

Richard J. Garrett's *The Defences of Macau: Forts, Ships and Weapons over 450 Years*

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Richard Garrett's book on Macau's unique forts published earlier this year by Hong Kong University Press should have been written 50 years ago, when many elements of the fascinating history of the city were still available. This would have been before the 1960 Cultural Revolution in mainland China, which soon spilled over to the enclave giving origin to the December 3, 1966 riots that (because of its date) became known to the local community as the "1 2 3 incident". It was an event that also led to the collapse of the Administration's authority, with consequent panic on the part of the civilian population, when many Macau families sought refuge in Hong Kong and in the process destroyed documents, books, photographs and letters, which were either thrown away or burnt. At same time books, magazines and documents that would have been very useful to persons interested in researching the history Macau's past were also burnt in the playgrounds of religious institutions, such as that of the Salesians of Don Bosco and of the Seminary of Macau. Since then, further records have been lost, destroyed, misplaced and neglected and it is remarkable how the author of *The Defences of Macau*, through a conscientious and painstaking work of research and analysis, has managed to fill a wide-gap of the history of the enclave.

Loss of military records, structures and maps

The plans and records in the engineering section of the Military Headquarters are no more available and could not be found, even in the Military Archives of Lisbon, where research has failed to unearth any. The correspondence of centuries between the Jesuits of St. Paul's College in Macau and their missions in Beijing, Japan, Korea, Thailand (the former Siam), Timor, the Sunda Islands or even Lisbon, were almost all lost, with only some of that received by their addressees having survived.

As an example of the frustrations awaiting any historian looking for relevant information, in the year 1958 the Commanding Officer of the barracks quartered in Macau's *Guia* Hill received a request from headquarters to send them some photos of *Guia* Fortress. The problem was that no one there knew of the existence of a fortress at that location. Some of the staff suggested they were confusing the lighthouse and the chapel that are on top of the hill, since no fortress could be seen there. But an old sergeant, working there since before World War II, remembered seeing structures on the grounds, which he thought could possibly be the lost fortress; it was bizarre that so big a structure as that of a military building would have disappeared into thin air. He was proved right after a gang of soldiers were sent to cut all the bushes and trees that grew around in a dense mass of greenery which, after decades of indifference, had grown wildly above ground and completely covered the walls of the Fortress leaving visible only the lighthouse and the small church. In the photographs that accompany this article it may be seen how quick the vegetation grew on that location only a few years after it had been cut (figs. 1, 2). Slowly the walls emerged and, the work being completed, the Fortress appeared in all its splendor. Unfortunately, in their enthusiasm the soldiers, while removing a tree growing from one of its turrets, removed it together with some stone slabs. Their commanding officer finding them very useful utilized them for the construction of a coop to breed chickens and rabbits. The coop lent a more rural and peaceful environment to the observation tower, built over the kitchen where the soldiers' meals were prepared, staffed with one permanent sentry in charge of watching the marine traffic.

There have been neglect and losses of Macau's military heritage at various levels. Among the most painful cases of negligence that I recall has been that of an 1881 survey map of Macau by the Marine Officer Demetrio Cinatti, it is an incident that serves to illustrate how bureaucrats, male or female, are not always the best persons to help historical research. The Cinatti map is the first rigorous survey of the city to have been drafted in situ (fig. 3). There still exists, presumably in the present Museum of Macau, the next most accurate map that was produced in the city, the 1906 map by Baron Cadore. Unfortunately, it is not as informative as was that of Cinatti. Moreover, previous maps of Macau were based on observations and sketches by visiting British and other foreign officers and later completed in London, which officers also took the opportunity to spy on the defences of Macau.

I delivered this unique Cinatti map, of which there were apparently no other copies, to the director of the former *Luis de Camões* Museum, *doutor* Antonio Conceição Junior, who it seems at some point sent it to the *Arquivo Histórico de Macau* (Macao Historical Archives). Years later I was requested by the *Instituto Cultural de Macau* (Cultural Institute of Macau), to write an essay about Cinatti, but the Museum no longer remembered its whereabouts. The ladies in charge of the Historical Archives, whom I contacted about twenty years after the map had been sent there, either had forgotten about it too, or didn't want to be bothered to look for it. They claimed they had some microfilms of it, but so smudged, blurred and out of focus that they were completely useless. According to the lady director at the time she did not know what had happened to the original. Because of this the only conclusion I could draw at the time was that the map had either been thrown away as trash or sold to some collector.

