THE DEFENCES OF MALTA

By J.T. McPartlin

In this quatercentenary year of the Great Siege it is perhaps appropriate to lament that the historiography of Malta is still scarcely comparable with that of most European countries. There are, of course, many reasons for this, not the least of which is the deterring volume of historical material to be explored (some of it in a very inferior condition[1]), as compared with the few opportunities for publication open to the Maltese historian; but the resultant lack of depth in our historical imagination is only too obvious, and there is a quite considerable danger that the history of these islands may suffer as much from the lack of a capacity for synthesis as from lacunae in the fields covered by original research.

The present article makes no claim to serve as a model for the future writing of Maltese history. Its purpose is rather to suggest, in one circumscribed field, that there are still questions of importance to be asked even when a fairly complete collection of 'facts' has been assembled. Not being based on original research, the conclusions are naturally very much open to correction, but they are here advanced in the belief that there is some virtue in standing back a little from the established picture of a period and attempting to review its various aspects with a fresh eye.

A concise account of the building of Malta's fortifications in the early years of the rule of the Order of St. John of Jerusalem has been provided, from secondary sources, by Dr. J. Quentin Hughes,[2] and it is easily possible to trace the stages by which these defensive works were constructed. The details are fairly well known, and to probe further might seem useless pedantry – for what could be less mysterious than that a military

[1] For instance, Professor A.P. Vella, O.P., writes of the Inquisitorial archives, currently housed at Mdina, that 'the original documents ... unfortunately are not very accessible and many of them, although bound together in registers, are either unnumbered, or wrongly numbered, or numbered on both sides (old and new numeration), or misplaced, and therefore can be traced only with some difficulty. Let us hope that the Church authorities will find a suitable place for storing these invaluable sources for our local history and appoint a commission to index the registers, bind the scattered documents, re-bind those which are in a miserable condition and make photostats of documents which in a few years' time will be so wormeaten as to be indecipherable.' (A.P. Vella, *The Tribunal of the Inquisition in Malta* [Valletta, 1964], p. 3)

[2] cf. J. Quentin Hughes, *The Building of Malta during the Period of the Knights of St. John of Jerusalem, 1530-1795* (London, 1956), pp. 10-29.

community should fortify itself in its principal base? Nevertheless, it can be argued – and this paper does argue – that the coming of the Order to Malta involved a revolution in the military dispositions of the island, a revolution which to a large extent dictated the shape of Malta today.

Prior to 1530 the defence of Malta was a matter of the simplest strategy. Because of the great natural difficulties in transporting large forces by ship, the sea itself remained the principal obstacle to a full-scale invasion, as distinct from mere raiding; but it was not envisaged that an invading fleet might be met and countered at sea, such an exploit being far beyond the capacity of the island's corsairs or, later, the navy of the Knights, while on land Mdina, the natural focal point of an administration whose main horizon was the internal affairs of the island, was equally the strategic centre upon which all defensive operations must be based. In the event of an attack on the grand scale, various exploits against the enemy might be attempted, according to circumstances, but defence would consist basically of a simple movement of concentration within the walls of the old city. A strong and determined enemy, if it could cross the sea, could not be stopped on the coast, and the only alternative was a contraction of the lines of defence upon a single, central fortress. Defence, that is, was primarily directed against an enemy who would already be able to range at will over a large part of coastal Malta.

Only when we appreciate this inward-turned nature of the island's defences can we begin to see the true significance of the fortress of St. Angelo. L'Isle Adam's commissioners in 1524 reported that this fort was partly in ruins, and that its armaments consisted of one sizable gun, two light canon and a number of mortars – information which may be a considerable surprise to the modern student, accustomed to think of the protection of the Grand Harbour as a primary military consideration. More bewildering than the fact that St. Angelo was in a state of disrepair is the weakness of the artillery mounted by a fort which we naturally assume to have had great importance, and more bewildering even than the small number of guns is, if we examine the situation more closely, the small area which those guns actually covered. It is impossible to estimate with any accuracy the capacity of 16th-century guns, and we have no detailed information about the pieces mounted on St. Angelo, but Francesco Balbi di Correggio, in his narrative of the siege of 1565, was surprised and dismayed to find the Turkish guns firing effectively at a range of six hundred to a thousand paces,[3] and his surprise is corroborated, in a general way, by the (highly approximate) assertions of other writers of the

[3] cf. F. Balbi di Correggio, *The Siege of Malta, 1565* (tr. H.A. Balbi, Copenhagen, 1961), pp. 49, 61, 64.

same period.[4] A rough calculation on this basis quickly reveals that from St. Angelo the mouth of the Grand Harbour lay somewhat more than a decent canon-shot distant, though the guns on the fort could no doubt range further with a random chance of a hit.

