left then with an image of a dynasty of rulers whose fascination with the Old Kingdom caused them to instigate major upheavals within their country. Was this mere nostalgic vanity, or were they privy to a perception of religious truth at variance from their subjects? It is unlikely that we will ever know, but on the death of Amenhotep III, whose mummy shows him to be a fat, balding old man, with abscessed and worn teeth, the carefully planned religious revolution was to go into overdrive. An explosion of radicalism, that eventually proved too much for the country to bear.

If Amenhotep III as Joann Fletcher asserts, became the king on whom subsequent pharaohs modelled themselves, then his son Akhenaten became the antithesis, being the most vilified king in Egyptian history.<sup>24</sup> Where Amenhotep was arguably a visionary in art, religion and diplomacy, his son was merely a pale shade. When Akhenaten ascended to the throne, his mother Queen Tiye, took over the high level diplomatic correspondence. In writing to the king of Mitanni, she pointedly asked him to remember the love he had for her husband, and now increase it for her son. Clearly, she believed him to be a lightweight, unsuited to the role thrust upon him. The king of Mitanni in reply, urged Akhenaten to consult Tiye on matters of state, arguing that she was the only person who understood Amenhotep's policies in detail.<sup>25</sup> This prescient fear of regional instability was entirely valid, as the ineffectual Akhenaten did not have any of his father's inspirational qualities and he quickly lost control of Egypt's Levantine sphere of influence. This catastrophic reversal of Egyptian fortune, weakened the state, and grew more desperate as his reign progressed. Diplomatic letters found at his Akhetaten capital, from provincial governors, whose pleas for help reached deaf ears, vividly demonstrate this situation, and in Donald Redford's opinion shows not merely disinterest, but rather his indecision.<sup>26</sup>

Over the last one hundred and fifty years, Akhenaten has been interpreted in the light of beliefs and prejudices common to the times, which follows a practice commenced by his New Kingdom heirs. Vilified as a heretic whilst even still alive, to the early scholars attempting to make sense of his strange likeness, he was either a disguised woman, or a eunuch. Flinders Petrie saw Akhenaten as a gentle sage and moral philosopher. Breasted viewed him as the 'first individual'; whilst to Toynbee his Atenism was the prototype of the Roman third century AD, Sol Invictus cult. Weigall viewed him as a great reformer, and Freud took the religious implications even further, and viewed him as the originator of Mosaic monotheism.<sup>27</sup> H. R. Hall, one time Keeper of Egyptian Antiquities at the British Museum had a more prosaic view, calling him 'The first prig', and believed him to have been half-mad.<sup>28</sup>

Histories of Akhenaten have therefore usually been coloured by whether the reviewer liked him or not. Aldred for example approved of him, whilst Redford and Reeves are openly scathing. The evidence appears contradictory and is confused by his strange appearance in Amarna art, which has often led scholars to postulate some form of medical or genetic disorder. Early analysis that he suffered from Froehlich's Syndrome is roundly dismissed, as sufferers are generally impotent and mentally retarded. The Canadian scholar Alwyn L. Burridge however, theorises that Akhenaten suffered from Marfan's Syndrome, which produces in less exaggerated form, individuals who look like Akhenaten. Yet, two statues in the Louvre, dating well into his reign, depict both him and Nefertiti as being clearly normal, and demonstrate none of these medical symptoms. These were probably sculpted as household shrine objects, and may therefore represent an idealised image. The alternative is to assume that the Amarna art was religiously stylised. In this respect it is perhaps

significant, that the further down the social scale, the less deformed the statues become. Any attempt to suggest a medical disorder would therefore seem to derive from the mistake of interpreting the images literally. Such a situation has often led to some bizarre claims. One that he was an extraterrestrial, whilst another, that because he is depicted with bulbous lips, that he was black. Clearly, Akhenaten can be viewed as all things to all men, saint, sinner, gay icon, or even the first fascist.

