

Traditional Boats of Malta

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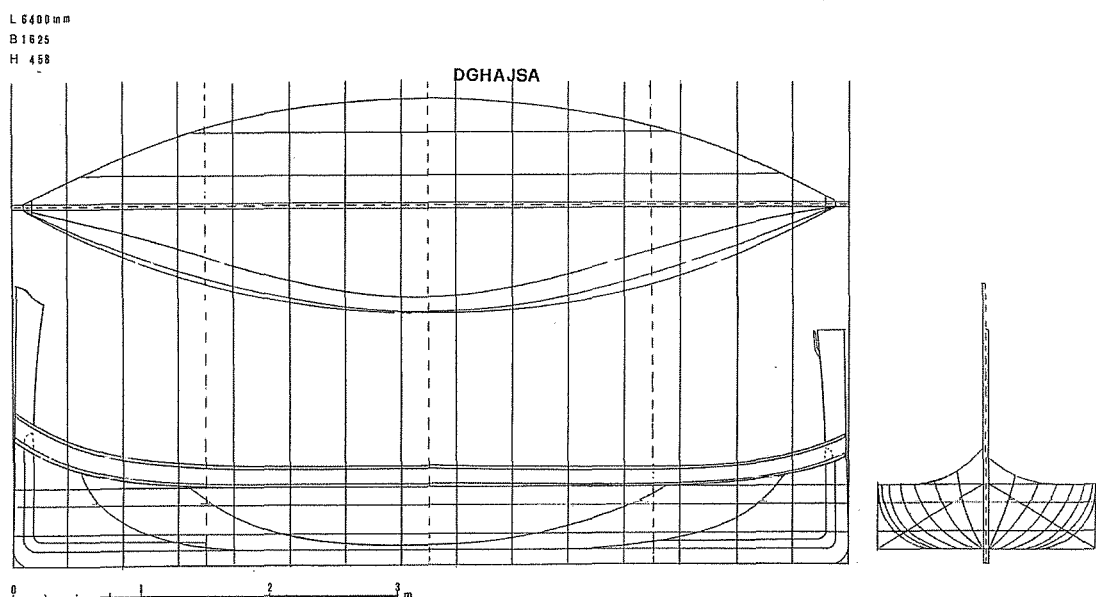
Around the shores of the Maltese Islands, one can see various small, working boats which developed over a period of hundreds of years. When we refer to the traditional boats of Malta we refer to the five¹ that have survived and which show the same constructional characteristics. It is interesting to note that one may come across certain local boats which originated after 1800 with the introduction of British rule in Malta but which do not comply with the traditional characteristics.²

The *xprunara* or *speronara*³ was the prototype of all traditionally built Maltese boats. During the time that it was in service - a period of almost two hundred years - other smaller local boats showed the same characteristics as those found on the *xprunara*. The *dghajsa tal-pass* or passenger boat appeared early in the seventeenth century while

the *ferilla* and the *kajjikk* evolved some time later in the same century. The Gozo boat or *tal-latini* evolved from the *xprunara* and appeared during the last decades of the nineteenth century. The *luzzu* evolved from the Italian *gozzo* as the principal fishing boat by the first decades of the twentieth century.

The main characteristics of traditional Maltese boatbuilding techniques were and still are the high stemposts fixed at right angles to a straight keel. Washboards were fitted on the gunwales while the catwalks to the sides joining the fore and aft *tambourets* were provided with drainholes. Maltese boats were carvel built - the open type without a deck - and they were normally powered by sails and oars. The highly decorated and brightly painted local boats have retained this characteristic up to present day.⁴

Figure 1:
A line drawing of a
dghajsa tal-pass



Looking at the first images of boats represented in Maltese maritime graffiti and which go back to the second millennium B.C., one may get the first inklings of the ships or boats of the period. The Tarxien graffiti refer mostly to open boats which came to Malta from the Levant.⁵ The *corbita* type of boat found at Hal Far, dating to the first century B.C. and first century A.D., might reflect the Roman influence on local boatbuilding. The interesting boat graffiti found at St Paul's and Tad-Dejr catacombs in Rabat show the open type of boat with high stemposts but most probably they were provided with sails and dated between the fourth to the sixth century A.D.⁶

It is not yet possible to come across a single image of a boat referring to the Phoenician period in Maltese history. Elsewhere, Phoenician open boats show high stemposts and they are rowed by men standing and facing the bows. It should be noted that similar characteristics could be traced on boats of various harbours in the Mediterranean and not exclusively in Malta. There is practically no tangible proof to connect Maltese boats with their Phoenician counterparts.⁷

A Maghreb-Siculo ceramic bowl dated to the twelfth century show certain interesting characteristics depicted on an open type of boat which deserve to be studied carefully.⁸ The boat shown on the bowl must have been one which travelled round the central part of the Mediterranean, especially between Tunisia and Sicily. This image on the bowl could well be the first and best reliable source of information for the study of Maltese boats. During the eleventh century, Malta was still under Arab domination and one can imagine how Muslim influences affected all aspects of life including boatbuilding. When examined attentively, the boat reveals the 'eye' at the bows, intricate decorations on the sheer strake or *tappiera* and the high stemposts fore and aft. The lateen rig was very popular among the Muslim masters and such a rig has also been employed on Maltese boats since time immemorial.

The idea of a link between a *dghajsa* and a gondola can hardly be taken seriously.⁹ There was once the Wignacourt gondola, which was specifically built as a ceremonial barge for that Grand Master, having the spiral type of stems fore and aft. When examining the model of this gondola

which dates to the first decades of the eighteenth century,¹⁰ one can see that it follows the traditional Maltese boatbuilding techniques. There is not the least connection with a Venetian gondola.

The British authorities in Malta introduced a ceremonial gondola for use by the Admiral and a few other V.I.Ps.¹¹ Notwithstanding its name, the boat was constructed according to local boatbuilding techniques and had absolutely no connection with its Venetian counterpart. There were local owners of the *dghajsa* who fitted a gondola type of stem on their boats and referred to them as gondolas. But the boats themselves were constructed strictly according to local, well known boatbuilding techniques.¹²

To see a *dghajsa tal-pass* under construction is an impressive sight. The frail skeleton is held in place and perfectly balanced by a system of props fixed from ground to certain vital parts of the frames. It remains on the stocks until such time as the boatbuilder decides that it is perfectly weighed and aligned according to the empirical rules of boatbuilding.

The exceptionally thin timbers employed on a passenger boat were intended to lower the construction costs and to produce a light craft which was strong enough to carry ten passengers but light enough to be handled quite often by one rower. However, looking at a *kajjikk* under construction one notices stronger timbers than those employed on a passenger boat, the reason being that a *kajjikk* was normally employed for fishing and had to face the open sea away from the sheltered bays and harbours of Malta. A *luzzu* and a Gozo boat carried still stronger timbers than those found on a *kajjikk* because they had to carry heavier cargoes and travel longer distances.