The fact is that St. Angelo was not intended to defend the Grand Harbour at all, but was more modestly confined to the protection of Dockyard Creek and the shipping which lay immediately under its guns. The idea of keeping an enemy fleet out of the Grand Harbour was altogether too grandiose for a pre-1530 commander, who was content to have the capacity to beat off the occasional raider. The Grand Harbour, like the other coastal areas of the island, could not have been defended if the Turks had landed in force before the coming of the Knights, and there is a distinct possibility that, in such an event, the garrison of St. Angelo would have been withdrawn to Mdina, or at most left to conduct what could not be more than a diversionary action.

For the Knights of St. John, however, these existing conditions were far from ideal, and although the excellent harbours influenced L'Isle Adam's commissioners to recommend the acceptance of Malta as a base, the settlement of the Order at the Birgu left them with the vast problem, not only of repairing the dilapidated fortifications (which L'Isle Adam set in train almost at once), but of creating a whole new *conception* of how the island should be defended. Since their main occupation was the prosecution of naval warfare against the Turks, they could not commit themselves to a system of defence whose fundamental principle was a withdrawal inland. It was now the Grand Harbour, not Mdina, which had to be held against an invader, and the auxiliary fortifications which had formerly sufficed for the area had somehow to be transformed into the major stronghold.

[4] 'The orists often said that a culverin could throw an eighteen-pound ball and a demi-culverin one half that weight point blank for seven hundred yards, and at random (extreme range) for about two miles. So, ships 'a long culverin shot' apart were within a little less than two miles of one another, and those distant 'a half culverin shot' were separated by roughly three hundred and fifty yards. In fact, this is modified by the great differences in bore, calibre, weight and performance of guns called culverins and demi-culverins, and further modified by the fantastic variety of sixteenth-century weights and measures and by the cheerful disregard of accuracy on the part of most writers. So a ballistics expert might say that a culverin of such and such dimensions would throw a nine-pound ball twenty-five hundred paces without having any exact idea of what he meant by a pace or a pound, and without knowing whether the foreigner whose statement he was copying (theorists all copied from one another) was using values like his or quite different ones.' (G. Mattingly, *The Defeat of the Spanish Armada* [London, 1959], p. 346.)

This was no easy task, since the Birgu was not well sited for the purpose, although the fire-power of the artillery of the time might encourage a certain optimism which the Great Siege proved to have been misplaced. All the defences of the Birgu, including St. Angelo, lay on the low ground of the seashore, easily commanded by enemy guns placed on Mount Sciberras or the Corradino heights.[5] Both of these stretches of high ground, moreover, were accessible[6] to invaders coming up from one of the other good harbours of the island – from the Marsamxett or St. Julian's on the one side, or from Marsaxlokk on the other. These harbours had been one of the attractions which drew the Knights to Malta; but they might also prove to be the means by which an enemy might enter to expel

[5] 'Before going further,' writes Balbi di Correggio at the beginning of his narrative, 'I wish to speak of how the defence was handicapped because of the heights which commanded the Birgu, St. Michael and also St. Elmo.

It was realised, before the arrival of the Turks, that these heights would be of disadvantage to us, but as they were so far distant it was never anticipated that they would be of as much harm as they proved to be. The enemy's artillery was so powerful and the ammunition so abundant that, notwithstanding the long range, they caused as much damage as if they had fired at thirty paces. As we have seen, some of their objectives were rased to the ground.

Across from St. Elmo, on the other side of the mouth of the Marsamxett harbour, is a place on high ground known as the hermitage of St. Mary. Although this position is at a distance of seven hundred paces from St. Elmo, the guns of Dragut bombarded it most effectively. Moreover, to the south of St. Elmo is a height which commands it, and, although it is at a distance of one thousand paces, the gun fire destroyed it completely. This promontory is about as high as St. Angelo and although the Isola of St. Michael stands high, it is commanded from the spur as far as the Fort. Another height, which is called Cortin, commands the whole Isola of St. Michael and even the Fort itself. The Mandra is another height which commands St. Michael from the front, and it was bombarded from this position. Although the bastions of Provence and Auvergne are both strong and high, they are commanded by the height of St. Margaret. The heights of Kalkara and Salvador command the Posts of Castile, Germany, England and almost St. Angelo'. (F. Balbi di Correggio, *The Siege of Malta, 1565*, pp. 48-9). I have slightly modified the translation.