Luckily, on 25th of June of the current year I was looking for the book *Fortifications of Macau* in the Central Library and the Historical Archives,¹ and while waiting to be attended I happened to skim through a photo holder on the reception desk and by pure chance I suddenly came across a very clear and sharp photo of the Cinatti's map, so not everything was lost after all. Copies of several sizes could be ordered, but I could not be informed whether they would be taken from a digitalized record on a computer or from the original map. The map has therefore reappeared and it is recommended to the director of the Central Library to request the Survey Department of the Public Works Department of Macau to make a full-sized copy of it, from which clean copies could be taken without the smudges that soil the original, and therefore more readable. Furthermore, it would be a very useful and accurate addition to the records of that Department.

Surely the map in question would be very much appreciated by scholars like Richard Garrett. Should he be willing to continue with his remarkable research, so important for the historical knowledge of the region, it will prove to be an invaluable source of information. However, I cannot suppress and hide a feeling of frustration after being misled by the previous lady director of the Central Library, after having wasted 12 years looking for the above-mentioned map. If anything, this episode brings out the qualities of saintly patience and diplomatic skill of Richard Garrett in dealing with such bureaucracy in such a difficult environment. This map could resolve many of the questions concerning the layout of the city, its public spaces, gardens, walls and the outlines of its defences. It shows, for example, the Battery of São Jerónimo shaped as two joined triangles and not according to a rectangular plan, as in the Heywood map of 1804. As a matter of curiosity, it should also be mentioned that this map displays the first public lamp-posts ever erected in Macau, of which there were some 28 along Praia Grande Street.

¹ Jorge Graça, *Fortifications of Macau: their design & history*, Macau, Direcção dos Serviços de Turismo de Macau, 1984 reprint.

During the 1966 riots mentioned above, when the mob invaded the Leal Senado, the books and documents of its library were thrown through the windows to the street below, where many were destroyed or stolen. It was an old lady forming part of the library's staff who, courageously, brought many of them back to the building. As was usual and customary of the administration of the territory her unselfish abnegation and dedication have unfortunately never been recognized.

Disregard for Macau's military and other heritage

The negligence with which Macau's heritage has been treated may also be seen in several examples of its military heritage. Part of the historic Monte Fort wall was demolished in order to build a carport and deposit for military material. In the Fortress of Bom Parto, built in the southern end of the Praia Grande and whose construction dates to the early 17th century, two walls were demolished for the construction of the Avenida da República. The underground structures of the Guia Hill 8.8 Battery had huge ammunition magazines filled to the roof—against prescribed rules, as they should not exceed 1.7 metres in height—with metal boxes of shells for its 25-pounder guns or ordnance. Already stuck together by rust, the shells exuded a yellow liquid extremely sensitive to heat and therefore dangerous, as they were liable to explode. In 1959, in the Ilha Verde firing range, the bullets of small arms kept falling a few meters in front of the barrels they had exited from, or became stuck half outside, the other half remaining inside the barrel. In addition, when exercises in the two previous years were carried out the infantry mortars kept falling short of their targets. When an order was given to increase the range they fell even shorter. The new officer in charge of these ammunitions wrote a report concerning their conditions and proposing their disposal. It took a long time before there was any reaction from headquarters, but surprisingly, it was finally approved. In all probability previous explosions must have been remembered, such as the historic 1931 explosion that destroyed the arsenal of the Flora Barracks, [discussed and illustrated in Richard Garrett's book]. The propellant charges were burnt in the sports ground of the barracks and the shells thrown into the sea in the area designated *Rada de Macau* (Macau Roadstead).