It is interesting to note that, while local boat builders, with the introduction of British rule in Malta, lost a certain amount of technological knowledge acquired under the Order of St John, they assimilated the latest technical innovations of building, for example, diagonal and clinker type of hulls. However, these last two types of hull never attracted the attention of local boat owners and consequently they were not built in great numbers.

One cannot underestimate the important role played by workers employed at the H.M. Dockyard who gleaned the necessary latest technologies working at the docks, subsequently

passing their expertise to local boatbuilders.¹³ The best local experts in boatbuilding learned the ropes at H.M. Dockyard and consequently new types of boats were introduced to meet local demand and others were acquired by British individuals living in Malta and elsewhere.¹⁴

The construction of the modern September regatta boats requires separate consideration as these boats are projected first and foremost for speed and consequently certain traditional characteristics are sacrificed to achieve improved velocity. Such racing boats were originally the same type and of the same construction as those commonly employed in the Grand Harbour. In the 1930s local competitors were demanding ever lighter boats from the local builders. Examining, for example, the racing *dghajsa* to be manned by four rowers, one wonders how such a frail boat constructed with very thin timbers could withstand the stress of four men, two of them rowing in a standing position and two sitting on their benches. Modern local racing boats such as the *dghajsa*, the *kajjikk* and the *fregatina* are unique in concept, light in construction and decorated but unfortunately they have lost a good number of their traditional characteristics.¹⁵

Boat Construction

The Cottonera boatbuilders were unsurpassed in their expertise and during the nineteenth and twentieth centuries they constructed hundreds of boats of all types. Certain builders from Senglea, Cospicua, Vittoriosa and Kalkara established themselves as the real experts in the trade. Others, working at Marsa, Marsamxett, Msida, Gzira, Birzebbuga and Gozo turned out excellent examples of Maltese boats.¹⁶ Local builders worked from family moulds and the father to son apprentice system proved its worth over the centuries.

While it must be said that there were no secrets attached to boatbuilding, certain builders did produce better boats than others. There were boatbuilders who never went to school yet they produced excellent drawings, moulds, cross-sections and profiles of their boats through trial and error. There were self-taught builders who succeeded in making a name for themselves without ever having attended an apprenticeship period with a well-established boatbuilder.

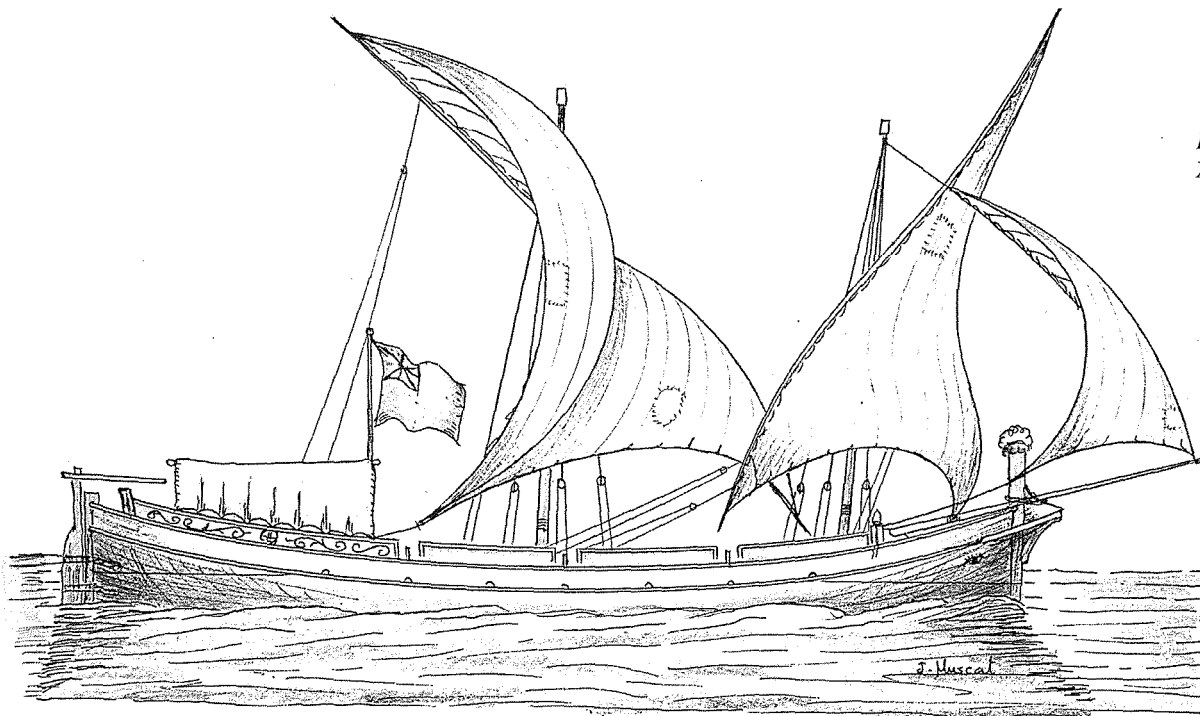
During the Knights period, boatbuilders followed the French type of technology and one can still trace French terminology in local boatbuilding. The knights constructed their galleys and third rates according to French technology and consequently the local workforce assimilated such knowledge and also applied it in the construction of small boats.¹⁷ Similarly, after 1800, with the introduction of British expertise as applied to ship and boatbuilding Maltese workers assimilated the latest innovations in ship and boatbuilding techniques.

One major British innovation in naval construction which affected local boatbuilding was the preparation of moulds for each frame required when building a boat. Moulds were normally prepared on a lofting board taken from the contours of a half model of the hull.¹⁸ The 'old' system based on empirical rules required a sliding type of half frame composed of a flat frame and a futtock duly marked with the required number of frames which composed the symmetrical part of a hull but not the entry and the exit of a boat.¹⁹ These last parts were constructed according to the expert 'eye' of the builder following traditional rules.

After fashioning the required frames, the keel and the stems, a boatbuilder laid down the straight keel on the prepared stocks. All frames made up of one flat frame with a futtock on either side were temporarily fitted on the keel, duly marked with the required equal spaces. All frames were held in place with a temporary stringer. When all frames were aligned and nailed down to the keel the sheer strake was fitted to the frames and the internal stringer reinforced the frail framework. The rubbing strake below the sheer one with the gunwale on top ascertained the solidity of the upper part of the boat; the thwarts or benches strengthened the sides.