[6] The movement of heavy artillery, of course, entailed considerable difficulties in itself, and Balbi di Correggio describes the great effort with which, on 25th May 1565, the Turks first brought up their guns to fire on St. Elmo. 'It was no light task, for the guns were heavy and their wheels and carriages were reinforced with iron. The distance they had to cover was nine miles, and the ground was very rough and full of stones. Their many labourers and the beasts of burden which the Maltese had abandoned in the country helped them over their difficulties. From the Spur of St. Michael we could see ten or twelve bullocks harnessed to each piece, with many men pulling at the ropes.' (F. Balbi di Correggio, *The Siege of Malta, 1565*, pp. 57-8). Such, however, were natural and expected difficulties of war, and were of small importance compared with the fact that the guns had a free passage to the positions chosen for the erection of batteries.

them. If the defence of Mdina were to give way to the defence of the Birgu, not only the Birgu itself but the whole coastline from St. Julian's to Marsaxlokk must be included in the Knights' calculations, and to enclose this whole region with a complete circle of fortifications was out of the question. The Knights, in short, were required to find some means of defending one coastal region while knowing that they must leave the remainder of the coast open to the enemy.

Successive Grand Masters were able to leave this problem unsolved, since, after all, an attack on the scale mounted in 1565 was fairly unlikely, in view of the difficulties it presented to the Turks. Malta's principal safeguard remained, as always, the sea which surrounds it, and the elaboration of a complete defensive system could be allowed to wait. An answer to the problem, however, could not be put off indefinitely, and its main features were immediately grasped by Antonio Ferramolino, the Bergamese military engineer whose services G.M. de Homedes secured from the Emperor in 1541, and who came to the conclusion that an adequate defensive system could be constructed only if the principal fortress on the coast were moved to a more appropriate site. Inevitably Mount Sciberras suggested itself for this purpose, since, although it lacked the sheltering creeks which afforded good anchorages on the south-eastern side of the Grand Harbour, it was high ground commanding both the Grand Harbour and the Marsamxett, and was not itself overlooked by other high ground.

G.M. de Homedes, however, had other factors to bear in mind, not the least of which was the financial burden which a completely new set of fortifications would impose upon the Order; and even if the Order could afford these, the outlay of large sums on Mount Sciberras would imply that a final decision had been taken on the still very controversial question of whether or not Malta was to remain the home of the Knights for the foreseeable future. In rejecting Ferramolino's proposals the Grand Master was as right in his own way as Ferramolino had been in his; but the Order was thereby committed to almost a generation of aberrant defensive planning – to the accretion of fortifications south and east of the Grand Harbour which were not to be complete until that dim and distant future date when the Cottonera Lines would close off the Birgu from the south-east, fortifications which by then would be more impressive than useful.

As a consolation for the rejection of his larger plan, Ferramolino was permitted to tinker with the defences of the Birgu, where he dug a ditch round St. Angelo and erected a cavalier to raise the firing platform of the fort, so that its guns might provide a more effective command of the mouth

of the Grand Harbour. The real development of the Birgu and its immediate surroundings, however, was the work of the Prior of Capua, Count Leone Strozzi, and the Spanish engineer, Pedro Pardo. Ten years after Ferramolino's proposals, Strozzi was vigorously putting the case for a new town on Mount Sciberras, to which he was convinced the Convent would sooner or later have to move. (The fact that Dragut, in his raid on Malta and Gozo at precisely this time, regarded St. Angelo as too strong for immediate attack could scarcely be taken as proof that the Knights occupied a position of impregnable security, and the Order's military experts were not deceived.)

In default of a new town on Mount Sciberras, Strozzi and Pardo sought to create a system of defences which, at least for the present, would not be dependent upon a single, central strongpoint, and these defences, substantially complete by 1554, were those which had to bear the weight of the Turkish offensive eleven years later.

In the first place the St. Angelo and Birgu defences were extended to the neighbouring Isola, to provide protection against attack from the Corradino side, and in due course the town of Senglea was founded on the Isola, protected on the landward side by Pardo's star-fort of St. Michael, 'a modern fort built after the plans of the ablest engineers of these times.'[7] St. Angelo and St. Michael between them commanded the whole of Dockyard Creek, and the guns of St. Michael ranged across the approach to both towns by land, just as those of St. Angelo bore upon the waters of the Grand Harbour.