Fortunately from time to time there appear some leaders with sufficient common sense and wisdom to prevail, not always with success, over the general and characteristic apathy and indifference of the place. Thus, when it was suggested that the site where the Ruins of St. Paul's are located would make a great location for a hotel the suggestion was rejected, a surprising show of rare good-sense; under different circumstances the idea could well have been approved on the grounds that it was good for the economic development of Macau. The same is true of the proposal to bring electricity from Coloane to Macau by means of metal towers crossing the islands. This scheme was avoided at the last minute thanks to the strong opposition of an architect, who asked whether the distance from the bottom of the catenaries of the cables to the surface of the sea—9 meters—was sufficient to let ships pass. He also asked what would happen if the masts of a junk were to touch them. The answer of the rabid proponent of such a ludicrous scheme, engineer Casimiro d'Oliveira, was that it would be blown off the water. Only then was the stupidity of the scheme realized, a scheme that at that moment was ready to pass to the construction stage. The architect in question forcibly and insistently demanded that the bridge *Nobre de Carvalho* (which stretches in front of the Lisboa Hotel), be considered to support and conduct the cables, something that the engineer insisted would be impossible. The designer of the *Nobre de Carvalho* bridge, Edgar Cardoso, was then contacted. Professor Cardoso solved the problem without any fuss, easily and more cheaply, without converting Macau's maritime seascape into an industrial landscape.

The notion of pride is relative, and thus there was no reluctance in selling the collection of photographs of old Macau by the Portuguese photographer José Neves Catela to Dr. Pedro Lobo, one of whose younger sons working and living in Macau later refused to make it public. This was a sad example that was followed by one of the Catela's own relatives, his daughter, a lady who was working at the time in the *CTT Correios de Macau* (澳門郵政), (Macau Post Office). She had apparently kept part of the collection, though she denied to the author of this article that she was in possession of any such photos, although it was later reported in the media that those precious witnesses of Macau's heritage had been sold.

The College of St. Paul, the *Patio da Mina* tunnel and other constructions

The foundry of Pedro Dias Bocarro and his son, Manuel Tavares Bocarro not only manufactured cannons. The statues in the niches of the famous façade of the old Jesuit College of St. Paul, today better known as the Ruins of St. Paul's, were also cast in their foundry. Many foreign tourists wonder why they have not been stolen, mainly in the past century when no electric public illumination was available. The truth is that attempts to steal them have been made, but the darkness of the night that hid their activity also was their doom, because the robbers invariably fell. A legend was therefore born that the statues had the capacity of defending themselves by kicking the robbers off their niches; if what an old Portuguese adage says: "*O medo e que guarda a vinha*" ("Fear guards the vineyard!") is true, then fear is better than security guards. The fear that the statues of St. Paul's inspires may have guarded them very efficiently in the past. These statues deserve further study to know if it was normal practice of the Bocarro foundry to cast bronze images. If the answer is in the affirmative, then where are the others, how many were made, what were their models, and were they restricted to sacred images?

The annual Macau budget for the acquisition of objects of art was a measly sum of 20 000 patacas, a sum that was not always used for its intended purpose. While other countries took the opportunity to enrich their collections of Chinese Art, Macau had to be content with the contents of doubtful origin and value of the collections of art of the Museum Luis de Camões of the city. In this, Macau may well have been following the example set by some of the persons holding posts of responsibility related to the cultural affairs of the Portuguese empire of old. Such a one was a former director of the *Casa da Moeda*, the national Mint of Portugal, who proposed that the Belem monstrance should be melted. The Belem monstrance is a priceless reliquary made by Gil Vicente (1465-1537), the Portuguese goldsmith and playwright who can best be described as the Shakespeare of Portugal, with the gold brought by Vasco da Gama from India in his voyage of discovery.² Then there was the idiot who suggested the demolition of the Monastery of Batalha³, in order to utilize its stones for another purpose.

The panorama of officially tolerated negligence and even of vandalism is not restricted solely to past rulers, it continued as late as 1998. A good example in Macau is the way the rescue of a historical tunnel of the city became an object of local politics. Macau is perforated everywhere by tunnels, like the tunnel running under Guia Hill and the tunnel in Taipa Island. The latter was built in order to ape the 1967 Lion Rock Tunnel of Hong-Kong,

² Ed. note: The historic 1506 *Custódia de Belém* (Monstrance of Belem) today forms part of the art treasures of the *Museu Nacional de Arte Antiga*, Lisbon. It has been convincingly argued by scholars that Gil Vicente, the playwright, is the same person as Gil Vicente, the goldsmith.

