

THE ELITE LONGHEADS OF MALTA

Great reluctance prevails on the part of several members of the local archaeological establishment to acknowledge the true nature of our Maltese ancestors.

The evidence for Neanderthal Man in Malta has been done away with in a most unorthodox manner.¹

The evidence of Palaeolithic art in Malta has been wiped out, at the Hal Saflieni Hypogeum², at the Ghar Dulam and the Ghar Hasan labyrinths.³

At the present time, the longheadedness of the Late Neolithic Maltese is being challenged in the very same spot where these people practiced their religious rituals, in the Hal Saflieni Hypogeum.⁴

The Late Neolithic underground sanctuary at Hal Saflieni

At the turn of the twentieth century a remarkable monument was discovered by workers on a construction site at the locality known as Hal Saflieni in the town of Tarxien, Malta. Crude caverns were found near its entrance and the area is in fact known as *Tal-Gherien*, literally 'of the caves'. Although it was first reported to the Malta Museum authorities in 1903, according to the Maltese judge, Sir Augustus Bartolo, it had been discovered four years earlier, in 1899.⁵

Furthermore, the Knights of St John must have known about its existence, for a coin of the period (1741-1773) was found on the upper part of the surface material. A French cannon ball was also picked up from this same material matrix, and this would give another date to knowledge of its presence during the French period in Malta between 1798-1800.⁶

Later still, the *Malta Mail* of 11 October 1844 refers to the "discovery of some ancient catacombs recently made at Tarshien. It was not, however, pursued but the aperture was immediately closed until H.E. the Governor [Sir Patrick Stuart] had been informed of it, and it is supposed he will himself pay a visit to the spot before any excavation be persevered in".⁷

¹ Mifsud, A., *Dossier Malta – Neanderthal*. P.B. London, 2016a; Mifsud A. and Falzon, S., *Documents relating to the Dulam Cave Man*. P.B. London, 2016; Mifsud A., *Dossier Malta – Neanderthal*. P.B. London, 2016b; Mifsud, A., *The Dulam Cave Man*. Academic.edu 2016c; Mifsud, A., *Dossier Malta – 2016*, Academia.edu, 2016d.

² Mifsud, A., *Dossier Malta – Evidence for the Magdalenian*. 1997: 161, note 198. Proprint, Malta.

³ Emmanuel Anati published his discoveries in the *Valcamonica* journal, the *BCSP* of 1990 [Anati *BCSP* 25-26 (1990) 166-172], after having also submitted the manuscript illustrated by photographs and drawings to the Malta Museum of Archaeology in April 1989 [Arte Parietale a Malta - Relazione preliminare. In *Archives of the Museum*, Library DAG.16.100a (box no 6f) TS (86)].

⁴ See the recently refurbished museum at the Hal Saflieni Hypogeum, and below.

⁵ Bartolo, A., 1915. History of the Maltese Islands, p. 17. In Macmillan, A. (ed.), *Malta and Gibraltar Illustrated*. London: W. H. & L. Collingridge.

⁶ Zammit, T., 1926. *Malta: the Islands and their History*, p. 6. A. C. Aquilina & Co., Malta.

⁷ Zammit, T., 1925. *The Hal Saflieni Hypogeum, Casal Paula-Malta*, p. 5. Empire Press, Valletta.



Fig. 1. The Hal Saflieni Hypogeum

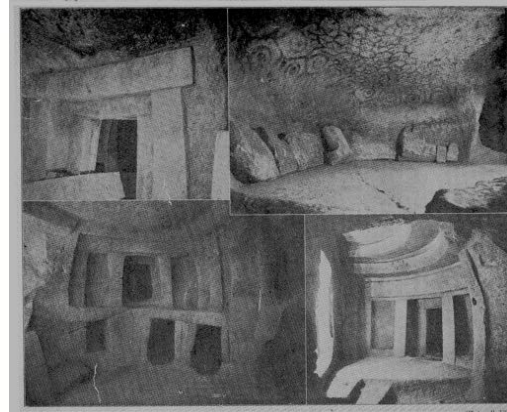


Fig. 2. Early photographs of the site

Description of the site

According to the official documentation, “*the top of the hill, in which the Hypogeum is cut, was, to a great extent, covered with megalithic buildings not unlike those now standing on Cordin Hill ... remains of large slabs of stone were found in situ, so arranged as to form chambers and enclosures ... human bones were found in considerable quantities among the material which filled the space between the standing pillars and slabs at the entrance to the Hypogeum. In this material ... old pottery, beads, stone pendants like those met with in the caves.*”⁸

The Hypogeum was originally entered through a megalithic assembly that today faces Hal-Saflieni Street. Underneath the floor of one of the houses erected just above the Hypogeum, and extending for a distance towards the north-west, the megalithic blocks that constituted this structure just in front of the entrance have been preserved *in situ*; some of these blocks were still standing when discovered.⁹ These megalithic stones next to the Hypogeum entrance were situated inside an ancient *undisturbed* deposit, of the same context and nature as that present throughout the Hypogeum labyrinth itself. This deposit comprised a homogeneous admixture of human bones, beads, pendants, and prehistoric pottery. Zammit also recorded that, in contrast to the alluvial nature of this ancient deposit, there were also several rock-cut tombs, still containing human skeletons, lying at a distance of a few metres away from the Hypogeum entrance.¹⁰

Of World Heritage status, the Hal Saflieni sanctuary is a ‘megalithic’ monument that was immaculately carved underground out of the living rock – a hypogeum that mirrored the other Maltese megalithic sanctuaries above the ground. The complex structure comprises a labyrinth of caves and corridors with niches distributed over three levels. It was being hacked away and utilised by man for several centuries, if not millennia, and this is reflected in its various forms of

⁸ *Museum Archaeology Reports (M.A.R.), Malta, p. ii. 1909-1910.*

⁹ Zammit, T., 1910. *The Hal-Saflieni Prehistoric Hypogeum at Casal Paula, Malta.* First report, p. 6. Valletta.

¹⁰ M.A.R 1909-10: E2-3; Zammit 1910: 32.

decoration and finish; contrary to standard archaeological stratification, the more recent sections of the monument lie at the lower levels.

The upper level is the most ancient; its walls are rough, and it is not possible to determine which portions of it are natural and which are cultural. The monument is hewn out of the soft globigerina limestone, the ideal medium that is readily worked by human hand, but is unfortunately also dissolved naturally through water action. Like all other natural caves and fissures, it had been initialized through the agencies of nature, but was subsequently adapted by Stone Age man on an extensive scale over several centuries.¹¹ The technique of chamber formation becomes more refined as one goes down the levels.

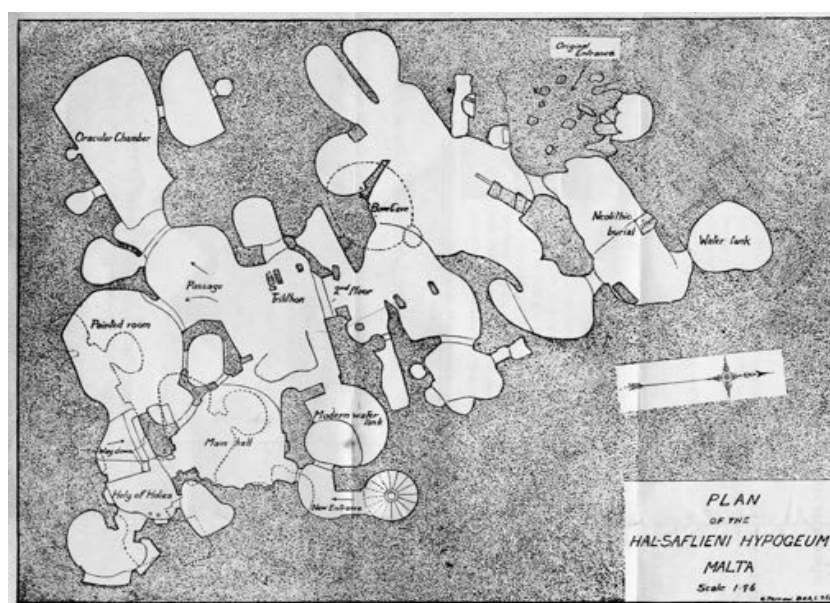


Fig. 3. The plan of the Hal Saflieni Hypogeum in Zammit's 1926 edition

Decoration

Some chambers were smoothed off nicely, whilst others were not. The latter were those that bore the decorations; Room 26 (the Holy of Holies) manifested the best workmanship in carving.¹² In Room 17 (the Passage), painted discs averaging 0.25 m. appear on the walls in groups of three, whilst Room 18 (the Oracular Chamber) bears three discs in red paint and an elaborately painted ceiling in red; these comprise large red discs intermingled with loose spirals joined by lines.

Close to Room 17 lies a large hall, chamber 20 (the Painted Room), that contains painted patterns and carvings; it is painted red all over and an elaborate pattern of red, branched and angular spirals and volutes adorns the ceiling. Room 24 (the Main Hall) is also elaborately carved and painted in red; a scroll of patterns is more evident in subdued light conditions.¹³

¹¹ Zammit 1926: 59.

¹² Zammit 1910: 15.

¹³ Zammit 1910: 20.

Apart from the multitude of designs in red ochre at the Hypogeum, there are also drawings in black manganese dioxide pigment, and one of these measures 1.15 by 0.95 metres. It represents a bovid, the Pleistocene European bison-bull¹⁴ “with a hunch on its back, with short horns and tail” and is situated on the left wall at the entrance of the Holy of Holies.¹⁵ The red ochre wash on the same wall is a later feature for it terminates just short of the figure.¹⁶ Paintings in black were dominant in the earlier forms of cave art,¹⁷ and considering the simple, crude design of this Hypogeum bovid, together with its frozen aspect, the lack of perspective and infill, and the non-differentiation between foreground and background, its dating in the Upper Palaeolithic is therefore estimated to be very early on in the pre-Magdalenian period.¹⁸

Some form of illumination must have assisted the craftsmen as they carved out the Hypogeum and designed the various art forms on its walls. The majority of the sherds and vases retrieved from the Hypogeum deposit provide evidence of the use of lamps for illumination; these were neither domestic nor funerary, but were best suited to have served the specific function of lamps.¹⁹

Without the use of metal, the ancient Maltese were erecting the first domed structures of the world; these sanctuaries were also being built in accordance with an anti-seismic blueprint, and, amongst other designs, most if not all of these temples incorporated highly advanced acoustics that are still retained in the ‘closed’ surviving framework at the Hal Saflieni Hypogeum.



Fig. 4. Guardians of the Hal Saflieni sanctuary.

¹⁴ Megarry, T., 1995, *Society in Prehistory*, p. 261. Macmillan Press Ltd.

¹⁵ Agius, A. J., (1959) 1968, *The Hal Saflieni Hypogeum*, pp. 5-7. Union Press, Malta; Rossiter, S. (ed.) *Malta*, 1968: 90. Ernest Benn Ltd, London; McGregor Eadie P. 1995, *Malta and Gozo - Blue Guide*, p. 104. A. & C. Black, London.