However, in the end any analysis of him polarises into two camps, with his fervour being either genuine religious zeal, or a cynical attempt to exploit religion for political ends. The jury in truth, will be forever out, but given the strong evidence for the prior existence and vitality of Atenism, it would seem that his was but an extreme version that had been subtly promulgated by his immediate predecessors. If so, then his subsequent actions must be viewed from the context of contemporary opinion of him as being alternatively rash, or indecisive: and the resultant likelihood that his decisions were coloured by the sycophancy that surrounded him. Whatever the truth, William J. Murnane is probably closer to the mark, when he remarks that what little we know of Akhenaten 'remains hidden behind the carefully crafted persona.'<sup>29</sup>

What is beyond doubt is that he came to the throne as Amenhotep IV, probably as co-regent with his father, who it is often argued kept his religious fervour in check. If this was the case then it is questionable as to how much effect his father had. During the early years of his reign, he began a radical temple in the Amun heartland of Thebes, called the Hwt-bnbn, meaning house of the benben, which had been the sacred object of the cult of Ra from time immemorial.<sup>30</sup> Such overt sun symbolism would have been both an insult and a warning to the Amun clergy, who must have viewed this development with horror. Reeves postulates that around this time there was an assassination attempt made against him, which led to a grudge of considerable magnitude against the Amun clergy.<sup>31</sup> If so, then it would certainly explain his subsequent actions, which began to take place in year five of his reign.

Others have argued that his father died around year five of his reign, releasing him from the shackles of parental control. This of course is entirely dependent upon a co-regency, which has never been proven.<sup>32</sup> What is undeniable, is that in year five of his reign, he changed his name to Akhenaten, meaning variously 'He who is effective on Aten's behalf', or "Glorified Spirit of the Sun disc'. Shortly after, he uprooted his entire court and moved them to a virgin site at Akhetaten, leaving Thebes and the hated Amun clergy forever. Work abruptly stopped on the Theban sun temples, and all resources were directed towards building his new vision in the sands of Egypt, some 250 miles north of Thebes. Probably at the same time, workmen began to lay new gypsum plaster over the second of the royal cartouches, and his new name was re-cut over the old.

Other workmen were sent out to all parts of Egypt to eradicate Amun's name, and it is likely that at this point, the temples were closed and all funds diverted to the new site.<sup>33</sup> This was not mere spite, but a tangible persecution that generated real fear in the population. A fear that is illustrated by texts and artefacts that show people were scared of being found with Amun symbolism. So much so, as Nicholas Reeves points out, that the owners themselves would gouge out the three offending signs on small broaches which articulated Amun's name.<sup>34</sup> The extent of this self-censorship, providing clear evidence in Reeves view, of the paranoia that was gripping the country. A paranoia that was both countered, and exacerbated by the increasing presence of Akhenaten's soldiers on the streets of Egypt.

In this respect the site of the new city of Akhetaten fulfilled a useful role, in that in its design it was easily defended from internal unrest. Built around an eight-kilometre stretch of the north-south road which led to the alabaster quarries at Hatnub, the closest other city was across the Nile and to the west, being Hermopolis home of Thoth. The topography of the city is usually claimed to be the reason for its position. Politically neutral by virtue that it was a virgin site, it was midway between Egypt's traditional borders of the Delta and Elephantine. Fourteen boundary stelae were carved in rock to define the city limits, which encompassed an area of over 77 square miles, and at its height, housed a population of between 20,000 and 50,000 people. Started in year Five it was inaugurated in year Nine of Akhenaten's reign, and to judge by the decoration found on its artefacts, was a green and pleasant Eden. Yet such was the hatred Akhenaten engendered that shortly after his death the city was abandoned, and the capital returned to Thebes. A hatred demonstrated by the

fact that the city of Akhetaten was never used again, with most of its masonry being removed for other building projects.

Yet, this very act of desecration, coupled with its desertion, is what makes Akhetaten unique, as everywhere else in Egypt continual habitation serves to obscure the finer details of design. When Akhenaten's successors demolished the gleaming city, they reduced the once fine buildings to their foundations, which remained as a time capsule of Akhenaten's grand scheme, entombed by the desert sand. How bitter the hatred of Akhenaten's religion was is evidenced by the ruthless destruction of the stone work in the palace and temple, carried out by parties of skilled masons with orders to destroy all traces of Akhenaten. A task, which one of the first excavators of the site John Pendlebury observed, they carried out thoroughly and in an orderly manner, taking the blocks to be re-used at Karnak. In the middle of what was once the Great Temple, Pendlebury found a statue base bearing Horemheb's name, which he believed had been a statue of Amun, erected as a symbolic victory over the heresy.<sup>35</sup>

For three thousand years, the city of Akhetaten lay virtually undisturbed under its carpet of sand, only to re-emerge in 1714, when a Jesuit scholar called Claude Sicard noticed one of the cities boundary stela. By this time the city was known as el-Amarna, and named after a Bedouin tribe living in the area.<sup>36</sup> Thereafter a succession of excavations helped reveal its hidden scale, and in 1798 when Bonaparte's men reached the site to perform the first cursory examination, it was still quite substantial.