³ E. note: The Dominican Monastery of Santa Maria da Vitória, better known as Batalha Monastery because of its location in the small town of Batalha in central Portugal, was built to commemorate the victory of Portugal over Castile in 1385. It is considered a masterpiece of Portuguese Gothic architecture and has been declared a World Heritage monument by UNESCO.

and is known as the *Tunel do Gato* (Cat Tunnel). Then there is the underground installation for the use of six 25-pounder field guns, the tunnels formerly existing in the *Portas do Cerco* (Barrier Gate), the ones in the Monte Fort itself and its cisterns, and the tunnel that joined Fort São Francisco with the Military Club.

One of the most historic tunnels is the one whose mouth still exists in the *Patio da Mina*, but reference to it was suppressed by the government of Macau in fear of upsetting Beijing authorities, who were apparently not much concerned by the question. The entrance to this historic tunnel may still be seen in the stone remains of the structures that formed the former berthing quay and landing place of the *naus* (Portuguese ships) of the Japan Trade, the famous “Black Ships”. Here they unloaded the goods and merchandise to be carried to the security of the Jesuits’ Monte Fort, while waiting for the monsoon for the voyage back to Goa, to Malacca and Portugal.

During the excavations for the construction of the museum at the Jesuits’ Monte Fort (today’s Museum of Macau), it was found that the tunnel had been obstructed by the foundations of a building constructed in Palha Street. The result is that this historic tunnel is now abandoned and is divided into two sections, one that runs from the former Jesuit Fort to the obstruction, and another from there to its entrance in the Patio da Mina. The attached photographs (figs. 4-7), that nobody has bothered to publish in the past, display the remains of the heavy masonry of the structure built on the quay to protect the entrance to the tunnel. It cannot have been a drainage conduct for rainwater or a sewer as is sometimes argued, a kind of local *Cloaca Maxima* (Main Sewer), intended unsuccessfully to echo the historic main drainage system of the ancient city of Rome because, as may be seen, it is obviously completely out of proportion for such a purpose. Its more likely function of protecting the goods of the trade, shows that it was an important element of the devices used for that purpose and it is difficult to understand the reasons for ignoring its importance and existence for so long, even today. This example shows the lack of common sense and competence that has been plaguing and degrading the maintenance and development of the cultural heritage of the city.

Representative incidents

The military history of Macau is unique, as the following two examples taken from World War II show. While the Japanese, more or less, respected the neutrality of Macau, the same cannot be said of the Americans who bombed Macau several times and almost made the biggest VIP of Macau, Dr. Pedro José Lobo, one of their collateral fatalities. This happened when they opened fire at his car, which he used to circulate almost always at same time in the road that runs round Macau’s reservoir. Dr. Lobo was only saved by his quick-thinking reaction, jumping from the car and diving into the ditch that runs along the road, thus escaping the fire of the machine guns of the American planes that insistently tried to assassinate the magnate. These planes then proceeded to bomb the fuel deposits of the Outer Harbour and the radio antennas of Dona Maria II Fort.

There was also an arrangement with the American military to provide all information obtained from deserters who fled China crossing the narrow *Canal dos Patos* (Ducks’ Channel), who, afterwards were received by the Yankees in Hong-Kong.

The attitude of neglect of Macau’s heritage continued when the war ended and was reflected in its military rituals. After the war, it was decided to build modern military installations in Coloane, and once the works were completed, at the cost of about four and a half million patacas, its inauguration was carried out with the presence of the top big wigs of the territory. Upon receiving the usual salute of the troops, marching in parade with great pomp and circumstance, the guests went to visit the building, and were much impressed by the facilities provided. The inspection of the ground floor completed, they proceed to climb to the first floor, but then the usual problems

arose. No one knew where the stairs for such purpose were. Searching for them here and there, none could be found; they had forgotten to build them. The entities in charge of approving the plans, the builders, the staff, the inspectors and clerks of works during the construction, none of them had noticed the absence of means of access in the plans. Later an external staircase was built, but again, this case of ridiculous negligence and carelessness was not an isolated example.