¹⁶ Trump, D. H., *Malta: An Archaeological Guide*, 1972: 63; 1990 (2nd ed.): 65. Progress Press Co. Ltd., Malta.

¹⁷ Clottes, J., 1996, Thematic changes in Upper Paleolithic Art: a view from the Grotte Chauvet, p. 281. *Antiquity*, 70: 276-288.

¹⁸ Clottes 1996: 278; Delluc B. and G., 1991, L'Art Parietal Archaïque en Aquitaine, pp. 320, 342, 348, in *CNRS 28, Suppl. a Gallia Préhistoire*; Leroi-Gourhan, A., 1965, *Préhistoire de l'Art Occidental*, pp. 68; 147-8; 159. Mazenod, Paris.

¹⁹ Zammit 1910: 33-4.



GRAFFITO Length 5½"
Height 8½"



THE HAND 8½" × 4"



THE BULL — .98m × 1.15 m

Fig. 5. The curator of the Hal Saflieni Hypogeum during the 1950s was A. Agius. His dedication and thorough investigation of the monument yielded a number of features that had not previously been recognised, including the above. Like longheadedness, the six-digit hand was considered a divine attribute in antiquity.

The excavation

In November of 1903 the Committee of Management of the Valletta Museum appointed one of its members, the Jesuit Father Emanuel Magri, to supervise the exploration and excavation of the monument.²⁰

The Hypogeum was initially cleared of all the material and deposit that had accumulated inside it, and four sets of caves and galleries were identified. No metal implements were discovered; the tools used included stone, horn and antler. The finds comprised flint and other stone tools, alabaster, clay and stone statuettes, personal ornaments, animal bones and seashells. There were no signs of actual human habitation inside the Hypogeum.²¹

Fr. Magri was involved in the in the laborious process for five years, between 1903 and 1907, but his notes disappeared with his sudden death in Sfax; efforts to retrieve them have been consistently unsuccessful.²²

After Magri's demise, the Director of Museums, Themistocles Zammit, was entrusted with continuing the excavations. These included the lowermost storey and the area north of the platform leading to the original entrance. After two individual reports by Zammit and Tagliaferro in 1910, excavations continued for another year, with the area around the original entrance being excavated last. These last phases of the excavation were reported in the 'Museum of Archaeology Report' (M.A.R.) for 1909-10.

In this report, Zammit clearly laid out the nature of the ancient deposit inside the labyrinth. This was comprised essentially of red earth, the same matrix surrounding the megaliths at the entrance, and which had been washed down into the chambers of the Hypogeum. In this red earth deposit, which averaged one metre in height, homogeneous motley of human remains, implements and Neolithic pottery were to be found. In certain parts recent material covered the red earth deposit, and this material was mainly composed of the waste products of the work by the builders, who were developing the area at the turn of the century.

The early Hypogeum photograph that is on display outside the audio-visual room there clearly shows the large amount of deposit that filled the Hypogeum cavities. Several sieves and a skull are also visible in the photograph.

Zammit differentiated quite clearly between the *material* and the ancient *deposit*, and it is necessary to quote at length in order to contrast the content with its subsequent misinterpretation by Evans.²³ *"In the upper stories, modern material was found, mostly thrown in quite recent times; some of the material, however, was undoubtedly over a century old as not far from the original entrance a coin of Grand Master Pinto (1741-1773) was found very near the surface. The modern*

²⁰ Zammit 1910: 4-5.

²¹ Zammit 1926: 59-63.

²² Zammit 1910: 5; 1926: 7.

²³ Evans, J. D., 1971, *The Prehistoric Antiquities of the Maltese Islands: a Survey*, p. 58. The Athlone Press, University of London.

*material was easily recognized and of no interest whatever. Under this, a dark compact deposit was found which showed nowhere signs of having been disturbed. In this old deposit no stratification was observed and in caves which were cleared inch by inch, the deposit was always of the same type and contained objects of the same quality. The deposit of the large caves, about a metre in depth, was made of red earth one finds in our fields and in this, bones and potsherds were intimately mixed. This deposit was wanting in the series of caves which were elaborately cut and finished, and in the small caves in the lower storey."*²⁴

Bones and skulls were thoroughly mixed up in the deposit; and the one complete skeleton which was discovered in the red soil was neither buried in a trench, nor was it associated with flints or sherds; no mention of a ritual burial is made by Zammit. It lay on its *right* side, whereas ritual burials in the late Neolithic, such as those represented at Burmeghez, lay on their *left*.²⁵

"Further investigations proved also that the burial of whole bodies was an exception, and not the common form of disposing of the dead ... limbs were not as a rule disjointed and the bones of feet and hands were in anatomical position ... this work involved a great deal of attention and could not be left in the hands of hired workmen." The assistance in the excavation by the Rev. A. W. Dawes C. F, and medical students E. Vella, P. Xuereb and F. Borg is acknowledged.²⁶ In the alluvial deposit of the Hypogeum itself, *"human bones were found in great numbers, but not one skeleton could be made out to have been whole and regularly laid out for burial. In the new caves as well as in those cleared the years before, the impression one gets from the distribution of the bones is that they were thrown in a haphazard way"*.²⁷

Zammit therefore considered the Hypogeum as primarily a Neolithic sanctuary that was later converted into an ossuary.²⁸

"The innermost part of the Hypogeum was destined for some kind of worship, another part of it was surely used to bury the dead ... the human bones found disjointed and confusedly massed might also point to the custom, prevalent in Neolithic ages, of scraping the dead bodies off their soft parts, before their final burial ... the contents of the deposit point rather to a burial place in which the bodies were laid or heaped mostly as skeletons. Very few bodies were found lying in a natural position and no special arrangements such as trenches, sepulchres, stone enclosures etc. were met with, anywhere, intended to receive a body ... not a single one [skeleton] was found lying with bones in position." On the contents of the ancient deposit *"at least 120 skeletons were buried in a space of 3.17 by 1.2 by 1m. This is enough to show that a regular interment was out of the question as not more than 12 bodies could be laid in such a limited space."*²⁹

²⁴ Zammit 1910: 34.

²⁵ Zammit 1910: 37, 42; Tagliaferro, N., 1911, Prehistoric Burials in a Cave at Bur-Meghez, near Mkabba, Malta, in *Man*, 11 (10): 147-150. Royal Anthropological Institute, London.

²⁶ M.A.R. 1909-10: iii.

²⁷ M.A.R. 1908-9: iv.

²⁸ Zammit 1926: 62.

²⁹ Zammit 1910: 33; 34; 35; 36; 37.

Other evidence for the alluvial nature of the deposit can be adduced from other observations made by Zammit, that *"fragments of sherds in parts of the Hypogeum fitted other fragments deposited in other caves far away"*.³⁰ *"Nearly all the caves, passages and chambers contained old deposit varying from a few centimetres to over one metre deep"*.³¹ *"No difference whatever could be observed between the different strata of the deposit, and the same quality of sherds were found at the surface, at the bottom and in the space between"*.³² Slingstones were found neatly arranged at the Hypogeum entrance, and also in the deposit inside the labyrinth.³³

"When all the red soil with its contents were removed from the caves and the passages, it was observed that the hypogeum ... had more the appearance of a sanctuary than of anything else. A large hall, where people must have assembled, an elaborate chapel in which holy rites were celebrated, an oracular room, tiny cubicles in which devotees could have slept in expectation of inspired dreams, are all features specially adapted for a place of worship and for the initiation of the young priests who had to learn the magical ceremonies and the sorceries of a primitive religion. ... It is obvious that the people who made it excelled in the craft of stone-cutting and building; and as the art of a people is an index of its culture, it is safe to surmise that, in the Stone Age, the inhabitants of these islands had reached a degree of civilization not met with at that time in any of the islands of the Mediterranean Sea".³⁴

Although Zammit concluded that *"the Hypogeum was in part used as a sanctuary in which religious ceremonies were conducted, and in part as a burial place in which the bones of the dead were deposited after being deprived of the flesh"*,³⁵ he made it clear that the original and primary function of the Hypogeum was not a funerary one. The sanctuary to tomb sequence is evident from Zammit's remark that *"it is clear that, during the last phase, the Hypogeum was used as a burial place or, more correctly, as a deposit of human bones taken from graves somewhere outside the place ... the human bones were everywhere thrown in disorder ... more bones were met with than it was consistent with normal burials in a restricted place ... bones from 120 different individuals were identified in a space ... which could not hold more than six bodies if interred in the usual manner"*.³⁶

According to Zammit, *"it is most probable that this underground monument was originally dug out by a religious community to serve the purpose of a Sanctuary in honour of a divine power they worshipped and in which devotees were able to consult an oracle under the direction of a numerous priesthood, who among other things practiced oneiromancy, that, is they interpreted dreams provoked in the faithful that slept in cubicles still to be seen in the Hypogeum ... the hypogeum served also very probably for the training of the priests and for the initiation of the*

³⁰ Zammit 1910: 37.

³¹ Zammit 1910: 34.

³² Zammit 1910: 37.

³³ Zammit 1910: 39.

³⁴ Zammit 1925: 9-10; 38.

³⁵ Zammit 1910: 43.

³⁶ Zammit 1935:11.

neophytes in the complicated magical rites. When the sanctuary, in the course of time, proved to be less attractive or unsuitable, the mysterious caves, that had acquired fame as a holy temple, were considered by the devout population to be a fitting ground for the burial of their dead".³⁷

The conclusions of those who first excavated the Hal Saflieni monument were that its primary function was that of a sanctuary with transcendent purposes. The conclusions of unbiased modern-day scholars are similar. *"These were a people who searched with a sense of purpose and dedication, with a knowledge and awareness in tune with the totality of darkness and light. Theirs was a language of the amalgamation of science and art ... the cyclic time factor of the life-death-rebirth pattern is reflected in these peoples' obsession with the mystic spiral pattern ... to think of the orbicular womb-like spaces of the Hypogeum and the mystery that lies hidden within them is sufficient to entice the curiosity of all who have the ecstasy of human transcendental knowledge close to their hearts".³⁸* *"Symbolically the Hypogeum at Hal Saflieni represents a labyrinthine womb, and it is most unlikely that the early Maltese were not conscious of this symbolism".³⁹*

The Hal Saflieni human remains

One notable physical characteristic amongst the human remains found at the Hal Saflieni Hypogeum was their longheadedness, that is also known as dolichocephaly. These highly advanced Maltese temple-builders were dolichocephalic - the pharaohs of the Old and New Kingdom were also longheaded.

The shape of the royal skulls of the ancient Egyptian pharaohs was of the longheaded variety not only throughout the Old Kingdom, but also during the New Kingdom. In between these two major periods of ancient Egyptian history, the pharaohs of the Middle Kingdom were foreigners who defeated the Old Kingdom pharaohs, but were then in their turn defeated by those of the New Kingdom – the ancient lineage of the pharaohs had thus apparently been restored, and the longheads re-appeared as the rulers of Egypt.