The fore and aft *tambourets* were fitted together with the side catwalks. When the skeleton was strong enough to be turned on one side the builder proceeded with the planking. The floor frames were strengthened with the floor stringers and the benches were fitted on the upper risings. It should be noted that a keelson was fitted only on a *xprunara* and on the Gozo boat. Mast benches were provided on boats as required, near the fore *tambouret*, only in the

Figure 2: Maltese Xprunara (1832)



case of a sprit rig or at the middle too when two lateen rigged masts were fitted. Washboards were provided on the gunwales of all traditional Maltese boats.

The Xprunara (Figures 2 & 3)

This vessel presents the first characteristics of local boatbuilding and its origin can be traced to the early sixteenth century. Unfortunately, its first iconographical evidence only goes back to circa 1740 and can be seen in an *ex voto* where it is shown under a sprit rig and with all the characteristics of a Maltese boat.²⁰ Presumably, there are earlier undated *ex voto* paintings showing the same boat in various predicaments at sea.

It is probable that the first *xprunara* carried a long *sperone* or spur at the bows like the other lateen rigged contemporary brigantine and *fregata* and used a lateen rig.²¹ Indeed, the first *xprunara* evolved from the brigantine which together with the *fregata* were the three principal small Maltese merchantships which kept the Island supplied regularly with all types of food provisions.

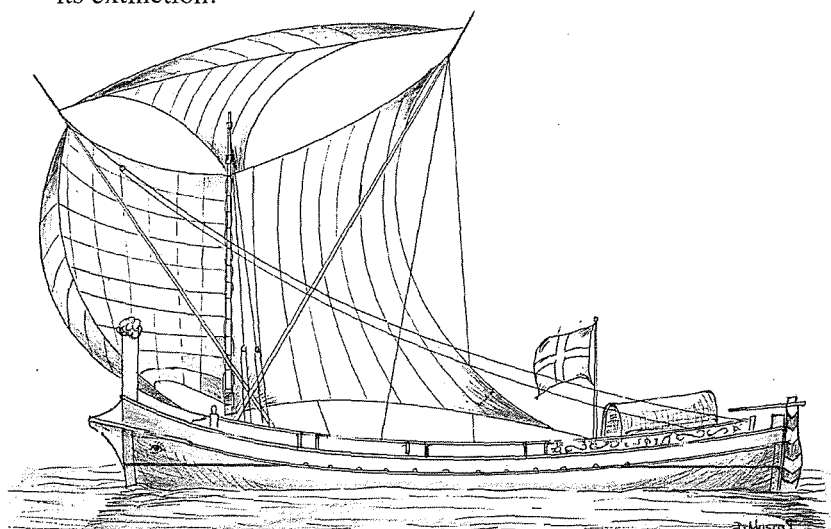
The hull construction of a *xprunara* was similar to any type of traditional Maltese boat but it carried a type of cabin at the stern for the benefit of any paying passengers.²² The *xprunara*, amongst other roles, was the principal passenger-carrying vessel that operated regularly between Malta, Sicily and Naples. Utilizing oars with its sails, a *xprunara* normally crossed from Sicily to Malta in twelve hours.

During its evolutionary life the *xprunara* changed its sail arrangement several times. It

probably started with a single lateen rigged mast and a jib like that carried by a brigantine. During the seventeenth century, it was provided with a sprit rig and a jib. In fine weather, the greater spritsail was rigged to one side and the smaller sprit to the other with the jib rigged as a topsail. By 1850, the *xprunara* was rigged with a small lateen sail at the stern and by then the oars were not employed anymore.²³

With the abatement of the Algerian corsairing activities in 1830,²⁴ there was no longer need for the oars but it is interesting to note that by then the hull of the *xprunara* had attained greater dimensions and hence a second mast was required. That was the time when a *xprunara* was equipped with two lateen rigged masts and by 1853²⁵ a great *xprunara* carried three such masts. By 1900, there was an attempt to provide a *xprunara* with a schooner rig²⁶ but by then the boat had entered its last phase of evolution – its extinction.²⁷

Figure 3: Maltese Xprunara (1740)



The *Dghajsa* (Figure 4)

The *dghajsa* or passenger boat occupies a major facet in the history of the Grand Harbour of Malta. Keeping in mind that the Cottonera area was very thinly populated before 1530, with the coming of the Order in Malta and its settlement at Birgu the whole area attained a definite change. The building of Valletta and the expansion of Bormla and Senglea greatly increased the ferrying of passengers and consequently required an adequately equipped passenger-carrying service.

It is interesting to note that the ferry or *dghajsa* service in the Grand Harbour and subsequently at Marsamxett, was introduced by those first individual boatmen who perceived in such a service a very remunerative activity. If, before the arrival of the Knights of St John in Malta, there was some type of boat service in harbour, that activity must have grown rapidly with the increase of services round the harbour. By 1601, we come across the first written reference to the harbour boats as a ferry service.²⁸ Schellinks drew the first iconographical evidence of a passenger boat in 1664.²⁹ After Schellinks, one can trace the whole evolutionary stages in the life of the Maltese *dghajsa*.

One can see in the Schellinks ferryboat certain similarities with the Sicilian one. Indeed, the connections between Malta and Sicily were close and people frequently moved about between the two Islands.³⁰ This earliest known type of Maltese *dghajsa* carried a slanting fore stempost and an awning for the passengers but it does not show any washboards on the sides.

The *dghajsa* depicted in the *Piccola Barriera* painting dated c. 1750, and exhibited at the Fine Arts Museum in Valletta shows the same slanting fore stempost and the washboards

together with the awning. This boat and the earliest known type were most probably not painted in bright primary colours. By 1750 there must have been a great number of passenger boats and their movements in and outside harbour were regulated by the codes of Grandmasters Vilhena and de Rohan. All regulations were mostly directed at suppressing any attempts by Muslim slaves to escape from Malta on a *dghajsa*.³¹

Vincenzo Fenech in c.1790, depicted a *dghajsa* showing high fore and aft stemposts, the washboards, the sheer strake with its drainholes, the awning and tholepins for two oars on each side. For the first time bright colours are shown on the *dghajsa* but no other decorations.³²

The Schranz painters left us a number of pictures showing further evolution of the *dghajsa* after 1800, during British rule in Malta when the boat attained its greatest glory as a passenger boat in the Grand and Marsamxett Harbours. By 1850, the *dghajsa* maintained its slightly curved, tall fore stempost, the sheer strake, the awning and between the rubbing and the sheer strakes, moustaches or triangular spaces were painted mostly in red with the eye of Horus depicted on the fore.³³ By 1880, the great passenger *dghajsa* or *ferilla* was highly decorated with floral designs all along the sheer strake and brightly painted in combinations of primary colours.³⁴

The *dghajsa* entered its last phase of evolution by the first decades of the twentieth century.³⁵ The high, straight, scimitar type of fore and aft stems fixed at ninety degrees with the keel had a practical function. The boatman steadied his boat while holding the fore stem with one hand as he helped passengers to embark or disembark. With his other hand he received the fare from the passengers. The *dghajsa* retained