It was a long established tradition, on the 10th of June, day of Camões, that the military garrison would carry out, among other commemorations, a military parade through the streets and avenues of Macau, its high point being the salute to the Governor, the military Commander, Bishop and such VIPs that would be standing on a dais in front of Government House. In these parades everything that had a motor of internal combustion was incorporated to make the parade look longer. On one occasion in the 1950s, the parade was progressing normally, flags waving in the wind, the VIPs with their hands raised either in salute or to shelter their eyes from the sun, bugles and drums sounding, the rhythmic cadence of the boots on the pavement, the voices of command in a impressive show of military power. Military might was displayed by the motorcycles of the police, the fire engines of the firemen, the four troops transporters on caterpillar tracks, and the six 25-pounder field guns being pulled by military vehicles, when suddenly the parade came to a stop, nothing else appearing from the other side of the road. The VIPs kept bending over to look at the extremity of the road, trying to see what was going on, or rather not going on. After waiting for a long time, while executing these kinds of gymnastics, they finally sent the *officier du champ* (official in waiting), to see what was holding up the parade. The answer he brought back was that the supplier of trucks and vans to the supplies company had not received his due payments, long overdue, despite his repeated requests. After months of waiting for his money he had lost his temper, seeing them passing in front of his nose already painted with camouflage paint. At such a display, he had jumped in front of them and would not allow the parade to proceed without being paid then and there. The fracas was only solved when the VIPs, with the blessing of the Bishop, promised him the money would be made available to him within the next few days and this way the solemnity of the occasion was saved. Such trivial kinds of incidents often occurred and were usual at the time in the financial affairs of Macau.

Records and writings

The author of *The Defences of Macau* claims at the beginning of his meritorious work to be fascinated by the wealth of what has survived, but in regard to documentation it is calculated that only about five per cent has escaped periodic losses. When the Jesuits were expelled from their installations in Macau they had prepared a large trunk with their most important books and papers, which have since disappeared into thin air, the library of the seminary being burnt by mobs looking for “treasure”. Perhaps, and this is a gambler’s hope, they may be found in the Vatican. No records remain of the adventurous activities and battles against pirates, both Chinese and foreigners, by the courageous captains of the lorchas, or details about the Japan trade, leading Professor Boxer to lament: “So many heroes, so many martyrs, so many scholars! I would exchange the lists of their names for a single bill of lading of a *nau* (a portuguese merchant ship) engaged in the Japan Trade!”

The ignorance of those supposedly in charge of the culture of Macau is revealed by the following incidents involving local historians. Those in charge at the time of local culture were approached by José Maria Braga—better known as Jack Braga and a prestigious Macanese scholar—with the offer to buy his extremely valuable library of books and writings on Macau. During his lifetime Braga had written many articles and books about the history of his native city. His writings were more reliable than those of the better known historian,

Father Manuel Teixeira,⁴ since he used as sources only coeval data confirmed by two or three other sources. He had connections with several foreign societies of history and he received notice from antiquarians from all over the world when any art piece of local interest appeared on the market. It must be noted that while the monetary value of it was much, much higher, the sum he asked for his library was a derisory 100,000 patacas. Even as a business proposition the Macau Government would have profited from it, but as the old maxim says, it was like “throwing pearls before swine”, as usual. The outcome of this regrettable incident is that the Australians stepped in, paid the requested price and offered him the post of curator of his own collection,⁵ with a very generous salary. When he passed away it was a loss for Australia, but not for the jackasses in charge of Macanese culture. They did not mind spending as much on themselves in Japan at the Tanegashima Festival, which commemorated the introduction of firearms to Japan by the Portuguese, under the excuse of adding solemnity to the festival.