The long headedness of the Old Kingdom pharaohs was confirmed by Douglas E. Derry, Professor of Anatomy at the Department of Medicine in the University of Cairo.⁴⁰ He was amongst the first Egyptologists to take an X-ray of one of the mummies, that of Amenohotep I in the 1930's. Derry was also tutor in anthropology at University College London, and a great mummy specialist.

³⁷ Zammit, T., 1935. *The Neolithic Hypogeum at Hal Saflieni at Casal Paula-Malta*, pp. 57-8. Malta: Empire Press.

³⁸ England, R., 1980. *Uncaged Reflections*, p. 43. Valletta: M.R.S.M. Ltd.

³⁹ Ferguson, I.F.G., 1985. New Views on the Hypogeum and Tarxien, pp. 156, 158. In Bonanno A. (ed.) *Archaeology and Fertility Cult in the Ancient Mediterranean*. Amsterdam: B. R. Grüner Publishing Co.

⁴⁰ Derry, D. E., 1956. 'The Dynastic Race in Egypt', *Journal of Egyptian Archaeology*, vol. 42.

The remains of the New Kingdom pharaohs were investigated by Grafton Elliot Smith, a prominent anatomist and Egyptologist at the turn of the twentieth century; he confirmed their longheadedness.⁴¹

Why is longheadedness being considered to be significant? Together with other anatomical variants, such as six-digit limbs, longheadedness was considered in antiquity to be indicative of individuals with semi-divine attributes.

Through the archaeological excavations that were carried out on a grand scale in the Middle East at the turn of the twentieth century, notably by the British archaeologist Flinders Petrie and the French Jacques de Morgan, it was shown that around the time of the first Egyptian dynasties, a longheaded group of people introduced themselves amidst the round headed ones that preceded them. This longheaded group appeared at about the same time that the first dynasties started off in Egypt. The same phenomenon seems to have also occurred in Mesopotamia, where the ancient roundheaded human skulls were replaced by longheaded ones.

Amongst the British Egyptologists who excavated extensively in Egypt in the mid-twentieth century was Walter Bryan Emery, the Edwards Professor of Egyptology at the University of London with a vast experience in researching and excavating in the Nile Valley. The question that has constantly been posed regarding the origins of the pharaohs and the Mesopotamians is who preceded who. Were the ancient Egyptians the precursors of the ancient Mesopotamians, or was it vice versa? Emery concluded that it had probably been some other source *as yet unidentified* that had preceded both the ancient Egyptians and Mesopotamians.⁴²

Did the Maltese longheads have anything to do with this? Considering the highly advanced status of the Maltese temple builders, a link with the Egyptian pharaohs is certainly not impossible. The sudden, contemporaneous and unexplained demise of both these longheaded groups, the Old Kingdom pharaohs and the Maltese temple builders, cannot be simply brushed aside and considered coincidental in nature.

Unfortunately, in the wake of the racial elements of the Second World War, hypotheses relating to racial physical characteristics were given a very low profile. Nonetheless, the physical anthropological features of the Maltese temple-builders continued to be investigated.

Longheadedness

Male skulls are longheaded if their breadth is less than 75.9% of their length (less than 75% in females; all the Hal Saflieni skulls were males.⁴³) If this percentage is above 80%, they are known as brachycephalic, round or

⁴¹ Elliot Smith, G., 2000. *The Royal Mummies*. Duckworth Egyptology Series.

⁴² Emery, W. B., *Archaic Egypt*. Penguin Books (1961) 1991: 39-40.

⁴³ Dudley Buxton, L.H., 1922. The Ethnology of Malta and Gozo, pp. 197, 198. In *Journal of the Royal Anthropological Institute* 52: 164-211.

broadheaded. In between these two percentages (76-80%), they are termed mesocephalic.⁴⁴

Whilst modern Maltese are broadheaded,⁴⁵ in all the Late Neolithic sites of Malta and Gozo investigated by the present author, the predominant skull shape (97%) was the dolichocephalic, or longheaded type.

The investigation of Late Neolithic longheadedness in Malta

The Maltese skulls from the Hal Saflieni Hypogeum have been studied by a number of scholars, who have all been unanimous in classifying these skulls as longheaded. These included Sir Themistocles Zammit, Richard Bradley, W. A. Griffiths, L. H. Dudley Buxton, J. D. Evans⁴⁶, J. L. Pace and Emmanuel Anati.

In 1912, Themistocles Zammit⁴⁷, Thomas Peet⁴⁸ and Richard Bradley⁴⁹ published a report on the small finds at the Hypogeum; however, Zammit also carried out a detailed anthropometric survey on ten of the Hal Saflieni human skulls discovered there, this in accordance with the European standards prevailing at the time.⁵⁰

The following quotes by the original excavators of the Hypogeum are but some of the documents that are routinely ignored by a few modern-day archaeologists.

Bradley excavated the area immediately adjoining the original entrance of the Hypogeum. His impressions at the time were that the human remains at Hal Saflieni were not primary burials. *“Under the guidance of Professor Zammit I excavated at Hal Saflieni, between the 17th of September 1910 and the 23rd February 1911, working at room C29 and its entrance towards C28. No complete skeletons came to light, and the bones lay in confusion through the soil as in the rest of the Hypogeum, except that occasionally an arm with fingers, and complete foot, and several vertebrae would be found lying with the parts in situ. From the upright position of an isolated radius it might be judged that the filling up of the cave was of a wholesale nature, rather than that individual burials took place in it ... unrelated bones and also implements were found in the interior of skulls. The finding of six vertebrae in position, five of them without spinous processes, suggests a case of re-burial, and it is an open question how far most of the interments may not have been of this character. Animals bones were found mingled with human”.*⁵¹

⁴⁴ *Dorland's Medical Dictionary for Health Consumers*. © 2007 by Saunders, an imprint of Elsevier, Inc.; *The American Heritage® Medical Dictionary*. Copyright © 2004, 2007. Houghton Mifflin Company; *Webster's New World College Dictionary*, 4th Edition. Copyright © 2010. Houghton Mifflin Harcourt.

⁴⁵ Dudley Buxton, L. H., 1922: 197.

⁴⁶ Evans, J. D., 1971, *The Prehistoric Antiquities of the Maltese Islands: a Survey*, p. 58. The Athlone Press, University of London.

⁴⁷ Sir Themistocles Zammit was a medical doctor who was then also Director of Museums.

⁴⁸ Thomas E. Peet was the Director of the British School at Rome that included Malta under its wing.

⁴⁹ Richard Bradley was a young B.A. graduate whose particular interest lay in human skulls.

⁵⁰ Zammit, T., Peet, T.E. and Bradley, R.N., 1912, *The Small Objects and the Human Skulls found in the Hal Saflieni Prehistoric Hypogeum*. Second Report. Malta.

⁵¹ Zammit, Peet and Bradley 1912: 21.

W. A. Griffiths

One of the students who excavated under the supervision of Zammit was W.A. Griffiths. *“Most of the rooms were found to be half-filled with earth, human bones and broken pottery. It has been estimated that the ruins contained the bones of 33,000 persons, mostly adults. Practically all were found in the greatest disorder, and there had evidently been no regular burial of a complete body ... with regard to the original use of the Hypogeum, opinions vary. It may be that it was a temple carved underground for the use of spirits who had left this world, providing them with the same type of temple as that which they had been accustomed to worship above ground; or it may have been a sacred college, wherein the priesthood were initiated into the mysterious beliefs of those days ... whatever may have been the original use, there is no doubt that it was used in part as a burial place for the bones of the dead after a previous burial above ground”*.⁵²

Regarding the two figurines, one lying asleep on her side, and the other facing downward, both lying lengthwise on a couch, the interpretation rendered at the time was quite feasible and acceptable. The former represented *“a priestess dreaming near the sacred places in the hope of obtaining inspiration to declare the words of the holy oracle, while the second figure represents her in the act of worship.”*⁵³ The original interpretation of the fish on a plate is clearly more feasible than that of a fish on a couch, as suggested by Evans.⁵⁴

“Perhaps the most interesting piece of pottery found was a black polished plate, on which was drawn with flint the figures of several horned bulls of mottled colour, all instinct with life. The species of animal was identical with that carved in high relief in the “bull sanctuary” of the latest and most wonderful discovery of all, the Stone Age Temple of Tarxien”.⁵⁵

In 1922, the ethnologist Dudley Buxton investigated the Maltese collection of skulls. *“Summing up, the general characters of the Maltese skulls at our disposal, the physical type conveniently termed ‘Malta first race’ is associated culturally with the Malta Local Neolithic. Skulls of this type are long, narrow, and slightly built. They have low orbits, narrow zygomatic arches, and a jaw which, though often not absolutely large, has a low ascending ramus, a shallow sigmoid, and considerable breadth in the antero-posterior diameter. They appear to be representative of the Mediterranean race.*

“The skulls of succeeding periods, conveniently termed ‘Malta second race’, and associated with numerous cultural periods, are, as a general rule, shorter, broader, more stoutly built, larger, and have higher orbits. The ascending ramus of the jaw is high, and the antero-posterior diameter is small.

“Although among a large collection of these crania single specimens exhibit the characteristics of the Mediterranean type, and some even occur with features which are usually considered to be typical of the Nordic race, the majority, in

⁵² Griffiths, W. A., 1920. Malta: the halting place of nations, pp. 466-7. *National Geographic*.

⁵³ Griffiths, W. A., 1920: 467.

⁵⁴ Evans, J. D., 1971: 59.

⁵⁵ Griffiths, W. A., 1920: 468-9.

addition to the features already mentioned, show that peculiar contour in the occipital region which is usually associated with the type called by Von Luschan 'Armenoid.'⁵⁶

"The Hypogeum near Hal Saflieni is a remarkable megalithic temple, where prehistoric man worshipped his deities and buried his dead. Long shafts descend 30 feet below the earth's surface, where, carved from solid sandstone, lie dozens of odd rooms, including an altar, a long hallway, and a treasure vault."⁵⁷

In 1972, Joseph Leslie Pace, Professor of Anatomy at the University of Malta, published a study on Maltese skulls, and highlighted the difference in cranial shape between the Late Neolithic and the modern Maltese.⁵⁸

In 1973, a very large quantity of human remains were discovered at the smaller Hypogeum in Santa Lucia Hypogeum (Figs. 6 and 7); these have never been exhibited, and their present whereabouts are unknown.

This monument at Santa Lucia represents a smaller version of that at Hal Saflieni, with a megalithic entrance and an internal architecture similar to the temples above ground. The deposit inside this hypogeum consisted of human remains admixed with Neolithic pottery and amulets, in a matrix of red earth soil; the context is similar to that at Hal Saflieni. In the words of the Director of Museums at the time, the deposit inside the Santa Lucia Hypogeum was *"as if the mass had been dumped inside the monument from the surface."* F. S. Mallia could not have been more precise, and the close proximity of the two hypogea enhances even further a similar mechanism operating in both monuments in the creation of the deposit in question – an alluvial or flooding event.⁵⁹



Fig. 6. The covered-up opening to the Santa Lucija Hypogeum in Triq il-Peprin, Santa Lucia.