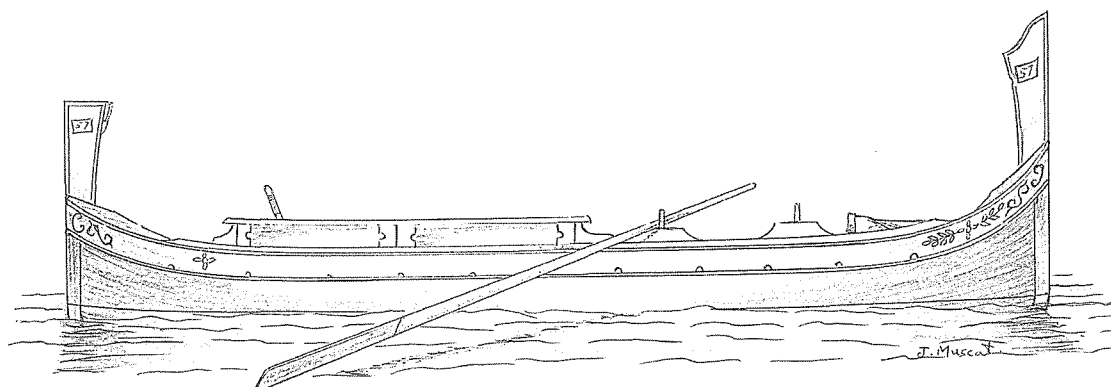
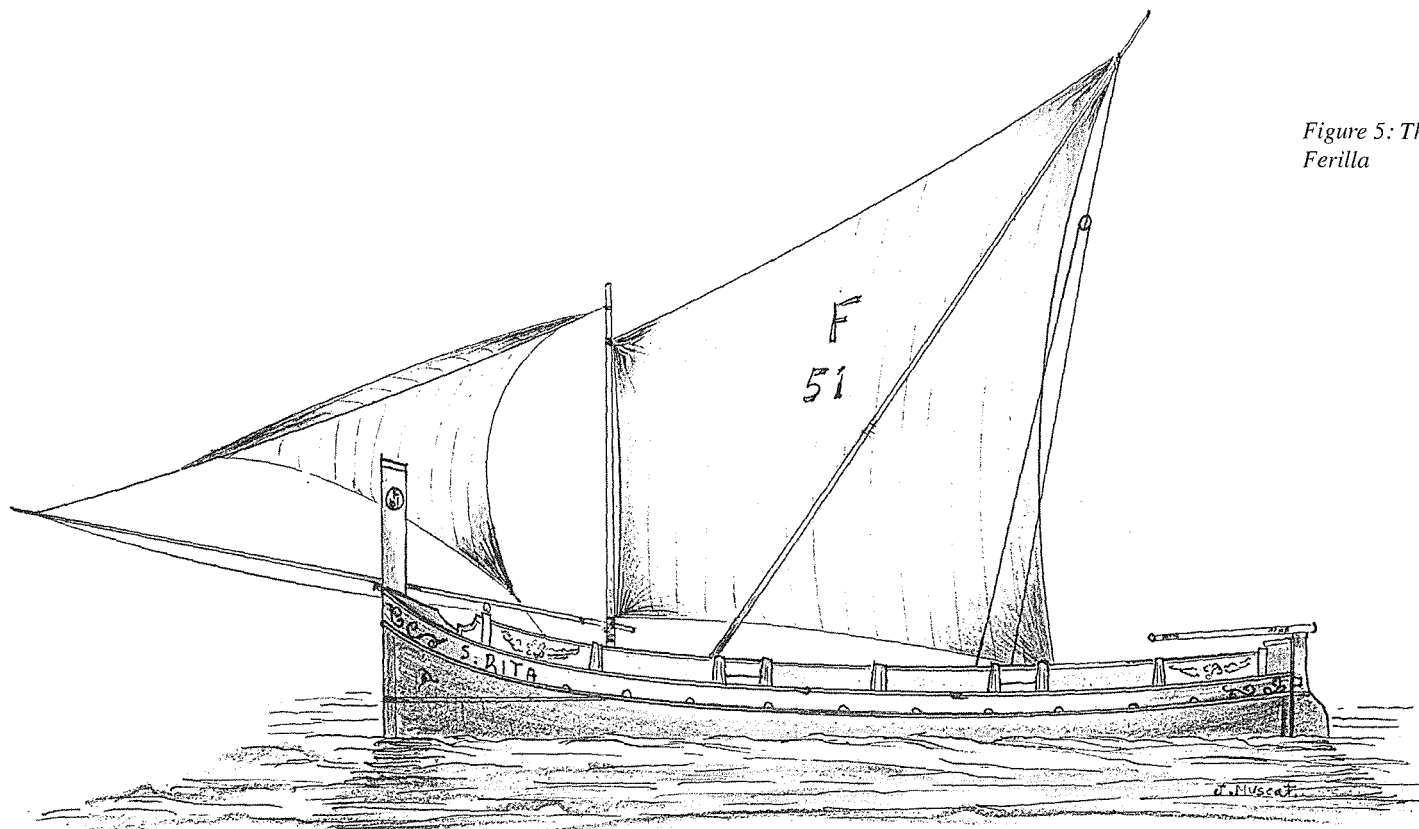


Figure 4:
The Maltese
dghajsa

Figure 5: The Ferilla



those characteristics up to present times but unfortunately by 1970, outboard motors were fitted at the stern and the oars are not employed any more except perhaps when approaching or departing from a landing place.

One can judge the importance of the *dghajsa* by the great number of rules and regulations issued from time to time by government officials.³⁶ There used to be hundreds of passenger boats hovering around a liner arriving at the Grand Harbour. There was a time when boatmen used to line up in their boats near the Customs House awaiting the arrival of a liner.³⁷ The British navy employed a great number of passenger boats as ship's company.³⁸ Any *festa* in harbour involved hundreds of *dghajjes* carrying people around various spots in harbour. Boatmen worked hard and, for those who wanted to work harder than others, there was enough work for every one and there were many amongst them who earned good money. With the introduction, in 1882, of the steam ferryboats first in Marsamxett and in 1906 in the Grand Harbour³⁹ and then, in 1918, the buses⁴⁰ the *dghajsa* service lost its importance. The mortal blow for the *dghajsa* came with the rundown of the British forces in Malta.⁴¹ At present, there is a slight revival of the *dghajsa* service but it is not enough to provide a decent remuneration for fulltime boatmen.⁴²

The Ferilla (Figure 5)

There was a time during the eighteenth century when the nomenclature *ferilla* was connected solely with the small passenger boat that plied between Birgu and Senglea. It was much smaller than the normal *dghajsa* which crossed the Grand Harbour, was very swift and was handled by one boatman.⁴³ Concurrently there was a fishing boat without a specific nomenclature⁴⁴ but it seems that by the turn of the nineteenth century the name *ferilla* was attributed to one of the principal Maltese fishing boats.⁴⁵ Indeed, there was not much difference between a *dghajsa* and the fishing *ferilla* and the latter was occasionally described as being a large *dghajsa*.⁴⁶

There was hardly any difference in the building of a *dghajsa* and a *ferilla* except that the latter had a much taller forestem and a higher free board. As the *ferilla* was expected to sail away from the sheltered waters of the Grand Harbour it was built to be stronger than the *dghajsa* and carried the eye of Horus on the bows for good luck.