A further elaboration to the design was the second star-fort constructed to Pardo's design at the tip of the Sciberras peninsula, where a watch-tower had been fortified long before, in 1488. St. Elmo was clearly not intended as a substitute for the new town which had been projected for the peninsula behind it: its function was to deny an enemy entry to the Grand Harbour and the Marsamxett, and it could not, therefore, be placed anywhere except on the low ground at the seaward end of the peninsula, whence its guns could not range with any great effectiveness across the peninsula itself.

The aim of the engineers of 1551-4 was to construct an interlocking pattern of smaller works round the Birgu, and by taking in the Isola they were certainly able to create a more compact block of fortifications round the harbour in Dockyard Creek on which the Order's navy depended. They did not, however, succeed in overcoming the basic defects of the site with regard to height, and during the Great Siege St. Elmo, despite its protracted resistance, revealed numerous disadvantages. 'This fort,'

[7] F. Balbi di Correggio, *The Siege of Malta, 1565*, p. 27.

wrote Balbi, 'has high walls surrounded by wide ditches and outworks but, as we have seen to our cost, it lacked traverses and casemates and had no embrasures for guns in the ditch', and the cavalier outside the fort 'would have been very strong had it been built of good stone and lime.'[8] Moreover, he adds, 'St. Elmo was not considered a stronghold. No magazine nor storehouse was there. It lived, as the saying goes, from hand to mouth, and if the Turks did not take it by force they would reduce it by hunger.'[9] While it still held out St. Elmo had to be supplied continuously by boat from the Birgu, the boats crossing, usually by night, over a stretch of water swept by the Turkish artillery and Turkish snipers, whose efforts eventually made the crossing impossible.[10] The galleys, even if they had been designed to give support to a fortification like St. Elmo, could not operate in the Grand Harbour under fire from Mount Sciberras: as soon as Turkish gun platforms were seen under construction on Sciberras, two of the Order's galleys were allowed to fill with water, while two others were retained in the safety of the ditch behind St. Angelo.[11] Moreover, on and after 26th May (the day after the Turkish guns had been brought up towards St. Elmo, when the enemy trenches had already reached the cover of the counterscarp of the ditch, where they could not be seen from the fort) the garrison of St. Elmo repeatedly informed the Grand Master that their position was indefensible.[12]

From this recognised weakness of St. Elmo one should perhaps infer that the fortifications of 1551-4 had been built consciously with a view to the eventual construction of a new town on the Sciberras peninsula. St. Elmo itself defended the mouth of the Grand Harbour, and placed a further complication in the way of an enemy proceeding to an attack on the Birgu; but St. Elmo itself was isolated and readily open to attack from the rear if the Knights could not hold the peninsula as well. When we consider Strozzi's recommendations for a fortified town in the light of the position in which he placed St. Elmo, it seems extremely likely that we should regard the construction of Valletta as an established aim of the Order from 1551 onwards. Certainly the idea was taken in hand by La Valette immediately after his election in 1557, and the remaining eight years before the Siege were taken up with the consideration of the detailed

[8] F. Balbi di Correggio, *The Siege of Malta, 1565*, p. 27; cf. pp. 65, 67.
[9] F. Balbi di Correggio, *The Siege of Malta, 1565*, p. 81.
[10] cf. F. Balbi di Correggio, *The Siege of Malta, 1565*, pp. 59-60, 62, 66, 70, 80-1, 83-5, 91.
[11] cf. F. Balbi di Correggio, *The Siege of Malta, 1565*, p. 59. A dismantled galley was, however, used in an abortive attempt to send relief to St. Elmo on 22nd June (cf. p. 85).
[12] cf. F. Balbi di Correggio, *The Siege of Malta, 1565*, pp. 58, 67-8, 70-4, 81.

projects submitted by Bartolomeo Genga and Baldassare Lanci. The Siege itself, often represented as determining the Knights to move across the Grand Harbour, would thus appear as much more incidental to the development of the strategic conception of the Order's military experts, confirming the possibility of a Turkish attack in force and confirming also weaknesses in the defences which had already been discerned, but important not so much because it established the pattern for future defensive works as because it attracted international attention and therewith the extensive contributions by foreign rulers without which the Order would still have been unable to realise their strategic revolution.