⁵⁶ Dudley Buxton, L. H., 1922, The Ethnology of Malta and Gozo, in *Journal of the Royal Anthropological Institute*, 52: 164-211.

⁵⁷ Walter, R. 1940. Wanderers Awheel in Malta, p. 272. *National Geographic* 78 (2): 253-272.

⁵⁸ Pace, J. L., 1972. *The anatomical features of prehistoric man in Malta*. Table 2: 1-5. Royal University of Malta.

⁵⁹ *Museum of Archaeology Reports* 1973-74.

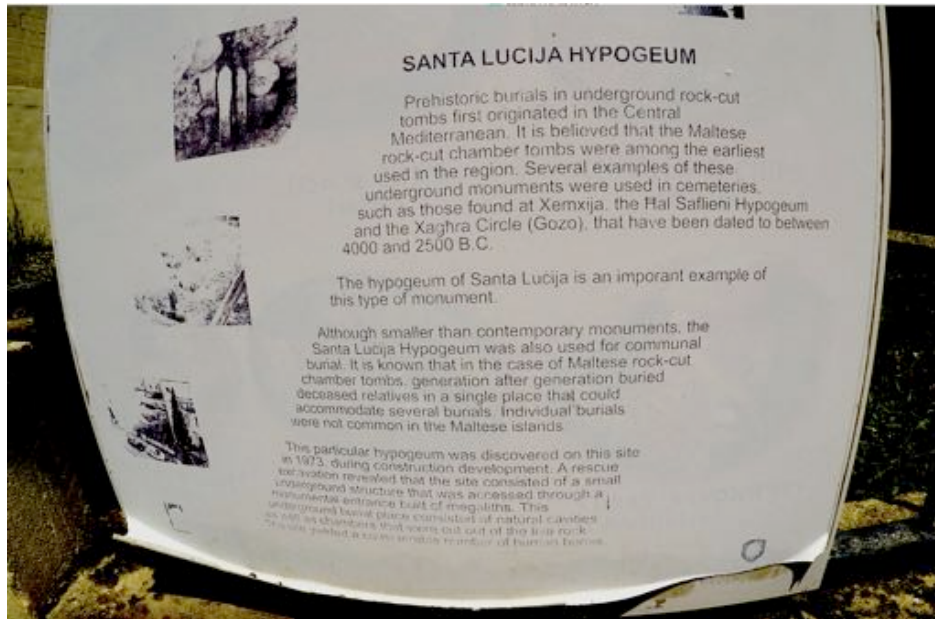


Fig. 7. The official placard in front of the undeveloped plot of land – the bottom paragraph is barely visible ... “the site consisted of a small underground structure that was accessed through a monumental entrance built of megaliths. This underground burial place consisted of natural cavities as well as chambers that were cut out of the live rock. The site yielded a considerable number of human bones.”

Then in 1977, one of Malta’s leading archaeologists, the late David Trump, made a specific distinction in skull shape between the Maltese Temple Builders and the Early Bronze Age invaders.

At the Tarxien temples, “even more significantly, a few of the (Early Bronze Age / Tarxien Cemetery) interments were of inhumed skeletons, the skulls of which were markedly brachycephalic (broadheaded), in contrast to the many skulls of the temple period that were equally markedly dolichocephalic (longheaded).”⁶⁰

Other scholars were interested in the Saflieni skulls. In 1985 these prehistoric skulls from the Hypogeum were investigated by the scientific team of Italian prehistoric art expert from Brescia, Emmanuel Anati.⁶¹ He described one of the skulls as suffering from anaemia. Amongst the photographs I had taken, there had been a few diapositives with ASA 50 – any features would certainly show up on these. And sure enough, after extracting these slides, I scanned them with a dedicated slide scanner at the high resolution at 1200 dpi. As the photographs were examined and enlarged at random on Adobe Photoshop, the unmistakable features of *Porotic Hyperostosis* were revealed. These appear in the form of

⁶⁰ Trump, D., 1977. The Collapse of the Maltese Temples, p. 605, in (Eds.) G. de Sieveking, I. H. Longworth and K. E. Wilson, *Problems in Economic and Social Archaeology*, pp. 605-610. Duckworth, London.

⁶¹ Anati, A.F. & Anati, E. 1988. *Missione a Malta*, p. 230. Brescia: Centro Camuno di Studi Preistorici.

multiple pinpoint perforations all over the surface of what had been labelled as skull number 11 (Fig. 8).

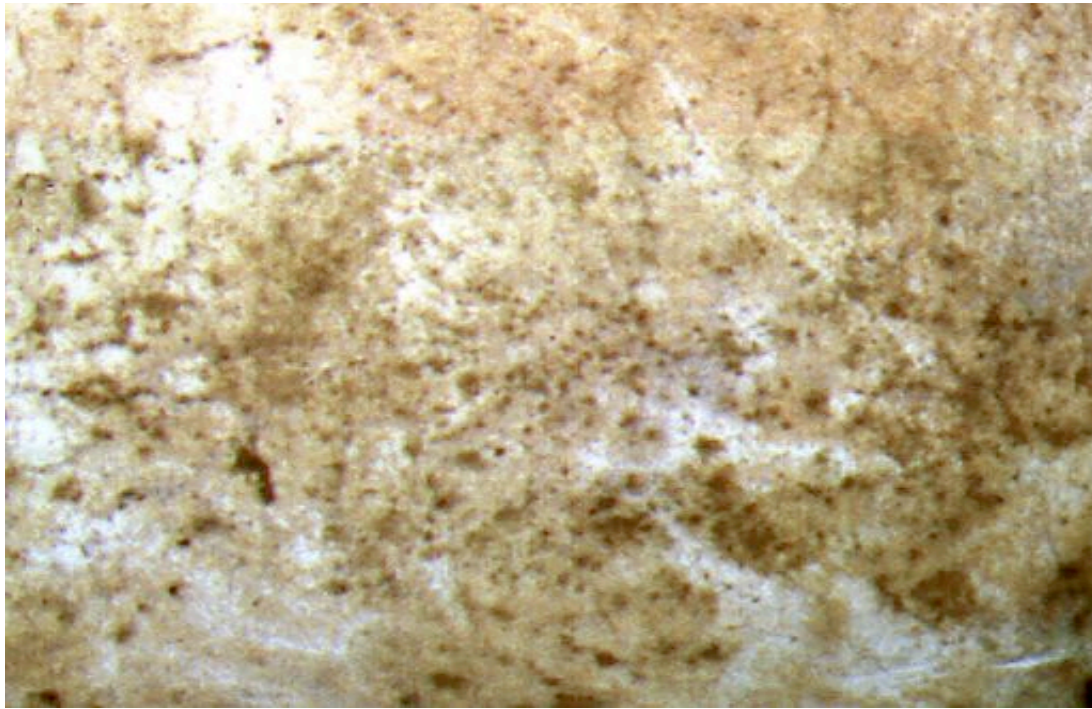


Fig. 8. *Porotic Hyperostosis* – the diagnostic feature of anaemia, as seen on the skull surface of Saffieni 11, and confirmed as *Thalassaemia Intermedia* by the present author.



Fig. 9. April 1985 - the six remaining skulls from the Hal Saffieni Hypogeum.

Visiting the Hypogeum in 1999

I have been to the Hal Saflieni Hypogeum on several occasions, both before and after its two major refurbishments. The first was carried out during the 1990s, during which time the structure was closed to visitors. It was re-opened in November of 1999, and I had been one of the first to visit it at that time.

The projected preview film about the site I had seen several times before. Of course there were several opinions I could not share, but I was glad that there were several points that I had made and that had been taken up. The major bone of contention regarding the structure regards its primary function. The local 'ostrich' archaeologists perpetuate the myth of its having been intentioned as a 'prehistoric underground cemetery' by assigning a funerary function to it. Nobody in his right mind would go through all that labour to produce such a wonderfully symmetrical and decorated labyrinth with brilliant acoustic properties and then use it to dump the dead inside a metre thick layer of soil that was transported inside the structure for this purpose. Furthermore there were the findings of the original excavators who had initially thought that the cavity was a massive tomb, but at the end had to conclude that its role as an ossuary function was a secondary function. The original purpose of the underground megalithic structure was that of a sanctuary. As my daughter Seana observed, if there was such a deep reverence for the dead in the Hypogeum, as emphasised in the footage, how come they were later simply shifted around and dispersed to make space for the newcomers.

However, a group of archaeologists have preferred to stick to the obsolete version of its function since this would have suited their own pet theories better. And these are basically orientated towards wedging the entire Maltese repertoire of megalithic structures into the "megalithic tomb" phenomenon of Europe. In this way Europe would have preceded the Maltese in their civilization, whereas as it really is, the Maltese were the precursors of the Europeans insofar as their megalithic civilization is concerned.

If this handful of archaeologists are still sticking to their guns, they are doing so in the face of the opposition front that has been barring their hypothesis since the early seventies. In 1971, calibrated radiocarbon dating established the actual state of affairs, and placed the megalithic assemblies throughout the world in their proper sequence. It was then that the Maltese megalithic structures assumed their priority in ranking as the oldest free standing⁶² megalithic monuments in the world.

Some of the staff at the Hal Saflieni Hypogeum considered me a *persona non grata* because some of my disclosures during publication had revealed a number of skeletons in the cupboards. The entire structure had risked total collapse during its refurbishment because of neglect; crucial artefacts such as a painted bull had been erased from one of the walls in the second level, and a large six-fingered hand that had been engraved on another wall had been obscured into

⁶² The structures at Gobekli Tepe are not free standing.

oblivion; these acts had been perpetrated through the irresponsible activities of certain senior archaeologists.

The guide allocated that day may have been slightly uncomfortable at my being there; that is what my son-in-law Simon thought. I certainly did my best not to embarrass him in any way. It was clear that he had been drilled into the dogmas of the local establishment from what he had to say.

One point that struck me was the guide's referral to a pair of interconnecting holes in the ground as libation holes. Whoever has assumed this has ignored a more feasible explanation for this, and several other similarly shaped features in this labyrinthine complex. We see these all over the place in the temples above the ground, and they represent simple tethering holes, and most probably designed for the sacrificial animals. One archaeologist I had asked on a previous visit had simply shrugged his shoulder and pouted his lips as he emitted a vague utterance sounding like "post holes?" One is simply amazed at the most unlikely explanations that archaeologists are apt to put forward to gullible persons who would tend to regard them as experts in their field, and that their word is dogma.