The small Aten temple was clearly visible, standing in parts up to twenty-three feet, although most of its decorative limestone facing had long since been removed. Since then, the site has been excavated extensively by some of the most distinguished scholars in archaeology, providing us with a unique insight into the Amarna period.<sup>37</sup>

Figure 53 is an aerial photograph of the Central City and serves to illustrate just how much detail still existed when Pendlebury excavated it. Figure 55 shows the result of his excavation, and is a block plan of the central part of the city. [Figure 54 is from the later survey carried out by Kemp, and published in 1993.]

From these surveys, it is clear that the Central City area was designed to conform to some form of geometric cohesiveness. If you look at figure 54 for example, you will see the initial 'Laying Out' line as detailed by Barry Kemp, stretching from the North City to the Kom el-Nana, (which was probably the solar shrine of Akhenaten's Queen). It is immediately clear that the central area was rigidly positioned at right angles to this line. Many have disingenuously suggested that this was at best a meaningless geometry, imposing a formal structure onto the new city, and at worst, an attempt to align the city to the course of the Nile. Barry Kemp, and the Egypt Exploration society architect Michael Mallinson are however certain that an underlying geometry was key to the whole plan.

Firstly, Mallinson has identified certain correlations between the Amarna structures and earlier building works at Karnak and Heliopolis. His conclusion being, that the two principal temples were symbolic substitutes for the two Ra shrines at these earlier cult centres, and that this positioning represents a unification of the different theological perspectives of Egyptian religion.<sup>38</sup> It is certainly interesting that he further postulates that key points between the Palace and the Great Temple were positioned to mirror key distances along the processional routes at Thebes.<sup>39</sup> A seemingly vague analysis from a geometrically aware architect, which is remarkable perhaps for what it doesn't say, rather than for what it does.

Richard Wilkinson in the Complete Temples of Egypt, is less obtuse and states almost as an aside, that the Karnak temple displays a growth ratio in successive modifications, which approximates to that of the Fibonacci series, being in the ratio of 1,2,3,5,8, etc.<sup>40</sup> He is quite clear that successive rulers adapted the Karnak temple according to the mathematical principles of Phi. By obliquely referring to this Fibonacci ratio, Mallinson is skating over the maelstrom of conflict that such a statement would inevitably cause. Yet, as a trained architect he can be under no illusion, that when he relates the Palace and Temple distances directly to those at Karnak, he is saying that they obey a Phi orientation. More simply; that the Great Temple is positioned at the 'Golden Cut' of the line between the Kom el-Nana and the North Palace. Moreover, as his colleague Barry Kemp

admits, the position of the Kom el-Nana enclosure is sufficiently odd, as to make it 'highly unlikely' that its positioning was a coincidence.<sup>41</sup>

Mallinson however, is more candid in disclosing that the positions of the boundary stelae were geometrically aligned to mirror the layout of the Great Temple. In his view, the whole of the city of Akhetaten is a macrocosm of the Temple structure, based upon a two-dimensional geometry.<sup>42</sup> By carefully aligning important points to the cardinal directions, the city became an explicit statement of religious meaning. Mallinson further postulates that a focus point was designed to radiate outwards from the rock tomb area in the east, to each of the boundary stelae, and to all of the salient points within the city. In this way, the city focussed all of its religious energy to the object placed at this nodal point, which was in his view, designed to be the tomb of Akhenaten. You will recall that a similar geometric imperative dictated the positioning of the temples on the Acropolis, which further emphasises the suspicion that the Greeks obtained their geometric knowledge, at least in part from an Egyptian source.<sup>43</sup> However, if we look at the geometry of the two Amarna temples in detail, something far more interesting becomes apparent.

Full Diagrams of Amarna are provided in *The Geometry of the Earth Goddess*, together with the geometric analysis of its extraordinary temples.

For copyright reasons unfortunately they cannot be downloaded for you to view.

