

The secrets of underground Valletta

by NOEL GRIMA

Half an hour before the lecture was due to start, the admittedly small hall of Din I-Art Helwa was packed, with people standing on the stairs and in the corridor outside.

Such was the interest generated by a lecture by Architect Edward Said last Thursday on the secrets that lie underneath the ground in Valletta, an interest generated not so much by the recent polemic regarding the proposed extension of the St John's Museum, as by the many rumours and stories over the years about secret passages that linked the various houses in Valletta.

Unfortunately, in a sense, Mr Said was to disprove most of these stories. In his wide-ranging exploration of almost all the subterranean corners of the city, the only 'secret' passages and links he found may have been created by the British between some key buildings during the last war. Other than that, he did not find anything so thrilling as those found in novels.

Yet there seems to be some evidence of a secret undersea tunnel linking Fort St Elmo to St Angelo and it would seem this was the way that reinforcements were sent in during the siege of St Elmo, said Mr Said.

But Valletta's underground best claim to fame, he said, was that Malta in the 16th century was far ahead of so many other countries, such as England or France, in hygiene.

Yet, even this claim to fame was to turn sour later on. By the time the British came to Malta in the early 19th century, the drainage system had so degenerated that it became the source of pollution and also of disease. It was only after 8,000 people died in the 1813 plague that the British carried out a complete renovation and upgrading of the drainage system.

Before the Knights

At the beginning of his lecture, Mr Said spoke about what was on the site of Valletta before the Knights decided to build on Mount Sceberras or Xaghret Mewwija as its Maltese name was at the time.

There were some farms there and some wells as well, as indicated by at least two place names – Bir Gallux and Bir Gellief. Somebody has written that there were also some megaliths and some cart ruts and this would prove that right from ancient times, the strategic importance of the peninsula at the centre of Grand Harbour was known and

appreciated.

When the Knights came to Malta they found Birgu, a medieval city, which did have even at that time some subterranean spaces, although people drank water from the ditches rather than from wells. This suggests extreme poverty.

During the Great Siege, the Turks tried many times to undermine the Birgu bastions and the Knights and the Maltese soon learned the skill and applied it against the Turks.

The building of Valletta

Although the Knights always wanted to build on Mount Sceberras, it was only immediately after the Great Siege that this could be done. The Pope's architect, Laparelli, was sent to Malta and produced his first proposal to Grand Master de Valette by December 1565, just three months after the end of the siege. A second phase of the proposals was presented on 6 January 1566.

Being a military engineer, Laparelli wanted to build a city that could withstand a siege, so his first preoccupation was to build water reservoirs. By 6 May the first huge reservoir had already been excavated in the lower part of the city.

The Codex Laparelli does mention some subterranean tunnels but these were defensive tunnels, mostly on the landside of the city, and intended to help in the defence of the city in case of a siege. Most of these tunnels still survive. Two of them are on either side of City Gate and would have helped to rush defenders to the outworks and the bastions before the gate. In this the builders were helped by the fact that on the landside the defences were mostly built up, rather than excavated. These tunnels are known as sally ports.

The topography of Valletta is that of a promontory with heights and valleys and also with some caves, mostly beneath the Siege Bell, known as the Grotta dell'Aliata. That area is also known as Tal-Gherien.

Laparelli's original intention was to design the streets to follow the contours of the hills but he was later over-ruled and Valletta was built to the strict gridiron pattern it has today, which was considered as being more militarily satisfactory.

Even the Knights had their own Mepa. This was called the Officio delle Case and existed even before the Great Siege.

When Valletta was being built, and it was such a huge endeavour after so hard a siege, the orders from the Officio were draconian. All those who were going to build a house in Valletta had to take their stone either from what was known as the Mandracchio (Mandragg), or from the site of the house itself.

The original intention was to make the Mandracchio a safe harbour on the Marsamxett side, which, as its name itself hints, means a wintering harbour. The area was dug to almost sea level but then the whole idea was scrapped. Another area from where building stones were taken was the ditch around the entry to Valletta.

Another rule by the Officio was that each house had to have its own cistern or well.

Sanitation gets priority

But what makes Valletta unique in the history of town planning is the insistence given to sanitation, in which Malta was far in advance of so many other countries. Coming from so many countries, the Knights made Malta a melting pot of ideas. Rome did have its Cloaca Maxima from the time of the Romans, and something similar was done in Paris in the 14th century, but since Valletta was being built on a green site, this was an opportunity to build a sanitation system for the whole city. It is there, it still exists and it is this that makes Valletta completely unique.

The drainage system was excavated before building was allowed. It was carefully planned and it was kept completely separate from the water system.