As we came down from the upper level to the middle one, over a number of stainless steel steps we were warned about the extra width of one of the steps. We could not see this because of the poor lighting. In fact balance suffers if one is not prepared for this irregularity in the otherwise uniform disposition of the structural modifications. One sees this irregularity in another part of the Hypogeum, and not made by modern man but created by his ancestor in the Neolithic. A number of seven steps lead from the middle level of the Hypogeum towards the Lower level. These are situated on the left side of the interface between the decorated Room and the Holy of Holies. The flight of steps ends in space at a height of a metre and a half above the lower ground level, and the fifth and sixth steps are asymmetrically constructed. A simple examination of these two steps clearly shows that this was an intentional manoeuvre, which I personally believe was meant as a trap for unwanted visitors to the Lower level. In fact, this very year, 2004, during the photography of the lower level for a coffee table edition of Maltese prehistory, in an adequately illuminated Hypogeum, and in full knowledge of the asymmetry of these steps, an individual in the photographer's retinue lost his balance on these very steps and fractured his femur on the ground below.

The guide was constantly pointing to drilled holes in the ceiling but the illumination was not sufficient to verify this. The megalithic arrangement of amputated blocks at the very entrance before the descent of the first steps was simply skimmed over. The unexcavated area left by the original excavators for future generations of archaeologists was again ignored. Emphasis was constantly being placed on the burial aspect of the structure, of how the body would be flexed in the foetal position, of the seven thousand bodies buried there, and so on and so forth. All these are controversial interpretations, and should be stated as such, especially since they represent the opinions of a mere few. The structure was primarily a sanctuary, and various disciplines, architectural,

artistic, medical, archaeological and geological have refuted the primary funerary function of the Hypogeum.

Then there is the other fallacy of the number of bodies that were discovered there. The magic number of the seven thousand was a simple calculation and not an actual count. The calculation was based on a number of knee bones in a measured area and multiplying this number by the reverse of the fraction of the space measured against the entire area of the Hypogeum. But for one thing the entire lower level was devoid of human remains. For another, there was no stratification in the soil, and the hydrodynamics of this deposit proved that it had been a one-time event, with a mass filling in of the structure by flood waters from the surface. Even the modern geologists have confirmed this in recent years.

Regarding the foetal position of the burials there, one look at the original reports will immediately confirm that there is no archaeological proof of just one ritual burial in the entire structure of the Hypogeum. The one intact human skeleton that was discovered in Room 22 showed no evidence of a ritual burial but rather the characteristic features of a severely emotional death such as drowning. Any student of forensic medicine will confirm this through the specifically contorted and flexed wrist and fingers of the right hand that lay a few inches away from the face. But Forensic Medicine is not included in the curriculum for archaeology students.

My comment on all this is simply that you can fool some people some of the time ...

The guide did his best to recreate the acoustics through a sustained 'OOWWWW' in the acoustic chamber, but he would probably have managed better if he had directed his voice towards the proper cavity cut into the left wall. This has been demonstrated on several occasions both by the original excavators of the site and subsequent visitors – this is extremely interesting. One of the female tourists rightly asked him, "how could the acoustics persist with the presence throughout the structure of one metre depth of soil and the 7,000 bodies?" That felt like really good music to my ears. Another asked "whether the harmful emissions of the constantly putrefying flesh would have damaged the ochre designs very much more than the emissions from our breath," so that none should have survived if that were the case. The guide evaded these by stating that he was quoting the authorities. Yes, I thought to myself, but then these authorities are not around to answer these queries by these genuine tourists. Who will solve these problems for them? Are they to leave these shores confused at the opinions expressed by the local archaeological establishment?

I then felt sorry for the guide who could not cope with the constantly fleeting and shifting illumination of the chambers that we were traversing. One German visitor frustratingly asked why the designs were not being sufficiently illuminated to permit observation. The guide said this was being done to preserve the paintings, upon which the German woman retorted that they should

not be trying to show them if they are not prepared to lighten them up sufficiently to permit this.

From the Acoustic chamber we were moved to the Decorated Room and we were shown the ochre spirals once again. To the right at approximately six feet above ground level a six digit engraving of a largish hand can still be made out. This had been discovered by a dedicated curator during the fifties, but although the foreign archaeologists acknowledged it, the local ones did not. Likewise with the large painting in black of a bull beyond the Decorated chamber in front of the steps to the lower level – this had been partially erased in Gordian Knot fashion in order to settle a dispute between two archaeologists who commented differently on the importance of this bovid.

We were now facing the Holy of Holies and a guard rail impeded us from entering it. To our immediate left another rail prevented access to the flight of seven steps to the lower level. To the very right lay the ghost of the bovid that had been erased from history. Right in front of us a small flight of steps had been carved in the ground and these led to a clearing with another pair of ground holes. Towards the left a doorway led to the main chamber that lay beyond the wall on our left. Beyond the chamber in front of us lay another, and this was slightly smaller and curved towards the right, so that we could barely make anything out of it except a portion of its left interior. We were told that there is a niche there, but we were not told that this niche accommodates a large animal and a tethering hole has been created at the top of it. In fact a modicum of imagination would immediately recreate the picture of a sacrificial animal being tethered to the stay, and then prepared for sacrifice inside this niche. The flow of its blood would trickle out this chamber into the Holy of Holies, and its dying sounds would reverberate throughout the labyrinth, intermingled with the bass sound produced by the functionaries inside the acoustic chamber in order to create that atmosphere of the beyond.

But the major importance of the Holy of Holies lies in its architecture, and the preservation of its roof structure gives us a very clear view of the roofing of the architecture of the temple above the ground. There are no straight lines inside the Hypogeum, all is curvilinear. The corbelling in smooth curves leads to the central flat roof, and all of this had been carried out five thousand years ago by the Neolithic Maltese without the use of metal tools. This was truly a remarkable achievement; the *dome* had already been around in Neolithic Malta thousands of years before the *arch* that was allegedly invented by the Romans.

One final trundle around the wall on our right led us to the Main Hall. This was clearly the largest chamber in the complex. An array of shapes in curvilinear, elliptical, rectangular and circular forms and outlines characterise this chamber that was evidently intended for the main ceremonial functions at the site. It has also been shown that in Neolithic times, when the area above the upper level was built over by a megalithic complex above ground level, the sunlight [in the afternoon] penetrated the depth of the Hypogeum and entered the Main Hall during the two crucial periods of the agricultural season. Agriculture was the mainstay for survival in the Neolithic and the seasonal rains, the sowing and

harvest times were crucial for a good crop. The sun and rain were out of human control, they had a mind of their own. They were superior beings that had to assuaged in order to allow the ideal conditions to prevail towards their agricultural yield.

It was up the stairs created in modern times inside the ancient well that took us back to the main entrance area where the 11.00 am group were awaiting our return for them to start their own tour. We were back in sunlight once again as we left the building and considered our options. Unanimously we opted for Marsaxlokk, a seaside village situated a few miles away to the southeast.

Examining the skulls

It was at the turn of the millennium, and getting access to and examining the ancient Maltese skulls posed a major problem. For some odd reason that I failed to identify, the Maltese archaeological establishment was extremely reluctant to display ancient human remains prior to the Classical Period. So how was it going to be possible for me to examine these prehistoric Maltese skulls, get access to their *craniometric* measurements, and then examine them for possible diseases like Thalassaemia, when the authorities in Malta would not even let me have a look at them?

What I had managed that far was only a *list* of eleven skulls with their *craniometric* measurements taken by that brilliant scholar, Sir Themistocles Zammit, in 1910 – these eleven skulls were discovered in the first decade of the twentieth century at the Hal Saflieni Hypogeum in Malta. Zammit proved himself to be not merely a brilliant medical doctor, but also an archaeologist, Malta's best ever, and, by virtue of his medical training, a very capable physical anthropologist.

During the 1980s and 1990s I managed to capture a few photographs of the then surviving *six* skulls exhibited at the National Museum of Archaeology in Valletta (Figs. 4 and 9), before these too, in the later nineteen nineties, were transferred indefinitely to the reserve collection of the Maltese Archaeological Museum and kept permanently out of the public view.

However, it was fortunate for me that the archaeological establishment in Gozo was very compliant with my requests. Furthermore, several of these ancient Maltese skulls had been transferred to the United Kingdom during the twentieth century and have been preserved there ever since, principally in London and in Cambridge. Once again, the archaeological establishments there were very accommodating.

LONDON – the Burmeghez skulls

During research conducted at the Museum of Natural History in London, and primarily related to the presence of Neanderthal Man in Malta, I made the acquaintance of the palaeontologist Robert Kruszynski, a colleague of the wellknown expert in the subject, the Head of Human Origins, Chris Stringer. Robert had carried out some research on ancient human remains in London and one day he volunteered to show me the actual human remains themselves –

Maltese human remains rather than casts that had been preserved at the Museum of Natural History in London for the previous sixty years or so. This was a welcome bonus.

Robert brought over a brown cardboard box that measured six inches at maximum, and inside it showed a large number of teeth. 'These are the Burmeghez teeth ...' and almost immediately I jumped at the mention of Burmeghez. These were the very teeth that had been discovered at one of the ancient Maltese Neolithic site that has since been destroyed. These very teeth had been examined by Arthur Keith in order to exclude the presence of the condition known as taurodontism amongst them. He had done so and showed that the condition was *not* a common one amongst the Neolithic Maltese. A total of 2,250 teeth had been examined by Keith, and not one of these was identified as taurodontic. Keith had conducted this exercise to show that the two taurodontic teeth that had been discovered in 1917 in a Maltese cave known as Ghar Dalam along with extinct red deer of the Ice really belonged to the time of the Maltese Ice Age. But in his time Keith had succumbed to the cynicism of the archaeologists who could offer nothing more than their weight of authority to disprove what Keith had been stating.

But then Robert volunteered to show me the actual human skulls that had been preserved in their vaults for the past sixty years, and had never been examined by anybody. This news sent a chill down my spine and I could not contain my excitement. Robert was also visibly thrilled at my enthusiasm, and we walked down together to the vaults in the basement - the skulls I was about to be shown by Robert were preserved in the 'Bones Room' in the basement vaults of the Museum of Natural History.

Within minutes Robert had located their storage area and one by one he started to move the series of massive cupboards that were disposed parallel to each other and moved on rails. Five boxes were clearly marked as those deriving from Malta. The registration marks on the cardboard boxes were imprinted immediately inside my mind, and Robert knew immediately what I wanted, and that was to come to terms with my good fortune and spend an hour or two on my own with the remains of my remote ancestors. I had discovered the hiding place of the Burmeghez skulls. These had already been measured in 1911 by a certain Napoleon Tagliaferro who pronounced them to be longheaded. The burials were unique - there were about 39 in all, and they were made to lie on their left side and had a stony arrangement in the form of a dolmen created over every single one in order to protect their upper bodies.

On measuring the reassembled skulls from Burmeghez, the craniometer confirmed to me that they are longheaded. But there was more than the shape that is interesting. The fragmented nature of some of the remains permitted me to have a look at the bone marrow of some of the skull bones.