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<sup>1</sup> The actual border for much of the hundred-year rule of the Hyksos was the town of Cusae, some 40 kilometres south of Hermopolis. Any traveller going north would be stopped at Cusae where a toll was payable to the ruler in Avaris, before they could enter Lower Egypt. This border region saw a considerable amount of action in the hundred-year occupation, with roving bands of warriors from both sides quick to attack. An inscription of Queen Hatshepsut, who ruled 75 years after the Hyksos expulsion provides an interesting comment on the devastation reaped upon the area. 'I have raised up what was dismembered from the first time when the Asiatics were in Avaris of the North Land (with) roving hordes in the midst of them overthrowing what had been made ...The temple of the Lady of Cusae...was fallen into dissolution, the earth had swallowed up its noble sanctuary, and children danced upon its roof'. [The Second Intermediate Period, Janine Bourriau, The Oxford History of Ancient Egypt, Oxford University Press, 2000, p201]

<sup>2</sup> Manetho states the Hyksos were cruel, knowing no mercy. Excavation of some of the garrison fortresses of the Hyksos would appear to bear this out. Amongst the bones of animals, there have been found pieces of human jaws, patella's, a separated arm, and what one excavator has called a 'superfluous loose hand'.

<sup>3</sup> Ages in Chaos, Immanuel Velikovsky, Sidgwick & Jackson, 1953, p 68

<sup>4</sup> The Second Intermediate Period, Janine Bourriau, The Oxford History of Ancient Egypt, Oxford University Press, 2000, p205

<sup>5</sup> The Complete Temples of Ancient Egypt, Richard H Wilkinson, Thames & Hudson, 2000, p 50

<sup>6</sup> Akhenaten, Egypt's false prophet, Nicholas Reeves, Thames & Hudson, 2000, p 33

<sup>7</sup> Akhenaten, Egypt's false prophet, Nicholas Reeves, Thames & Hudson, 2000, p 34

<sup>8</sup> Akhenaten, Egypt's false prophet, Nicholas Reeves, Thames & Hudson, 2000, p 38

<sup>9</sup> Akhenaten, Egypt's false prophet, Nicholas Reeves, Thames & Hudson, 2000, p 39

<sup>10</sup> The 18<sup>th</sup> Dynasty before the Amarna period, Betsy M Bryan, The Oxford History of Ancient Egypt, Oxford University Press, 2000, p249

<sup>11</sup> Akhenaten, Egypt's false prophet, Nicholas Reeves, Thames & Hudson, 2000, p 39

<sup>12</sup> Egypt's Sun King, Joann Fletcher, Duncan Baird Publishers, 2000, p 14

<sup>13</sup> Akhenaten, Egypt's false prophet, Nicholas Reeves, Thames & Hudson, 2000, p 48

<sup>14</sup> Egypt's Sun King, Joann Fletcher, Duncan Baird Publishers, 2000, p 41

<sup>15</sup> Akhenaten, Egypt's false prophet, Nicholas Reeves, Thames & Hudson, 2000, p 72

<sup>16</sup> Egypt's Sun King, Joann Fletcher, Duncan Baird Publishers, 2000, p 51

<sup>17</sup> Egypt's Sun King, Joann Fletcher, Duncan Baird Publishers, 2000, p 61

<sup>18</sup> Egypt's Sun King, Joann Fletcher, Duncan Baird Publishers, 2000, p 61

<sup>19</sup> Amenhotep's funereal temple was built at Kom el-Hetan. Adjacent was the Temple of Amenhotep son of Hapu. Both were aligned facing south of East at around 117°, which was the position of the Winter Solstice in that era. The ground chosen for the temple was relatively low, and it seems clear that it was deliberately

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chosen so that during the Nile flood, it would have been partially submerged. Joann Fletcher evocatively suggests that this would have been a symbolic rebirth each year when the waters receded. [Egypt's Sun King, Joann Fletcher, Duncan Baird Publishers, 2000, p 143]

<sup>20</sup> Egypt's Sun King, Joann Fletcher, Duncan Baird Publishers, 2000, p 68

<sup>21</sup> The Cult of Ra, Sun Worship in Ancient Egypt, Stephen Quirke, Thames & Hudson, 2001, p 52

<sup>22</sup> Egypt's Sun King, Joann Fletcher, Duncan Baird Publishers, 2000, p 139

<sup>23</sup> During a Sed festival, the king celebrant would run a ritual race around the sides of a rectangular open space, clutching a document called "the secret of the two partners". This veiled reference to Horus and Set, symbolised the two lands of Egypt, the racecourse its boundaries, and the document his divine kingly right to rule. It is also another interesting evolution of the Goddess culture of the ancient world, and is undoubtedly distantly connected its the sun-hero mythology.