During the war Jack Braga still had time to edit in Macau a cultural newspaper that fortunately has appeared as a book. I supplied to the Macau Foundation the only surviving copy of his father’s offprint, *The Portuguese in Hong-Kong and China*, at the request of Father Manuel Teixeira, who on account of his advanced age forgot to return it together with other books lent to him, as was his ingrained habit. This offprint has also been published at a later date by Macau Foundation in book form.⁶ The reading of this book is obligatory for anyone interested in the Portuguese and Western travelers and settlers in the Orient, but the publishers have never acknowledged who provided them with the texts.

The case connected to another Macanese historian, Luís Gonzaga Gomes (1907-1976), offers a less unfortunate, but equally typical example. Many people fled China during the Cultural Revolution bringing with them heirlooms that were sold in order to survive. For this reason the antiques shops of Macau were sought at the time by collectors and agents of foreign museums, looking not only for bargains but also items of art and documents not normally available in more peaceful times and at cheaper prices. At that time Gomes requested me to help a German assistant curator of a museum by taking him around the antiquarian shops of Macau. In one of the shop selling old Chinese furniture in Camilo Pessanha Street, the German visitor noticed a long row of bundles on the top of some cupboards. “What is that?”, he asked the owner, and to the reply:” Oh, nothing of interest! They are old newspapers I use to wrap articles I may have sold!”, the German asked him to let him to see them. This done, he could not contain his excitement. “This is the most important and antique daily of Shanghai! How much do you want for the whole lot?”. The shop owner could not hide his surprise for the enthusiasm of the German, but good businessman that he was, quickly replied, “20 000 patacas!”, “Done!”. After getting a lorry to take the bundles, the German curator explained that the newspapers, dating to the Opium Wars, were a priceless source of information concerning China. His museum already had a few numbers, but never expected to own the complete set. It was fortunate that they had been set in chronological order in the shop and the ones the owner had used for wrapping articles were those of more recent date, whose copies the Museum already possessed or could easily obtain.

Although M. Hugo-Brunt, who in the 1950s taught at the University of Hong Kong, was not a local scholar his work should be also recognized. However, in the 1950s he managed to prevent Professor W.G. Gregory, the

⁴ Ed. Note: A controversial figure during his lifetime because of his erratic behaviour and writing style, the late Msgr. Manuel Teixeira is nonetheless considered one of the leading pioneer Portuguese historians of Macau as a Portuguese settlement.

⁵ Ed. note: today it is the Braga Collection, housed in the National Library of Australia, Canberra.

⁶ José Pedro Braga, *The Portuguese in Hong Kong and China*, Macau, Fundação Macau, 1998.

then head of the Department of Architecture of the University, to continue to authorize the publication by the Institute Luis de Camões of the thesis of final year students that dealt with the architecture of Macau and very interesting aspects of Chinese Culture, some of which had never been the object of scholarly research before. Since then their texts have been gathering dust in the shelves of the Department, their existence not known by those to whom they could be rather useful.

As late as 1975 the Government of Macau threw away as trash all the reels, numbering hundreds, it received periodically from Portugal from the *Secretariado Nacional de Informação* (Services of National Information of Lisbon), under the excuse that it was all fascist propaganda, in their blank minds not conceiving that they could contain very useful historical data. After obtaining permission from one of the undersecretaries of the Governor to take possession of them, I spent days during my lunch time carrying those reels for storage to the building of the CDM (*Centro Democrático de Macau*). From here they were taken off to Lisbon several years later by Mr. Luís de Pina, director of the Portuguese Film Archives, who was traveling around the world in search of exactly such material, of which his Archives did not have copies. He was happy enough to state that this material would justify and pay for the expenses of his trip, but forgot to mention that the material belonged to somebody else, from whom he had not obtained previous consent. Needless to say, I have so far received no explanation, no note or thanks from anyone. In actual fact, I was working at the time in Hong Kong and came to know of the incident through the local Macau newspaper, *Tribuna de Macau*.

Those in positions of power, no matter how small, enjoy using it to satisfy their egos, and one of their more frequent victims is the truth. One good example of the latter in Macau is what happened to the preface of the book *The Fortifications of Macau*, which was unfortunately removed from the translation of the book into Portuguese.⁷ Even if the copyright of the book was given by me free of charge, the preface was suppressed by the director of the Cultural Institute because in his opinion it would not contribute to the value of the work. The controversy this caused is available in the pages of the *Tribuna de Macau* of that time. It led to the bizarre episode of the book's presentation to the public in the Livraria Portuguesa (Portuguese Bookshop), without the author—not invited—whose place was taken by the Secretary of Culture, Jorge Rangel. As the author of the work I am grateful to this gentleman for having saved me from such a boring ceremony.