As I scrutinised the bone fragments of these skulls from Burmeghez, there appeared certain peculiar features both on their outer surfaces as well as in their bone marrow centres. The plates of the skull bones were wider, and this was due

to a widened centre portion of the plate. The surface of the skull bones were perforated throughout their outer surface with a multitude of very tiny perforations. These were the irrefutable signs of Thalassaemia.

I must have been subconsciously alerted to the possibility of finding something else there, for my gut feeling was telling me to have a good look at the fragments for something that might have been missed before me. And I thanked my lucky stars for this decision, for a new discovery thus came to light out of the blue - some of the skulls bear the unmistakable signs of the very same disease that I had just been investigating in Cyprus - widening of the *diploe*, brownish discoloration, and *Porotic Hyperostosis*. These skulls must have belonged to individuals who suffered from Thalassaemia. They were adults and therefore their disease would have been of the *Intermedia* type, the same variant that prevails to this day in the island. I was allowed to take two samples for scientific analysis from the many specimens that are held there.

There are reasons for these abnormal changes in the bones of the skull with a chronic anaemia. In order to compensate for the shortened survival time of the Thalassaemic's red blood cells, bone marrow activity is markedly accentuated. The bone marrow areas in the body are enlarged, with signs being significantly marked in the human skull. The skull plates widen and the outer plate thins out to a degree which results in its assuming a sieve-like appearance, especially noticeable in the eye sockets and known as *cribra orbitalia*.

The widening of the middle zone of the skull bones at the expense of the outer bone plate is termed 'Porotic Hyperostosis.' Other characteristic findings in Thalassaemia include the characteristic and diagnostic mahogany brown appearance of the bone marrow zone, and this is due to the accumulation of the iron pigment Haemosiderin at this site.

Confirmation of this accumulation of iron inside the marrow is obtained by the laboratory tests known as Perl's stain, where an elevated accumulation of bone iron results in a Prussian blue reaction to. These increased iron levels are way above those that would have been derived from the soil surrounding the bones in burial.

There had also been human upper jaws from the Burmeghez repertoire, and one look at one of these immediately told me that it bore another cardinal feature of Thalassaemia - the front area of this fragment was widened where the cheeks were and the incisors had fallen off from their widened sockets. Once again I documented this as fully as I could with photography.

Other ancient Maltese human remains

There were other Maltese human remains that were preserved there at the NHM; three hypogeum skulls had been transferred to the Museum of Natural History in London in 1948 - this was 'excavators no 12', and is still there. But the two other Hypogeum skulls that had been transferred there in 1955 had since gone missing - these were 'excavator's no 13' and 'excavator's no 14'. A skull from Mgarr had also been transferred there in 1955, and was still there; the skull

from Hagar Qim that had gone missing in Malta in the 1950s was not at the Museum of Natural History. On the 29th of June 1998, Robert showed me the skull from Mnajdra that had been buried very deep inside the cave earth in one of the caves there close to the temple. This was a longheaded specimen. On Robert's suggestion I had it radiocarbon dated together with two other specimens I had targeted – one from Burmeghez and the other from the Hypogeum at Hal Saflieni.

The Mnajdra skull that I measured on the 29th of June 1998 was $192.5/144 = 75\%$. Two skulls from the Hypogeum at Hal Saflieni were missing – these were catalogue numbered as 13 and 14.

Radiocarbon dating

It was a totally incomprehensible affair – the Malta Museum authorities had even attempted to interfere with my own private negotiations with Christopher Stringer at the Museum of natural History and Paul Pettitt at the Radiocarbon Laboratory in Oxford.

When I attempted to carry out radiocarbon dates on some prehistoric Maltese human remains that were being preserved in London at the NHM, a covert operation on the part of the Malta Museum was carried out that sought to abort these tests. The Director of Museums went over to the NHM, dragging along with him an osteo-archaeologist in the form of a retired radiologist with a Masters in Archaeology – an extremely good and honest friend of mine. The Director had contacted the NHM and requested that the tests that I had asked for be refused and that they would be carried out instead for the Malta Museum of Archaeology.

Chris Stringer was thus faced with two requests for radiocarbon dating of specimens that were then preserved in his Department. He had first received my request through the Head of Archaeology at the University of Malta, Professor Anthony Frendo, and subsequently received a counter-request from the Director of the Department of the Malta Museum, Anthony Pace.

I had first made contact with the Maltese specimens at the NHM on the 18th of February 1997, and on the following 25th I contacted Robert Kruszynski by e-mail and requested radiocarbon dates on two specimens that were held there – one skull fragment from Burmeghez, and one tooth from the Hypogeum. Robert answered me in the positive the next day, and suggested that I could also include the Mnajdra skull to a total of three if I wanted to. I agreed absolutely.

Chris Stringer introduced me to Paul Pettitt, and he carried out three radiocarbon dates for me at Oxford and then had them published in the journal dedicated to radiocarbon dates, *Archaeometry* together with my comments.

In accordance with the request to have me submit my application through the University of Malta, Professor Frendo endorsed my request for the radiocarbon dates and sent a letter to Chris Stringer along these lines on the 26th of February 1997.

At some point now the Director of Malta Museums submitted his own peculiar request to Stringer to deny me my request and do the tests for him instead.

On the 7th of March 1997, a confused Chris Stringer sent an urgent fax contemporaneously to both Anthony Frendo and Anthony Pace. This was handwritten in bold upper case letters – ‘Dear Sirs – I am replying to you both in order to seek clarification of the situation regarding proposed datings of Maltese specimens from Ghar Dalam and Burmeghez. Mr Pace is hoping to meet me at 10AM next Friday (March 14th) to discuss these matters.

‘Please, therefore, would you gentlemen (and, if necessary, Dr Mifsud) clarify for me how your proposals relate to each other? Thanks, (signed) Chris’.

On Monday the 10th of March three Maltese were heading to London on the same flight. Pace and the osteo-archaeologist planned to go there at the earliest, after the fax of the previous Friday the 7th of March. Pace and his companion took two seats on the KM100 flight in row 9, seats *a* and *b*. I was at the very back of the aircraft as medical escort to a young neonate who required cardiac surgery in London at the Hospital for Sick Children in GOS. The two rows on the right before the very last at the back of the aircraft had been removed in order to accommodate an incubator – with the newborn inside it - and the additional life-support instrumentation that was necessary. A male nurse accompanied me, and we were the very first to board the aircraft – the incubator and instrumentation had to be made totally secure and immobile by the flight engineers before any other passengers could board.

Once the newborn was delivered safe and sound to the cardiac wing of the GOS, I walked, or rather ran to the NHM using both tube and taxi. Since I had been the first to request the radiocarbon dates, I was also to be the one to speak first with Stringer. Chris was quite happy with my version of the story, and he asked me to give him a call the following Friday at around noon in order for him to acquaint me with the developments after his meeting with the Museum people.

Robert escorted me to the door, and there, on a bench smoking away at his cigarillo, was my very good friend the osteoarchaeologist, who came over to me immediately he saw me and uttered a most welcome greeting somewhere inside the cigarillo smoke. I introduced him to Robert, at the same time preparing Robert for the forthcoming meeting with him and Anthony Pace on the coming Friday. We talked for a while after Robert left us, and he asked me when I had come over – at that point I disclosed the events of that morning. My motive had been purely one of pre-empting them by not making them aware of my arrival and presence in Britain before their own appointment with Stringer.

When I called Stringer on the 14th I could not believe my ears. Pace had insisted with him that the radiocarbon dates that I requested, and that I was personally paying for, would not be carried out for me – the NHM should perform them for the Museum. To Stringer’s credit, and as Robert also confirmed to me later, the Museum people were surprised to learn that their request was an unorthodox one and was not being acceded to. On the other hand, my request had been

carried out through the proper channels, and had been endorsed by the University of Malta. The three tests I had asked for would be carried out for me, and for me alone. If the Museum people wanted to carry out similar tests, they would have to see to it themselves. All of these developments could hardly have endeared me further with the Museum people. But I got what I wanted, and they helped to prove the Director of Museums wrong about his Hypogeum collective tomb theory.

On my part I could still not understand, firstly, how on earth the Museum got wind of my intentions, and, secondly, why on earth would they want to prevent me from carrying these radiocarbon dates when I was paying for them, and when I was not using any of their specimens.

The three samples I requested were radiocarbon dated for me in the 'Research Laboratory for Archaeology and History of Art' of the University of Oxford by Dr Paul Pettitt. They were published as OxA-8165, OxA-8197 and OxA-8166 in *the* journal that is designated for such information, *Archaeometry*, in Datelist 28. This was published in volume 41 (2), together with *my own comments* on the results obtained – this was definitely VIP treatment when compared with what I had received at the hands of the Malta Museum of Archaeology. These results were also later published in another journal that publishes this kind of information, - *Accordia*. These new dates were 2735 BCE for the Hal Saflieni Hypogeum and 2975 BCE for Burmeghez. I had demonstrated through these two dates that it had been the Burmeghez set-up that represented the late Neolithic burials in Malta, and not the Hal Saflieni Hypogeum one – the latter structure was not a collective tomb but an underground sanctuary that was similar to other sites such as Qatna in Syria.

But the predictable response by the Malta Museum was to ignore these dates altogether in their subsequent publications – I had tainted the investigations because it was I who had asked for them!

Cambridge - Colonel Astley Fellowes

There was even more information to be obtained from London. On a subsequent visit to the Museum of Natural History there, Robert produced a document entitled 'The Cambridge Osteological Collections, as listed by Bernard Denston, and there on its third folio was a note that indicated the presence of three skulls from Malta amongst the collection. Robert also gave me the name of the curator there, a Miss Maggie Bellatti, and also her e-mail address. I contacted her from Malta on the second of December 1997, by e-mail, and asked her whether she would be good enough to provide me with information about the Maltese skulls that were kept under her supervision in Cambridge.

Bellatti answered me on the 17th to inform me that she had been doing some research on my behalf, and had come up with some information that she was then transmitting to me. She had managed to trace a total of eight skulls from Malta that had been transferred there at some time or other. Four of the skulls had been transferred there during the late 19th century by British medical and

military personnel, Surgeon Leith Adams and Capt J. S. Swann, whose investigations along these lines in the Maltese countryside have been published.

One of the skulls in this group that was registered by the number 1246 interestingly derived from a site in Malta referred to then as the Tell Hor – this name for it translates into the ‘Mound of Hor’ – the god of the ancient Egyptians was known to them as Hor, not as the Classical authors labelled him – and it lies beneath the Addolorata Cemetery, where prehistoric human remains were often discovered during works on the cemetery. The Tell Hor also lies in close proximity to two Hypogea in the area, the major one at Hal Saflieni and the smaller one at Santa Lucia. It was at the Hypogeum of Hal Saflieni that the most remarkable longheaded skulls had derived from.

The other four skulls were registered in another file that was dated 1883-1919. Their registration numbers were 3053, 3442, 3443 and 3665. The origin of the first skull was unknown, but the other three had been transferred over to Malta by a certain Colonel Terry.