<sup>24</sup> Egypt's Sun King, Joann Fletcher, Duncan Baird Publishers, 2000, p 163

<sup>25</sup> Egypt's Sun King, Joann Fletcher, Duncan Baird Publishers, 2000, p 163

<sup>26</sup> Akhenaten, The Heretic King, Donald B Redford, Princeton University Press, 1984, p 167

<sup>27</sup> Akhenaten, The Heretic King, Donald B Redford, Princeton University Press, 1984, p 4

<sup>28</sup> Akhenaten, History, fantasy, and ancient Egypt, Dominic Montserrat, Routledge, 2000, p 4

<sup>29</sup> Murnane, 1995, 12, as cited in, Akhenaten, History, fantasy, and ancient Egypt, Dominic Montserrat, Routledge, 2000, p 42

<sup>30</sup> Perhaps significantly, the celebrant of the Hwt-bnbn, was his wife Nefertiti, as nowhere in the monument is there a depiction of him.[Akhenaten, The Heretic King, Donald B Redford, Princeton University Press, 1984, p78] Analysis of hieroglyphic scripts indicates that the Hwt-bnbn was probably built to house a single obelisk, which signified the original creation mound of mythology.

<sup>31</sup> Akhenaten, Egypt's false prophet, Nicholas Reeves, Thames & Hudson, 2000, p 111

<sup>32</sup> Pendlebury was one of the first to argue for a co-regency of Amenhotep III with Akhenaten as pot sherds found at Amarna, with joint names seem to indicate regnal dates of 28<sup>th</sup> year for Amenhotep III and 5<sup>th</sup> for Akhenaten.

<sup>33</sup> Akhenaten, The Heretic King, Donald B Redford, Princeton University Press, 1984, p 142

<sup>34</sup> Akhenaten, Egypt's false prophet, Nicholas Reeves, Thames & Hudson, 2000, p 154

<sup>35</sup> The City of Akhenaten, Part III, Volume 1, J D S Pendlebury, Egypt Exploration Society, 1951, p 4

<sup>36</sup> Amarna derives from a Bedouin tribe called the Beni Amran, who had four villages in the area, el-Till, el-Hagg Qandil, el-Amiriya, and el-Hawata. The name of the first combines with that of the tribe to produce el-Till el-Amarna, corrupted to Tell el-Amarna, and then el-Amarna.

<sup>37</sup> In 1798, Bonaparte's men, under the direction of Edme Jomard, carried out the first preliminary survey. Between 1824 and 1826 it was excavated by John Gardiner Wilkinson, who was followed in 1843 by Richard Lepsius, who as Reeves points out, was the first to notice that the names of the royal couple had been hacked out. [Akhenaten, Egypt's false prophet, Nicholas Reeves, Thames & Hudson, 2000, p 17] Between 1891 and 1892 the site was partially excavated by Alessandro Barsanti, and in 1893, Howard Carter made drawings of the site. Petrie conducted the first major excavation in 1891, followed by Ludwig Borchardt in 1907, who unearthed an exquisite collection of Royal art. In 1920 the Egypt Exploration Society took over the license to dig, and excavated almost constantly between 1921 and 1936. Their lead excavator was the maverick archaeologist John Pendlebury, a giant of early archaeology, who's colourful life ended on Crete in 1941 when he was shot by the Germans as a spy. After the interruption of the war years, and various Middle Eastern political crises, the archaeology re-commenced in 1977, directed by Barry Kemp again for the Egypt Exploration Society.

<sup>38</sup> Akhenaten, Egypt's false prophet, Nicholas Reeves, Thames & Hudson, 2000, p 117

<sup>39</sup> Akhenaten, Egypt's false prophet, Nicholas Reeves, Thames & Hudson, 2000, p 116

<sup>40</sup> The Complete Temples of Ancient Egypt, Richard H Wilkinson, Thames & Hudson, 2000, p 48

<sup>41</sup> A Survey of the Ancient City of el-Amarna, Barry J Kemp, and Salvatore Garfi, Egypt Exploration Society, 1993, p 77

<sup>42</sup> Akhenaten, Egypt's false prophet, Nicholas Reeves, Thames & Hudson, 2000, p 117

<sup>43</sup> Statues faced east for example, not just towards sunrise, but towards the focus of the city. The main road through the city is the Sikket es-Sultan, which was probably the ancient north-south thoroughfare. This Royal Road emerges into the southern plain by the southern boundary stela, and is almost exactly duplicated out in the desert, by the orientation of the desert altars. This exactitude in geometrical alignment is generally assumed to have had some astronomical significance.