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*Mediterranean dockyards in the Early Modern Age: the case of Messina*

The history of a maritime city like Messina, living thanks its strategic position in the Mediterranean, cannot set aside the complex history of its arsenal. In reality an arsenal is a military structure of fundamental importance for every seafaring city, usually protected by walls and fortifications. Arsenals are very complex structures with shipyards destined to build, to repair, to arm and to render ‘working’ the ships of a military fleet. So a maritime arsenal is constituted, besides scales and dry docks, by every kind of workshops, storehouses, warehouses and administration offices.

The settlement of an arsenal not only presupposes the choice of a precise site, but also involves the existence of an hinterland in order to provide the logistical support necessary for its running (men, raw materials, food supplies, etc.).

The arsenal needs a solid infrastructure of workshops and warehouses which can permit the storage of the different raw materials indispensable to the building of vessels. It has also to supply the manufacturing of articles which serve to this building and has to dispose of equipments suitable for the assembling of vessels and for their launching. Moreover it has also to allow the maintenance of the war ships and their armament for the campaigns. Therefore the main functions of an arsenal should be the warehousing of the raw materials and of the handiworks, the production and the building, the maintenance and the armament of the ships<sup>1</sup>.

From a conceptual point of view the naval arsenal was born during the Arabic period. The same origin of the term ‘arsenal’ comes from the Arabic ‘*dar as-sina ah*’, that is ‘factory’, ‘house of crafts’, ‘house of manufacturing’ with further linguistic elaboration like the medieval Latin ‘*tarsianatus*’, ‘*tarzanà*’, ‘*arzanà*’, ‘*ataranzas*’, ‘*adarsenale*’, ‘*darsena*’<sup>2</sup>. During Ancient times the ships were built in normal private shipyards which normally realized the common merchant ships.

As regards the city planning aspect in Messina there were in reality three arsenals, which, in succession, were active between the twelfth and the seventeenth centuries. The three different structures reflected the various ages of expansion of the city and will come to an end with the anti-Spanish revolt of 1674.

The first arsenal was acted by Normans to follow precise military purposes (so it produced ships for the Crown). The second one - which was built between the thirteenth and fourteenth centuries - was aggregated to the Royal Palace and built to the south-east from the first one; this new naval ‘factory’ defined for centuries the eastern boundary. The appropriation from Messina of the whole Sicilian royal shipbuilding activity is attested by the privilege, always confirmed, of the equipment of the *Galea Rossa*, and the monopoly ‘*constructionis omnium galearum et vassellorum nostrorum*’ – confirmed still in 1410.

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<sup>1</sup> For further details on origin of the Mediterranean arsenals see: E. Concina (1987); R. Ghirlando, S. Mercieca & M. Renault (2006).

<sup>2</sup> R. Sisci (1990): 182.

The second arsenal knew remarkable purchasers. The building of galleys was constant for all the fifteenth century. Then for the sixteenth century there are conflicting opinions: according to Carmelo Trasselli during the fifteenth century in Sicily at least were built ships in Trapani, Palermo and Messina: with the sixteenth perhaps some ships were built only in Messina; but with the seventeenth the ships built in Sicily can be classified as '*naviglio minore*' (smaller and less important ships); the big ships flew foreign flag or were bought in the unlawful market of Tunis. The arsenal of Messina continued to produce warships, but they were galleys not big sailing ships. Moreover the harbour of Messina was infested, since the end of the sixteenth century, with the *teredo navalis*, which perforated the bottom of the ships, as wrote the Neapolitan Crivella. But the worst thing was Messina had missed the trade for the Levant as the big ships did not need the intermediate ports of Trapani or Palermo and Messina anymore, so they adopted the deep-sea navigation and from the Straits of Gibraltar were directed towards Malta<sup>3</sup>.

But the Archives of Simancas instead document the carrying on of a lively activity of the shipyards where, at the half of the sixteenth century, they executed the complete production cycle of two galleys and, at the end of the Sixties, they drew up a contract for the building of thirteen galleys. The noblemen Antonio and Francesco Adorno, father and son, and the *magister* Fabrizio Lucchini were engaged by the Royal Treasurer – who intervened on behalf of the *Regia Curia* – in the building of thirteen galleys; twelve of them were *galere sottili*, that is constituted by twenty-four *banchi*, the last one was a *galera bastarda*, '*reforsata di vocari quattro a quattro*'<sup>4</sup>.

Messina dues its peculiarities to the secular Mediterranean maritime and commercial tradition. During the sixteenth and the seventeenth centuries the city became the harbour of Sicilian and Calabrian silk, but also of copse chestnuts, of staves, of corks, of wine, of English, Flemish and French clothes, of Flemish linen goods, of sugar<sup>5</sup>, of alum, of iron, of wheat with the related freights, insurances, storages, loans and exchanges. Messina inhabitants tried also to exploit the alum mines of the Peloritans, they introduced the sugar production, organized the weaving of silk and velvet fabrics and produced clothes for the Sicilian market importing big quantities of ginned cotton from Calabria and Malta, they also developed vineyards and exported wine. Messina became the richest city of southern Italy (to south of Naples). In 1510 a company for the clothes trade was constituted, in 1518 was redacted a notarial deed related to trade with Flanders in which appeared 88 names of Messina inhabitants, among whom there were 40 representatives of feudality<sup>6</sup>.