My very good friend Joe Attard Tabone carried out some research for me on this Colonel Terry at the Public Records Office in the United Kingdom, and he came out with very interesting information - these skulls had been transferred from Malta in 1899; this was the date that the Hypogeum had been first discovered, but its announcement was delayed until three years later.

Astley Fellowes Terry and Francis Wallace Grenfell were born a year apart and both joined the Kings Royal Rifles Corps at the age of 18. As they went up the ranks of the military hierarchy, both continued to serve together in the 60th Rifles in several military campaigns.

Terry retired as Colonel in 1887; he was in Malta when Grenfell became Governor there in 1899, the year in which the Hal Saflieni Hypogeum was discovered at Tarxien. As in 1844, when the Governor was Sir Patrick Stuart, the ‘discovery’ would have had to be reported to the Governor’s Office. Both Grenfell and Terry were no doubt involved in the proceedings following the discovery, for at least four of the skulls already discovered in 1899 at the Hypogeum were taken that same year into Terry’s custody and were transferred to Cambridge where they are still to be found today.

I went over to Cambridge to photograph and measure these skulls. Maggie had fished out eight Maltese skulls for me, in two lots. From the first lot, the skull measurements revealed that two of the skulls were longheaded, the first had been discovered in the countryside by a Captain J. S. Schwann, and the other had derived from the Bingemma burial site.

The second lot derived from a certain ‘Colonel Terry’, but only three of the four were measurable for Cephalic Index - these three were longheaded. Terry had not given their provenance, but the calculated date of their transfer to Cambridge – 1899 – strongly suggests this source as the Hypogeum at Hal Saflieni.

The Cambridge ratios of length to breadth were measured in millimetres respectively as –

Cambridge 43.00.1 (1245) – Cephalic Index = 191/141 (73.8%),
Cambridge 43.00.2 (1244) = 173.5/135 (77.8%),
Cambridge 43.00.3 (1246) = 187/145 (77.5%), and
Cambridge 43.00.4 (Bingemma) = 181/135 (74.5%);

Cambridge 5 (3442) = 185/134 (72.4%),
Cambridge 6 (3443) = 183/136 (74.3%) and
Cambridge 7 (3665) = 198/141 (71.2%).
Cambridge 8 was incomplete and unmeasurable for its Cephalic Index.

Joe Attard Tabone hails from the sister island of Gozo, the next site on the list to be investigated for prehistoric human remains.

The Museum of Archaeology in Gozo

On Gozo I decided to start off with a visit to the Museum of archaeology. This is situated on the Cittadella in front of the Cathedral Square. The staff there are superb – they actually welcome you and invite you over to see the collections, at the same time that they provide you with all the assistance that you request of them, within reason of course. They always have a smile on their face that is pleasantly contagious and conducive to a pleasant investigative mood.

I was able to make the visit one morning on the 10th of March 1998. My principal target for the day were the skulls on exhibition, and I started off with the one displayed in a beautiful old case in the hall that lies to the left of the entrance hallway. There were two cases on the right side of the hall, and the skull lay in the case to the right, Case 2. The story that goes with it describes the find as having been made at the start of the twentieth century in one of the villages in Gozo known as Xaghra – the village with the Ggantija temple. When discovered it still had a tinge of red ochre on its surface, and the initial impression was that this was blood and that foul play had been at work.

The director of Museums at the time, Temi Zammit was eventually called in, and he was able to confirm, through his own medical experience, that the red tinge was really red ochre. I attempted to measure the skull whilst it was still inside the case, and obtained readings of 168 mm by 155 mm, respectively for length and breadth, but I was not happy with this and asked if I would be allowed to do it properly. The staff conceded promptly to my request, and it was out of its case in no time at all. The new measurements now read 175 by 152 mm, with a head circumference of 52 cm. Its Cephalic Index I calculated there and then to 81.1% - this was not a longheaded skull. But then, after all, it had been discovered in a 'Copper Age Tomb at Xaghra' and not in a Neolithic context, so that it should have been round headed, as it was. All was proceeding as planned so far, apart from the fact that there were no Neolithic skulls on display in the Museum.

In fact, the next skulls I examined were those then being exhibited in the first floor – these were Punic skulls that had been discovered from a 'Punico-

Hellenistic' context in a rock-cut tomb at Wied is-Simar, a valley close to the village of Nadur, and dated to the first century BCE - these skulls were evidently, and visibly, round headed as well. Nevertheless I confirmed this by measurements of their length and breadth, and took an adequate number of photographs. Beneath the Punic skulls was an entire skeleton that had been found on the small island of Comino in a large clay jar burial – this was a Roman burial, and the skull measurements here too confirmed that it was round headed. There were no other skulls on display – there were no longheaded skulls to be seen there!

So I casually asked the curator whether there were any skulls in storage, and to my pleasant surprise he said yes. These were actually being stored in the upper room of the museum on the roof.

'Can I have a look at them whilst I am here? It will save me coming again from Malta another time!' 'Certainly!' answered George, 'we can go there right now.'

We ascended a small flight of stairs from the first floor close to the Roman anchor room and reached the roof with a beautiful view of the Citadel and its environs. The room here was opened up by George and to the left were a number of shelves with cardboard boxes on top of them.

George knew precisely where the skulls were, and he withdrew one of the boxes and laid it out on a table for me to inspect as he watched on, definitely viewing me out of curiosity rather than checking up on me. In a way I was glad that he was there to witness the method I had employed to measure the skulls.

As I opened up the box and starting unfolding it was clear that there were two skulls that were contained inside, each individually and carefully packed. Immediately I saw these it was plain that they were long-headed. The skulls had been discovered during excavations in the early 20th century; George added on that these were prehistoric skulls discovered at the temple site of Ggantija.

For the sake of protocol, I asked George if I could take photographs and measure the skulls. I had brought along my craniometer with me, and I was making good use of it that day in Gozo. With these two longheaded skulls in front of me, the exercise suddenly became extremely interesting.

Both skulls still contained a significant amount of soil that still adhered to their surfaces and filled in all the depressions and cavities – this soil was still the same matrix in which they had been found, and the right examination of it, such as pollen analyses, and even radiocarbon of any organic elements, would certainly yield interesting results. George in fact confirmed that the skulls had not been cleaned off specifically for that purpose.

I made sure that I would get the correct exposure for the photographs – I might not have had a second chance if this leaked through to the Maltese authorities! So I took a multitude of exposures [with both my Nikon F and the Olympus with its automatic exposure and 28 mm lens]. The excitement of taking the measurements was just a trifle too much, but I eventually lifted out the

craniometer from my haversack and started the exercise. I was getting all the cephalometric measurements this time, not merely the length and breadth that was my main concern at the time.

The first skull measured 199 mm in length and 133 in breadth – I had to use a calculator to be sure that I got it right. The Cephalic Index was 66.8% - this was very definitely a longheaded skull. Moving on to the second one, the length of it was 195 and the breadth 135, and once again the Cephalic Index was not merely below 75%, but even below 70 at 69%.

These two prehistoric skulls stored up there were definitely longheaded. I had photographed them and measured them in front of the curator. I was very happy!

The Gozo Stone Circle in Xaghra

Three years previously an excavation campaign at a prehistoric site in the same island of Gozo had come to an end. A number of prehistoric skulls had been excavated in the same village of Xaghra close to the Ggantija site, and were then in the process of being studied in the United Kingdom by the British contingent of the excavation team.

Whilst I was in Cambridge for the Maltese skulls that were preserved there, George Mann had come over to the depository that day and we had a few words together with Maggie Bellatti who was supervising the proceedings. Mann had been involved in these excavations in Gozo and during the course of the conversation it transpired that the person in charge of the skulls regarding their measurements was a certain Ms Jane Andrews.

I used slow mail to get in touch with her, and I managed, and so we converted to electronic mail. Eventually I asked her whether she would be willing to exchange information about the Maltese Neolithic skulls, and she complied after getting the go ahead from the excavation directors, Simon Stoddart and Caroline Malone – at the time Stoddart was actually preparing an article on the same excavation campaign for a volume I was editing relating to Maltese prehistory.

I was thus able to acquire a complete picture of the measurements that had been carried out on the Gozitan skulls from Xaghra.

Although a total number of about 1,000 individuals had been buried there – the name of the site was the *Gozo Stone Circle*, but is also referred to as the *Brochtorff Circle* from the artists who preserved it in his drawings in the early 1820s – only 30 skulls were retrieved in a sufficiently adequate state for examination.

Jane sent over to me a four-page Excel sheet with all the information that she appropriately named 'Maltasend'. The first thing that hit me was on the first page of the document – this was skull number 100, [M100], for this had been identified as having been 'intentionally deformed.' The skull had been discovered in 1994 in the area that was designated as X/A in spit 1 unit 2 – it had been deformed to a length of 206 mm and a breadth of 134 mm – the Cephalic Index

was a mere 65. This circumstance was significant in that it reflected the practice of artificial skull deformation as prevailing in the Neolithic society of Malta – for some reason it was felt at the time that a longhead was considered to be an ideal requisite for what the parents of the child had in mind for him or her.

The craniometric measurements that Jane had sent me were complete. The ones I required then were the length and the breadth, and these were provided respectively on sheets 1 and 2 respectively – Jane also provided me with a list of the Cephalic Indices on sheet number 3, and all I had to do was to scan the list and note the longheads at first glance. Any skull with a cephalic Index at or below 75 was a longhead, and out of the 29 remaining skulls, it was not possible to get both measurements in 15 of them. That left a total of 14 skulls that could be assessed, that is, excluding the artificially deformed one. Thirteen of these skulls were longheaded.

The prehistoric skulls in the sister island of Gozo that were available were now covered, and out of a total of sixteen skulls that permitted the appropriate measurements, fifteen were longheaded – a significant percentage of 93.7%.

The two groups of Prehistoric skulls from Hal Saflieni and the Brochtorff Circle were noted to be extremely narrow and longer when compared with the Classical group of skulls. The estimated Cranial, Height-Breadth and Height-Length Indices suggest that the transition from the Prehistoric to the Classical populations involved a process where the cranium became progressively more rounded. The Palatal Index appears to have increased in the Classical skulls when compared with the Hal Saflieni skulls as a result of increasing breadth, the length having remained approximately similar. The differences in the Cranial Index and Palatal Index noted in this study and that of Dudley Buxton [1922] suggests that the Prehistoric skulls with their marked dolichocephaly and low palatal index were morphologically a completely different population from the Maltese inhabitants of the Classical period.

The four skulls from the Maltese Bronze Age, three from the Tarxien cemetery and described by Margaret Murray in 1934, and the one from Ghar Mir dum, were unsuitable for analysis.

I had eventually managed to investigate practically the entire range of Maltese prehistoric skulls – what was even more significant was that I was able to identify these specimens as being long headed in the overwhelming majority. This was at 5,000 to 6,000 years ago, several centuries before this type of skull started to make its appearance at the beginning of the Egyptian dynasties.