However, unfortunately, if any plans for the drainage system existed, none have survived. In the 1960s Michael Ellul analysed 350 maps of Valletta, some in the UK, and found no drawings of the drainage system.

As said before, Valletta did have some springs. Of these, at least one still exists. It is found underneath the Archbishop's Palace and is rather copious.

However, even all the springs were not enough to provide water for the inhabitants, which is why Grand Master Wignacourt brought water to Valletta by means of the aqueduct.

This, however, was quite fragile – a man could block it with a stone – and was quite useless in time of siege. So the Knights built huge cisterns. One such cistern is the one in front of the Law Courts, while another is almost in front of St John's Co-Cathedral, as the recent polemic highlighted. Yet another one lies beneath the square in Queen's Square.

Another huge cistern is under the Opera House ruins, and a narrow staircase that might lead to it is still visible in front of Zachary Street. Nearby are two wells from the Casa della Giornata and the Casa Lanfreducci.

Romano Carapecchia, the baroque architect who gave us the St James and St Barbara churches, was brought to Malta by Grand Master Perellos to survey the water cistern system of the city. He found six cisterns in St Elmo, 22 public cisterns, 11 public reservoirs and 1637 private wells or cisterns.

The British contribution

When the British came to Malta, they found that the drainage system installed by the Knights had degenerated and was a hazard health. The Knights' system used no water for flushing and human waste flowed down by means of gravity, coming out from holes in the bastions and flowing down to the sea.

It was said that the stench was terrible all across Grand Harbour.

Such a system may have been a contributing factor to the 1813 plague, which took at least 8,000 lives.

The British thus decided to overhaul the whole system. They first studied the whole layout of the drainage system and then installed lead pipes in all of them so that the waste could flow through the pipes and no longer through the Knights system, which was a tunnel dug through the rock.

On many corners of Valletta one can still see structures like chimneys on street corners: these were the ventilation systems installed by the British to help those who worked in the drainage system.

A third element in the system is the gutters and railings in the centre of some streets: these collect rainwater, which flushes the whole system.

At the St Elmo end of Republic Street there is a huge hole that was used to draw up seawater to help flush the system as well.

Other subterranean excavations

Apart from the drainage system, which lies at a great depth under the streets, sometimes even five storeys deep at the highest point of the city such as Old Bakery Street, there are other subterranean diggings in Valletta.

Most houses have their own cellars, many of which have remained untouched after so many years. Casa Rocca Piccola, for instance, has a corner where one can still see how rock was cut to provide building blocks for the house itself.

One of the biggest cellars in Valletta is that underneath the Archbishop's Palace. The Order did not really want the bishop to reside in Valletta and it was only after the bishop appealed to the Pope that this was grudgingly granted, on condition, however, that the bishop could not have his own dungeons in the city. Nevertheless, the huge cellar could be an indication the bishop was determined to have his own dungeon.

Next to the cellars there is a sunken garden, which, with its own spring is completely

unique in Valletta.

Other cellars were used as stables.

Then there are the crypts of so many churches.

And of course the granaries. There were 75 in front of St Elmo and a further 15 at Castile. When Castile Place was turned into a road, the granaries were filled in and left there. No one granary is like another, as there was no need for them to be exact copies of each other.

Modern times

In the last decade of the 19th century, the train was introduced to Malta. Lord Strickland even envisaged the train extending to St Elmo as an underground train, with stops at Palace Square and so on.

The main station was underneath today's Freedom Square and the tunnel was enlarged towards Zachary Street to garage the train.

But by 1931 the train system had become defunct and the buses had triumphed. There were plans then to turn it into a cinema showing Italian films and even an ice rink.

But when World War II came, the tunnel, from Floriana to underneath the Opera House, was turned into a huge shelter, which at one time housed 5500 people at night. However, this had only one toilet, and the stench was consequently enormous, which was why many people preferred staying outside.

One can still see old beds and even tiles taken from destroyed buildings with which people decorated their own corner of the shelter.

The British also used their extensive knowledge of what lies under Valletta's streets to build a whole system of airtime shelters by linking people's cellars to each other and to crypts.

It is through such linkages that one can walk all the way from Castile to St John's and to the Bibliotheca and The Palace.

They even planned to build three huge submarine shelters underneath Great Siege Road, but the project was shelved halfway through for budget reasons. It turned out to be an expensive mistake. One of the tunnels is still there.

The other huge creations built during the war were what are known as the Lascaris War Rooms, and a similar nearby complex of tunnels inside the bastions from where the whole invasion of South Europe was planned.

Some of the tunnels are still in their original state – some half dug, some with rails for carrying away the rock that was excavated, and so on. The digging machinery is still there – as are whole rooms full of old typewriters.