Apart from its sprit rig, a *ferilla* was normally rowed by four men who were also fishermen. The boat was provided with washboards which were usually pulled out of place when hauling in a fishing net but not when letting down or pulling up fish traps.

The *ferilla* was hardly ever longer than 30 feet⁴⁷ and consequently it did not travel far out

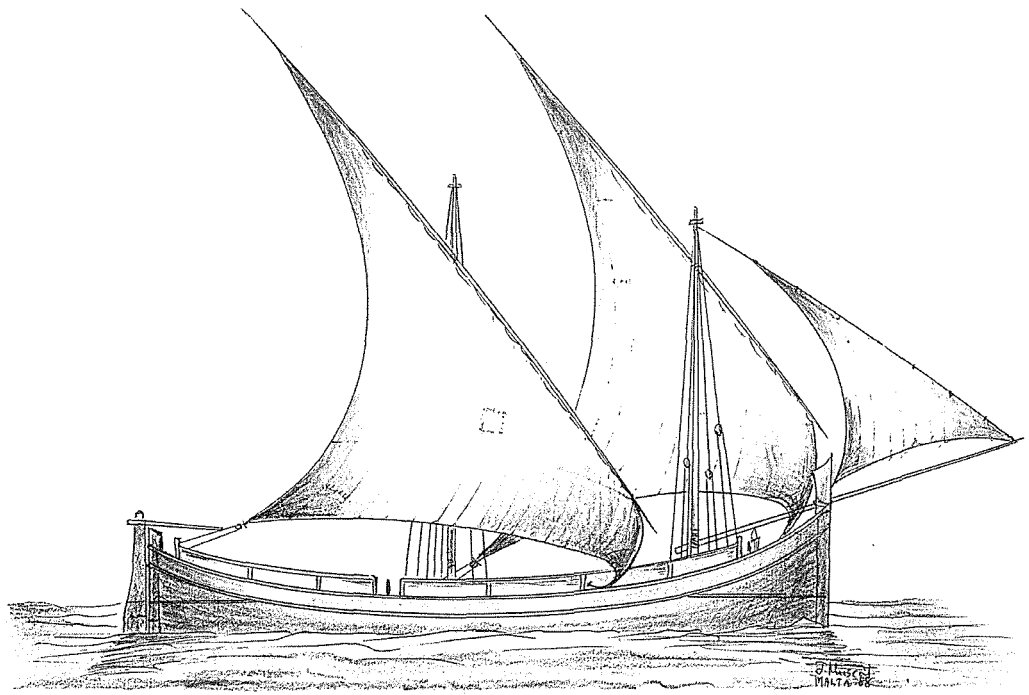


Figure 6: The Gozo Boat

at sea. Local fishermen who feared the attacks of the Barbary corsairs travelled with land in sight ready to dart to safety at the least sign of foul weather or Muslim corsairs. It seems that such behaviour was transmitted to the local fishermen who operated in the same way even after the Barbary corsair threat disappeared from the Mediterranean. They worked with small family crafts and consequently were unable to face the open sea in search of abundant fishing grounds.

The *ferilla* remained the favourite boat for fishermen up to 1900 and at present one can see the last remaining ones at St Paul's Bay, Marsaxlokk and perhaps in Gozo. There were attempts to make replicas of the *ferilla* utilizing fibreglass but the general effect is far from pleasing to the veteran fisherman.⁴⁸

The Kajjikk (Figure 7)

The local *kajjikk* evolved from the caique attached to a galley.⁴⁹ The caique with a transom at the stern was the real working boat for general purpose. Knights used to cross from Birgu to Valletta on their galleys' caique which was normally rowed by the *bonavoglie*. It is known that in the internal courtyard of the Palace of the General of the galley squadron in Birgu there used to be a gang of *bonavoglie* on call ready to row a caique whenever required by any member of the Order.⁵⁰

The Maltese *kajjikk* as we know it today might not be as strong as the galleys' caique but its role is as important. The *kajjikk* was always there ready to be employed on various tasks,⁵¹ on rare occasions carrying passengers, but it was frequently used as a fishing boat.

The fishing *kajjikk* was built exactly as a *dghajsa* was but with a flat stern. The Wied iz-Zurrieq fishing *kajjikk* was equipped with high bows with a pronounced flare. Nowadays there are hardly any more *kajjikki* at Wied iz-Zurrieq. The *kajjikk tal-gangmu* or the coal dredging one was provided with low bows and a short fore stem and was employed in the Grand Harbour to fish up anything from the sea bed although it was originally projected to be used when fishing for sea shells.

It seems that the largest number of *kajjikki* are to be found at St Paul's Bay, although one can see similar fine examples at Marsaxlokk. No more *kajjikki* are being built but fibreglass ones are produced instead. The *kajjikk* like any other Maltese traditional boat is painted in bright colours but unfortunately it is heading towards extinction.

The *kajjikk* was originally equipped to be rowed but also carried its single mast to be rigged with a spritsail. With the introduction of engines in about 1920 a *kajjikk* was sometimes powered by an inboard motor especially those *kajjikki* which were intended for fishing purposes.⁵²

The Tal-Latini (Figure 6)

There has been a ferry service between Malta and Gozo since time immemorial. The earliest iconographical evidence of the Gozo boat or *xprunara* can be seen in the painting *Piccola Barriera* dated circa 1750 exhibited at the Malta Maritime Museum. The same type of boat can also be seen in an *ex voto* dated 1778 at the Tal-Herba Sanctuary Birkirkara. The

Gozo *xprunara* was identical to the normal one which travelled to any part of the Mediterranean but it carried no awning at the stern. The two typologies continued to operate together up to the last quarter of the nineteenth century. By that time the *xprunara* was losing its popularity with local masters as they preferred the larger type of merchant ships like the brig and the bark for their mercantile activities. The Gozo *xprunara* remained as the principal vessel that plied between Malta and Gozo.