All the prehistoric Maltese skulls investigated result in their being longheaded. The two publications that had measured the skulls in 1910 and 1911 both pronounce these skulls as longheaded. The 1910 measurements had been carried out 'in accordance with the rules laid down by the International Congress for the unification of Craniometric and Cephalometric measures of 1907'. Of the eleven skulls from the Hal Saflieni Hypogeum, the Cephalic Index of eight of them was significantly dolichocephalic [the normal index for round headed individuals

is above 75], with the index reaching down to well below 70 in four of them – they were very evidently longheaded. The skulls from Burmeghez that were described by Tagliaferro in 1911 had sustained fractures and had to be reassembled before they were confirmed to be longheaded as well. [There had furthermore been an African skull discovered in one of the Maltese temples]

In a nutshell, all the series of Maltese prehistoric skulls that were available for examination were investigated and the vastly overwhelming majority were found to be longheaded. Furthermore, some of the Maltese prehistoric skulls showed the unmistakable signs of Thalassaemia.

A single gene defect in antiquity

Amongst these Neolithic Maltese skulls I was also extremely fortunate in having been able to identify the single gene defect of Thalassaemia – this was the same disease, although a geographical variant of it, that had led me to visit Cyprus in the first place. These two Mediterranean islands, Cyprus and Malta, had harboured the same disease in antiquity, each with its own variant of the genetic defect. What was even more remarkable was the finding of yet another variant in the western Mediterranean, on the island of Sardinia. I thus ended up with three distinct variants of Thalassaemia, each respectively representing the western, central and eastern Mediterranean, and each respectively concentrated in the corresponding Mediterranean islands of Sardinia, Malta and Cyprus. It was thus possible to investigate the migration patterns of population groups through these three variants of Thalassaemia.

A look at the photographs I had taken of the Maltese skulls – these had all derived from the Hypogeum of Hal Saflieni in Malta - then still being exhibited at the Museum of Archaeology in the early 1990s yielded additional information. The unmistakable signs of Porotic hyperostosis were readily evident on the surface of the skull in the foreground, numbered 11 by Zammit.

But there had been an examination by the same Emanuel Anati in 1985⁶³ on these prehistoric skulls from the Hypogeum, and he described one of the skulls as suffering from anaemia. Amongst the photographs I had taken there had been a few diapositives with ASA 50 – any features would certainly show up on these. And sure enough, after extracting these slides, I scanned them with a dedicated slide scanner at the high resolution at 1200 dpi. As the photographs were examined and enlarged at random on Adobe Photoshop, the unmistakable features of *Porotic Hyperostosis* were revealed. These appear in the form of multiple pinpoint perforations all over the surface of what had been labelled as skull number 11.

It was important to confirm the presence of Thalassaemia on the two specimens taken from the Museum of Natural History in London. Perl's stain confirms this, and a bone iron measurement clinches the diagnosis. Like Cyprus, there had been Thalassaemia in Malta in antiquity. Unlike Malta the survivors were adults rather than children, and that was because the Maltese variant of the disease is

⁶³ Anati and Anati *Missione a Malta* 1988: 230.

the intermediate form that permits survival into adulthood. The Cyprus variant is the major form that invariably kills in infancy.

So was the shape of the skulls of the prehistoric Maltese conditioned by Thalassaemia? The medical documentation does not mention this. It was furthermore possible to test this on a living patient, actual measurement and assessment of a CT that was available. The Thalassaemia did not cause the longheadedness.

The next step was to conduct genetic studies using the Thalassaemia variants as markers of ancient population migrations. An archaeological conference was about to take place in Malta, and I was invited to attend and participate – the subject selected was the Maltese longheaded skulls. I opted to add on my own flavour to the theme and show that the Maltese variant of Thalassaemia links the island with Libya and with Egypt rather than with Sicily.

But already an archaeologist had been recruited to confront me at the conference and attempt to bring me down. He was also responsible for setting up the website for the conference. This was the South African Michael Brass from the Hall of Maat website that is specifically intended to assault non-conformist archaeologists. The website was even endorsed by the *Archaeology* journal in May of that year 2003. A string of e-mails between members of the website was even submitted to me right from inside the ranks of the Hall of Maat website that showed their plan of action already set four months before the conference.

Why was I being targeted by Brass? I had appeared in Graham Hancock's *Underworld*, in both the documentary and the publication - Graham Hancock had already been attacked in that May 2003 issue of *Archaeology* in an attempt to debunk him and his theories. It was my turn next.

But things went bitterly wrong for Michael Brass - he failed to break me, and the conference concluded by David Trump ignoring him altogether and praising me amongst others in the conference for my contribution in the field of DNA studies in Malta.

Ironically, the Chief Editor of the journal *Archaeology* that had supported the 'Hall of Maat' website attended the conference, and he came over to me after my presentation to congratulate me personally. The next day he accepted a copy of a publication by the *Prehistoric Society of Malta* – this included most of the speakers that had participated that day at the conference there, and several had used the same themes that I had published for them in this volume of 1999. Oddly enough Michael Brass had not even been aware that amongst the Prehistoric Society's publications, that of 1999 included most of the archaeologists that were participating that day, including Trump, Bonanno, Stoddart, England, who were more or less recycling the same theme that I had edited for them in the 1999 publication of the Prehistoric Society of Malta.

In one of its later issues the journal *Archaeology* fully endorsed Cavalli Sforza, whom I quoted liberally in my presentation, as a leading geneticist in the field today.

Post-refurbishment 2017

Apart from the human remains in the Santa Lucija Hypogeum, a total number of 88 Maltese Late Neolithic skulls have been identified by the present author over the past three decades. Hal Saflieni Hypogeum - 17; Burmeghez - 39; Gozo Stone Circle - 29; Museum of Archaeology in Gozo - 2. In exactly 50% (44) of these 88 skulls, the Cephalic Index could be measured. Out of these 44 measurable, Late Neolithic skulls, 96.59% are dolichocephalic, or longheaded.

And yet, here in Malta, we are still being presented with a broadheaded Roman skull (*pers. comm.*, John Samut-Tagliaferro) in a supposedly Neolithic burial at the National Museum of Archaeology in Valletta (Fig. 10). And in Hall One of the Hal Saflieni 'museum' (Fig. 11), where the latest audio-visual presentation is being screened, we are presented with four panels, the first attempting to subliminally denigrate Zammit on his defining the Hypogeum skulls as longheaded, as if the term is an obsolete one.

How can one overlook the physical anthropological studies in the 1990s on the skulls at the Gozo Xaghra Stone Circle by Jane Andrews, these showing that the Late Neolithic skulls there were longheaded? ⁶⁴ How can David Trump be ignored on the same theme?⁶⁵

To add insult to injury, we are also being asked in the first panel to compare our own skulls with the Late Neolithic skull from the Hypogeum (Saflieni 3, Fig. 12) exhibited in Hall Two; according to the local establishment, this exercise should confirm to us that the Late Neolithic skulls at Hal Saflieni are no different from our own in size and shape.

However, although the skull in question looks round at the top, nevertheless it is longheaded, with a Cephalic Index of 72.9; its measurements have long been on record as 181 mm in maximum length and 132 mm in maximum breadth. These measurements make it a longheaded skull, dissimilar to the Roman roundheaded skull that was used in the 'Neolithic' burial at the National Museum of Archeology in Valletta. Possibly beautiful, it is not a Neolithic Maltese skull.

For, as the local Superintendent of Cultural Heritage declared, in the presence of a local anthropologist, in November 2016, on the discovery of some Roman remains at Rabat, in Malta, "some of the skeletons are *beautiful* (my emphasis)... we're not crazy, we're archaeologists."⁶⁶ Beauty, as we all know, lies in the eyes of the beholder. Physical anthropologists define skeletal remains in totally different terms.

⁶⁴ *Pers. comm.* Jane Andrews.

⁶⁵ Trump, D., 1977: 605.

⁶⁶ Martin, I., "Beautiful skulls' in tombs from 2,000 years ago." *The Sunday Times of Malta*, 27th November 2016.



Fig. 10. At the re-opening of the National Museum of Archaeology in Valletta in 1998, the Prime Minister, Dr. Alfred Sant's query might well have been, "what's a Roman skull doing in a re-enacted Neolithic burial?" The University Rector, Professor Roger Ellul Micallef looks on.



Fig. 11. The three central displays in the Hal Saffieni 'museum' in 2017, showing the Saffieni 3 skull (red arrow).

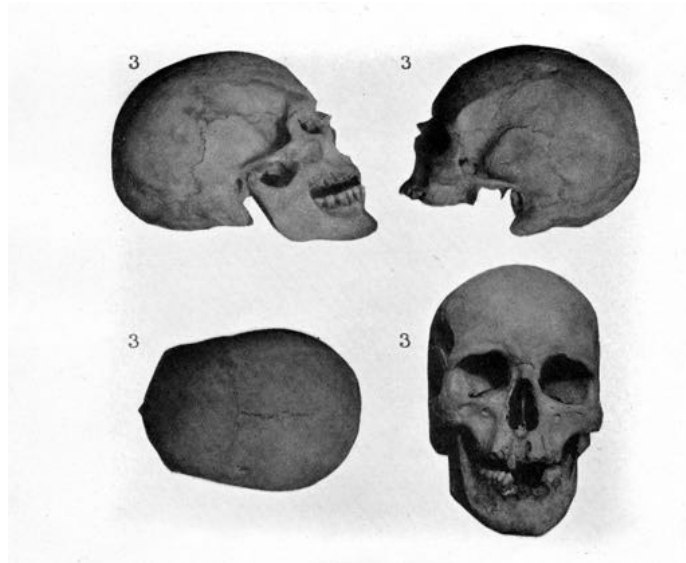


Fig. 12. The Late Neolithic skull being presently displayed in Hall Two of the Hal Saflieni Hypogeum 'Museum'. It is a male skull and is longheaded, with a Cephalic Index of 72.9; modern humans have broader skulls with a Cephalic Index of approximately 81.

Furthermore, also in Hall One of the present Hal Saflieni 'museum', Sir Themistocles Zammit is once again being misquoted, this time round in the fourth panel. Zammit assessed the total number of people that would have been buried there, *if the structure was indeed a cemetery*, at 7,000.

As already mentioned, Zammit's calculation on the contents of the ancient deposit in the Hal Saflieni Hypogeum was that *"at least 120 skeletons were buried in a space of 3.17 by 1.2 by 1m. This is enough to show that a regular interment was out of the question as not more than 12 bodies could be laid in such a limited space."*⁶⁷ This was meant to confirm that the Hypogeum at Hal Saflieni was not, as repeatedly stated in the audio-visual presentation, and elsewhere, a "prehistoric underground cemetery."

ANTON MIFSUD 2018 ©

⁶⁷ Zammit, T. 1910: 33; 34; 35; 36; 37.