It is hoped the book *The Defences of Macau, Forts, Ships and Weapons over 450 Years*, will become a classic of both the history of Macau and of China as an indispensable and accurate reference of the events of the last five centuries. It is also hoped that Richard Garrett's book will be added to that of previous distinguished scholars, such as those of Charles Boxer, Montalto de Jesus and Jack Braga. His work is not lacking in learning and scholarship, but it should be pointed out that it focuses on fields that are different from the research and interpretation of events more favoured by the mentioned scholars. The chapters in his book concerning weapons are unique in that no previous study on them has been made, due either to a lack of interest on the subject or from the belief that such a study was not important. This mistaken belief led to the selling in the year 1959 of a huge collection of weapons of all kinds, although many of them were useless, either not being in a condition to fire, or their ammunition not being manufactured any more, such the Japanese sub-machine pistols, perfectly functional, but whose ammunition, 7.65, were restricted to those only being manufactured in Spain at that time.

The fields for research are still vast and demanding, such as what happened to the cannons of gross caliber serving as posts in Fai Chi Kei 筷子基, an old quarter of northern Macau. Or yet again, the pieces of ordnance,

⁷ Jorge Graça, *Fortificações de Macau : concepção e história*, Ma L.Gambini de Sousa transl., Macau, Instituto Cultural, [198?]

below the makeshift bamboo latrine built on stilts, on the edge of the seawall of the Fai Chi Kei over the water, below which, in the seventies, they were still visible half buried in the mud and sewage, a fact that did not upset anyone in the administration of local culture. What of those that were piled up forsaken on the grounds of Monte Fort, some of them with Chinese characters indicating Chinese origin and manufacture? Those Chinese characters identified them, an English translation of one such inscription stating, “This is cannon no. 8 of the Tiger Battery, in the 12th year of the Reign of Emperor Wanli”.

Nowadays things have improved and perhaps Richard Garrett will not meet the frustrating and annoying difficulties that were the daily fare of previous scholars, researchers and historians, and that he will decide to proceed with his studies concerning a subject that he has undertaken to investigate so skillfully and ably. The chapters in the book concerning weapons are original, their description and backgrounds have now been disclosed to the general reader, and they will be much appreciated by anyone interested in the topic, since it is the first time they have been made a subject of study. Hopefully it will be followed by a research on cold steel arms, such as swords, cutlasses, lances, daggers, pikes, halberds, bayonets, poniards, etc, and respective panoplies.

Undoubtedly *The Defences of Macau, Forts, Ships and Weapons*, will become a reference book for anyone engaged in the study of the subject. Its author deserves the gratitude and congratulations of the Portuguese and Chinese people of Macau, for it shows that if much has been done by the Portuguese, much more could have been achieved with a more rational commitment to their people by noble-minded and less vain, pompous and wasteful administrators.

Architect Jorge Graça Pimentel da Costa e Silva (施利華) was born on April 23, 1934. After his school studies he entered the Faculty of Science of the University of Oporto, studies which he interrupted in 1956 to do his military service. In 1957 Jorge Graça volunteered to go overseas as a lieutenant up to 1962, returning to Portugal the following year. He returned to the East and after marrying continued his studies at the Department of Architecture, University of Hong Kong. After graduating in 1969, he took up employment in the Public Works Department of Hong Kong. In 1973 he resigned and returned to Macau to work in the office of engineer Tavares da Silva. In 1975 Jorge Graça was invited to join the Cabinet of Macau Development where remain until 1978. He then returned to the Public Works Dept. of Hong Kong, from where he retired in 1995 to return once again to the Public Works Department of Macau. In 1999, with the return of Macau to the People’s Republic of China, he was transferred to the government of Portugal and after reaching retirement age, decided to come back to Macau, where he now lives.