The Gozo boat or *tal-latini* was provided with two masts rigged with lateen sails and a jib. It seems that by the first decade of the twentieth century the lateen sails were enlarged by adding a kind of a bonnet at the foot whereby they attained the shape of a settee sail which was maintained up to the 1950s. By 1920, the first engines were introduced with success on the Gozo boat although sails and oars were retained.⁵³

It should be noted that a sprit sail was occasionally rigged on a Gozo boat up to the first two decades of the twentieth century and the spur or *taljamar* was retained on the bows. When entering harbour the mainsail was lowered first and then the foresail and the boat was manoeuvred into position alongside a quay with the oars. After 1920, the majority of the Gozo boats were equipped with engines but they kept their masts and sails ready for any emergency.

The Caruana family of Kalkara were reputed to be the best Gozo boatbuilders. Most probably the last one to be built was the *Sacra Famiglia* in 1934. Such boats, sometimes 45 feet or more in length between the perpendiculars, were built with very thick timbers on a green heart keel.⁵⁴

Their construction followed the same rules as those pertaining to any other Maltese traditional boat. Their huge bulky bows were projected to ride over a wave and their wide beam provided a spacious hold capacity.

The Gozo boat was used as a passenger boat up to such a time when the great ships started to operate between Malta and Gozo. The *tal-latini* was kept as a transport vessel carrying agricultural products from Gozo and various items of merchandise from Malta.⁵⁵ The shuttle service between the Maltese Islands was maintained even during the dangerous period of World War II when one of them was lost as it hit a mine. The last Gozo boat, the *Sacra Famiglia*, is at present being restored and hopefully it will be exhibited in a museum for all to be aware of a dying craft.

Local and foreign artists painted numerous pictures of the *tal-latini*, presenting it under various sail arrangements. Old photographs show it under its *kabuz* or awning at Mgarr Gozo or entering the Grand Harbour. Eye witnesses still remember the days when certain Gozo boats were seen going out of the Grand Harbour in inclement weather, disappearing behind a wave and appearing again riding another one. No Gozitan master ever lost his boat at sea. Those hardy Ghajnsielem *padruni*/masters defied all weather conditions to maintain communications between the Maltese Islands.⁵⁶

The Luzzu (Figure 8)

This working craft was the last in the family of local traditional boats to appear round the shores of the Maltese Islands. It probably evolved from

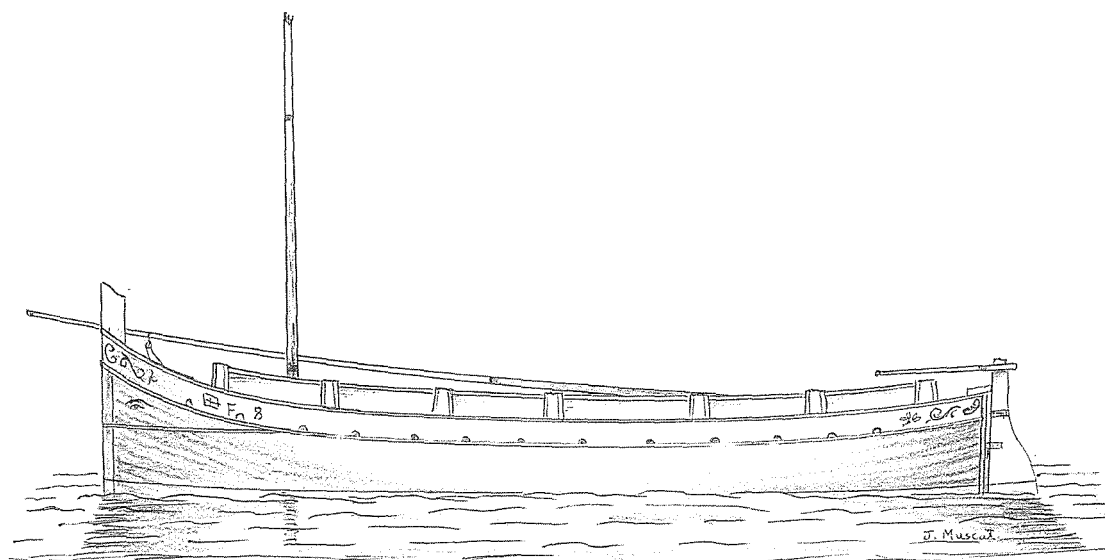
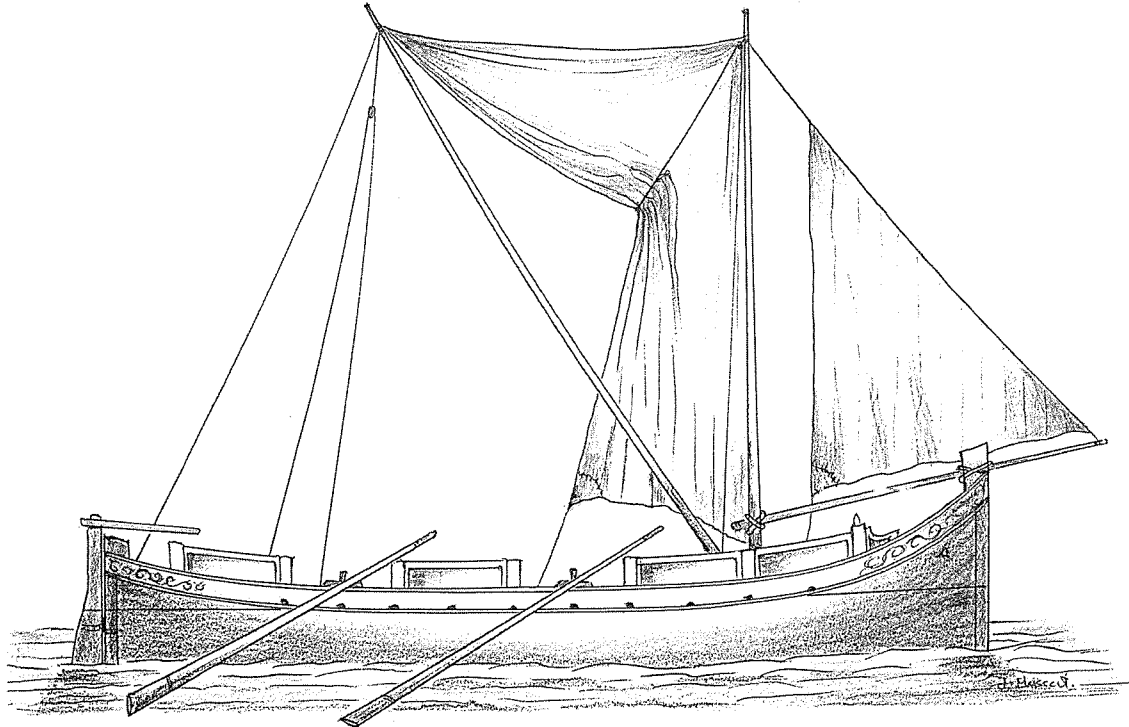


Figure 7: The *Kajjikk*

Figure 8: The Luzzu



the Italian *gozzo*⁵⁷, a boat which visited Malta quite frequently, especially in the 1880s.⁵⁸ With the introduction of marine engines on local boats stronger constructions were required to take the weight and stress, especially on the floor timbers.

The *luzzu*, a carvel built, double ended open boat was almost a replica of the *ferilla* but having a much shorter fore stem and a higher freeboard. The construction followed in all details that of all local traditional boats except for the fact that it was made of much stronger timbers. From a distance the profile of a *luzzu* looked exactly like that of a *ferilla* except for the fore stem and a higher freeboard. The plan view showed a fore *tambouret*, side catwalks and a stern *tambouret*.⁵⁹

The early *luzzijiet* were rather small, not larger than 30 feet between the perpendiculars⁶⁰ and were employed mostly as transport vessels. They were rowed regularly by four men when engaged in harbour services but when employed as a fishing boat they were rigged with a sprit sail and a jib. Subsequently, when the *luzzu* was adopted as the main local fishing boat it was powered by one or more inboard engines.

The *luzzu tal-gadraj* was provided with the necessary hold space and facilities to supply the required provisions to ships in harbour. The fishing *luzzu* is at present equipped with a deck and a midship cabin together with powered winches and navigational instruments. At Marsaxlokk, one can see a good number of such boats kept in perfect working condition by their owners and although no more are built it is hoped that at least the last few hundred that

are still seaworthy will be kept in working order for many years to come. A few *luzzijiet* are nowadays engaged in tourism and are equipped with the necessary amenities to comply with tourism regulations.

A *luzzu* is painted in the traditional blue, green, red and yellow colours. On the red or yellow ochre painted fore *moustache* one invariably find the eye of Horus but owners normally select a holy name for their boat. Together with the licence number a *luzzu* is decorated with floral designs on the sheer strake.

There are hardly any more local traditional boats being built as the construction costs are prohibitive. Consequently there is little demand for such craft, especially as fibre glass ones require hardly any maintenance work.

The last few professional boatbuilders are nowadays more engaged in maintaining and repairing the existing traditional boats rather than building new ones. Indeed, there exists the possibility of losing the technology of boatbuilding but on the other hand one can notice the flourishing of professional model makers of traditional boats especially round the Cottonera area. Hopefully, the pendulum will swing the other way and the love for the old wooden boat will once again attract the attention of local owners as is happening in other countries. It is hoped that the remaining boatbuilders in Malta and Gozo will pass their expertise to others. The Malta Maritime Museum's collection of local traditional boats is quite substantial and together with a fine collection of old models, constitutes a good

point of reference for the history of the evolution of Maltese local, traditional boats.

One cannot but emphasize the fact that the first typologies of local boats, with the exception of the fregatina, to disappear into oblivion were those which were introduced after 1800 under the influence of British rule in Malta. The phenomenon of natural selection for the survival of the traditional boats depends on those empirical rules constituting the modalities for the transmission of culture. It is hoped that one will be able to see around the shores of the Maltese Islands for many years to come the sturdy fishing *luzzu*, the omnipresent *kajjikk* and the elegant *dghajsa*.

References

- 1 These are the Gozo or *tal-latini* boat, the *luzzu*, the *ferilla*, the *kajjikk* and the *dghajsa tal-pass*.
- 2 The most popular ones were the *fregatina*, the *gigg*, the *baghal tal-gig*, the *barkun*, the racing *gigg*, the *wejla* and the *skiff*.
- 3 J. Muscat, *The Xprunara*, (Malta, 2000), *passim*
- 4 J. Muscat, Maltese Ship and Boatbuilding 18th and 19th centuries in K., Damianidis, *The evolution of wooden shipbuilding in the Eastern Mediterranean during the 18th and 19th centuries*, (Athens, 1993), 69-89
- 5 J. Muscat, The Tarxien Ship Graffiti Revisited in *Melita Historica*, vol.xiii, no.1, (Malta, 2000), 49-57
- 6 J. Muscat, Maltese Ship Graffiti in C. Villain-Gandossi, *Medieval Ships and the Birth of Technological Societies*, (Malta, 1991), vol.ii, 323-378
- 7 See A.F. Tilley, A Phoenician Survival in *The Mariner's Mirror*, (London, 1969) vol. lv, 467-9 and *ibid.*, The Survival of Ancient Mediterranean Boat Designs, in *The Mariner's Mirror*, (London, 1975), vol. lix, 373-84 where the author insists on the theory of a Phoenician origin and the connection of the Maltese *dghajsa* with the Venetian gondola. But see also L. Basch, De La Survivance de Tradition Navales Phoeniciennes dans la Mediterranee de nos Jours, in *The Mariner's Mirror*, (London, 1975), vol.lxi, 229-53 where he aptly confutes Tilley's theory.
- 8 Thanks to Honor Frost who provided me with a picture of the bowl; see also *The American Neptune*, (Salem Massachusetts, 1989), vol. xlix, no.3, 173 item 13 and 174 pl. 13
- 9 P.G. Camenzuli, *Is-Sengha tal-Bini tad-Dghajjes f' Malta u f' Ghawdex*, (unpublished B.A. thesis, University of Malta, 1968), 15-17 for his idea about the possible relation of the *dghajsa* and the Venetian gondola but unfortunately he fails to give one contemporary reference. For more information see J., Muscat, The Dghajsa - In Memoriam in *The Mariner's Mirror*, (London, 1991), vol. lxxvii, no.4, 404 note 1 and 2.
- 10 One may see this model exhibited at the Malta Maritime Museum.
- 11 A model of the Admiral's gondola can be seen at the Malta Maritime Museum.
- 12 The last 'gondola' type of *dghajsa* was put to sea for some time recently but it was subsequently stowed away in a garage.
- 13 Anthony Muscat, a foreman employed at the boathouse at H.M. Dockyard, recalled the dockyard *dghajjes* kept near his workshop for use by dockyard workers to move from one dock to another.
- 14 It is known, for example, that racing gigs, built at Kalkara, were bought by British individuals in Gibraltar and in Israel.
- 15 For further information see J., Muscat, *The Dghajsa and other Traditional Maltese Boats*, (Malta, 1999), 168 *et seq.*
- 16 Such names as Guli, Pule, Del Ceppo, Bengala, Caruana, Rodo, Toscano and others are still remembered for their expertise in boatbuilding.
- 17 J. Muscat, French Influence on Maltese Ship and Boatbuilding in *Proceedings of Seminar: Aspects of Maritime Relations with France Through the years*, Malta Maritime Museum, (Malta, 1998), 1-4
- 18 Half models of local boats are exhibited at the Malta Maritime Museum.
- 19 J. Fennis, *Un Manuel de Construction des Galeres 1691*, (Amsterdam, 1983), figs, 14-16
- 20 One can see the *ex voto* at Tal-Herba Sanctuary, Birkirkara.
- 21 J. Muscat, *The Xprunara*, (Malta, 2000), 33
- 22 *Ibid.*, 2, 4, 6, 8
- 23 It was possible to trace the evolutionary stages of the sail arrangement through the ages by studying the *ex voto* paintings in several churches of Malta and Gozo; see also J. Muscat, Le Xprunara - Un Batiment traditionnel maltais in *Neptunia*, (Paris, 1992), no. 185, 22-32
- 24 P. Jullien, *Journal de la Prise d'Alger 1830*, (Paris, 1960), *passim* for a full account of the fall of Algiers which was the last stronghold of the Barbary corsairs in 1830.
- 25 See *ex voto* painting dated 1853 at Tal-Herba Sanctuary, Birkirkara.
- 26 See *ex voto* painting dated 1904 at the Mellieha Sanctuary.
- 27 For more information see J. Muscat, *The Xprunara*, (Malta, 2000) and J. Muscat, The Xprunara in K., Sciberras, *Proceedings of History Week 1993*, (Malta, 1997)
- 28 A. Contreras, *The Life of Captain Alonso de Contreras*, (London, 1926), 52
- 29 W. Schellinks, *Journey to the South 1664-1665*, (Rome, 1983), *passim*
- 30 NAR Lib which is a series of arrival booklets for the years 1743-47, reveals a vivid picture of the movements of passengers especially round the central part of the Mediterranean.
- 31 *Del Dritto Municipale di Malta*, (Malta, 1784), *passim* and *Leggi e Costituzioni Prammaticali*, (Malta, 1724), *passim*.
- 32 The water colour by Vincenzo Fenech is exhibited at the Malta Maritime Museum.
- 33 At the Fine Arts Museum in Valletta one can see two harbour scenes by Schranz which include the iconography of the *dghajsa*, also.
- 34 A model of the 1880 *ferilla* type of *dghajsa tal-pass* is exhibited at the Malta Maritime Museum.
- 35 During this period, numerous photographs have been produced showing the *dghajsa* in various positions and under various roles.
- 36 The rules and regulations governing the employment of the *dghajsa* as a passenger boat are included in a series of documents NAR Customs, the Malta Govern-

- ment Gazette and the Police Laws.
- 37 J. Muscat, *The Dghajsa and other Traditional Maltese Boats*, 65, 69 for an explanation of the *venda* system or how boatmen used to line up waiting to be called for service.
 - 38 Ibid., 51 *et seq* where the author explains at length the ship's company system.
 - 39 G. Belli, *Storja ta' Malta u Ghawdex*, (Malta, 1932), vol.vii, 2569-72
 - 40 Ibid., 2574. The public bus service started to operate by 1918.
 - 41 J. Muscat, *The Dghajsa and other Traditional Maltese Boats*, 68
 - 42 For a lengthy description of the Maltese *dghajsa* see J. Muscat, *The Dghajsa and other Traditional Maltese Boats*, 19-77
 - 43 Del Dritto, 271, item xii; Leggi, 77, item xii
 - 44 Leggi, 77, item xii
 - 45 NAR RB, license no. 13 (1894) the entry reads: Fishing boat *Ferilla*; see also V., Busuttill and T., Borg, *English Encyclopaedia*, (Malta, 1921), vol. D-F, 1127
 - 46 One can see a model of the great *dghajsa* denominated as *ferilla* at the Malta Maritime Museum.
 - 47 For more details see J. Muscat, *The Dghajsa and other Traditional Maltese Boats*, 86; see also NAR RB *passim*.
 - 48 For more information about the *ferilla* see J. Muscat, *The Dghajsa and other Traditional Maltese Boats*, 85-88
 - 49 NLM LIB 223 s.v. *Caicco*; NLM LIB 280, ff.48, 83, 167; see also J. Muscat, *The Maltese Galley*, 20
 - 50 G. Scarabelli, *La Carovana Marina di Fra Francesco Antonio Mansi 1728-1729*, (Lucca, 1986), 70
 - 51 E. Serracino-Inglott, *Il-Miklem Malti*, (Malta, 1975-1989), s.v. *Kajjikk*
 - 52 For more details about the Maltese *kajjikk* see J. Muscat, *The Dghajsa and other Traditional Maltese Boats*, 88-91
 - 53 NAR CD, F 33, 30 mentions the first Gozo boat which was fitted with a motor on 31-12-1920.
 - 54 Information kindly provided by Peter Caruana of Gozo.
 - 55 See J. Muscat, *The Dghajsa and other Traditional Maltese Boats*, 130, 131
 - 56 For further information see J. Muscat, *The Dghajsa and other Traditional Maltese Boats*, 127-133
 - 57 NAR VB, *passim*
 - 58 NAR CD, I 37 for the years 1889, 1890, 1891, *passim*

- 59 See profile and plan view of a *luzzu* in J. Muscat, *The Dghajsa and other Traditional Maltese Boats*, 96
- 60 J. Muscat, *The Dghajsa and other Traditional Maltese Boats*. 96

Glossary for Traditional Boats of Malta

- Buonavoglia:** a freeborn person who commuted a debt into an agreed period of rowing service on the Order's galleys. He was treated just like a slave but could keep a moustache as a special privilege.
- Carvel:** carpentry work in a boat having the planks of the sides fitted edge against edge.
- Clinker:** carpentry work in a boat having the planks fitted overlapping each other slightly .
- Corbita:** a Roman type of merchant sailing ship.
- Flat frame:** the part of the frame of the skeleton of a boat resting on the keel.
- Freeboard:** the part of the hull of a boat or a ship comprising the area from the gunwale to the level of the sea.
- Futtock:** part of a frame of a boat on each end of the flat frame.
- Gunwale:** the strong timber on the upper edge of a boat's side.
- Keelson:** the timber fitted on the flat frames of a boat and nailed to the keel.
- Lateen sail:** sail which had a triangular format.
- Sheer strake:** was the timber from bows to stern of a boat found below the gunwale which delineates the shape of the profile.
- Sprit rig:** denotes the manner of rigging a boat with a sprit sail.
- Sprit sail:** a rectangular sail having a spreader yard at its peak to keep it open in the wind.
- Stem post:** the straight or curved strong timber fitted upright at both ends of the keel.
- Stringer:** the timber fitted at the heads of the futtocks from bows to stern on which were fitted the benches and waterways of a boat.
- Tambouret:** the triangular deck level at the bows and stern of a boat.
- Tappiera:** see sheer strake.
- Tholepin:** the upright strong peg fitted in an oar chock and to which the oar of a boat was tied with a stropp.
- Transom:** the flat timber at the stern of a caique.
- Washboard:** the flat upright timber fitted on the gunwales of traditional Maltese boats.