The real re-birth of the arsenal activity occurred with the beginning of the sixteenth century, under Charles V, who realized the serious increasing danger coming from the Muslim incursions (the Barbaresque corsairs incursions became real military attacks, often reinforced by the Government of Constantinople).

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<sup>3</sup> C. Trasselli (2001):176.

<sup>4</sup> Archivo General Simancas, Estado 1120, f. 176; *ibidem* 1126, f.185; *ibidem* 1128, f. 110; *ibidem* 1138, ff. 62, 63, 64; *ibidem* 1158, ff. 96, 123, 129.

<sup>5</sup> J.H. Galloway (1997): 177-194.

<sup>6</sup> D. Ligresti (2006): 320.

During the sixteenth century, the political frame of the 'old continent' - characterized more and more by a condition of 'permanent war' - forced the Spanish Hapsburg to try new administrative forms in order to allow a continuous mobilization of men and financial resources to assign to military engagements. The struggle for the predominance in the Mediterranean engaged the Crown in the formation of only one military Navy constituted by the Spanish and Italian realms fleet<sup>7</sup>.

The second arsenal of Messina because of its small size (its closeness to the Royal Palace did not permit a further expansion) became inadequate for the real needs of the time. It was constituted by six sheds with arcades able to give hospitality to no more than twelve hulls.

During the second half of the sixteenth century the Turkish danger reached its climax. In 1565 a Ottoman fleet of 180 galleys assaulted the island of Malta, new site of the Order of St. John of Jerusalem since 1530<sup>8</sup>. The victory of the Christianity was due, besides the action of the Knights, to the courage of Maltese inhabitants and the aid of a squadron sent from Messina by the viceroy Don Garcia from Toledo.

After the victorious intervention of the Sicilian fleet against the famous Turkish Great Siege of Malta<sup>9</sup>, in the same year 1565, the viceroy ordered to build a new big dockyard in the extreme side of the sickle-shaped peninsula of St. Raineri in Messina, and next to the 'under construction' Fort of St. Salvatore. This area was chosen in order to give the structure important dimensions. The old arsenal was partially demolished to allow some works of restructuring of the Royal Palace.

The Sicilian Parliament in 1561 had already voted an allocation of 39 thousands annual *scudi* to build and to arm six galleys in order to add them to the other ten which were already in service. In the new dockyard the shipbuilding activity developed more and more. The Messinese dockers built not only the galleys of the Sicilian naval fleet, but also the galleys for the Maltese fleet (the Order of St. John's fleet) and for the Spanish fleet. The evidence of the importance of Messina shipyards is showed by the fact that only during the sixteenth century Messinese dockers built the celebrated galleys for the St. John's Order in 1546, 1555, 1571, 1588, 1595, 1597, 1598, 1606, 1625, 1632.

The Order had its own shipyards in Birgu, where since 1554 they built their galleys and which represented one of the most important activities of the island, but all shipbuilding materials had to be imported, adding transportation costs to already-

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<sup>7</sup> On the complex military and political situation of the viceroyalty of Sicily and its dependence on the Crown of Spain see. V. Favaro (2004); V. Favaro (2007).

<sup>8</sup> The deed of donation, dated 23 March 1530, declared that Charles V was granting in perpetuity to the Order of St. John as a fief, noble, free and unencumbered, the Islands of Malta and Gozo, together with the City of Tripoli, and all their castles and fortresses. The Order had only to present a falcon every year on All Saints day. The Emperor reserved the right to appoint to the bishopric of Malta a person of his choice from three learned and pious persons presented to him and his successors by the Grand Master. The Order accepted the donation on 24 April 1530.

<sup>9</sup> A 'new' reading of the famous Great Siege of Malta of 1565 is present in G. Restifo (1988).

high labour expenses on the island, so it was a normal fact ordering a ship to be built elsewhere<sup>10</sup>.

In 1571 the concentration in Messina of the powerful fleet of the Christian League represented reason of merit and pride for the city of the Straits, whose shipyards and arsenals showed their efficiency and were able to satisfy the exigencies of hundred warships belonging to all the Christian navies of the Mediterranean (with the exclusion of the French one), united under the command of the Prince Don John of Austria, natural son of the King of Spain Philip II. The victory of Lepanto and the successive coming back to Messina of the victorious fleet (which brought with it dozens of galleys captured to the 'Infidels') exalted the organizing abilities of the city naval structures, as well as of its skilled workers<sup>11</sup>: those were subjected to work hardly for the patching and the reparation of the numerous unities damaged in battle<sup>12</sup>.

The ship which was more frequently built in the Messinese dockyards, during their golden age, was the galley, the ship considered to be during Modern Age the queen of the Mediterranean<sup>13</sup>. '*Plus qu'un simple instrument de combat, la galère s'impose à tout historien de la Méditerranée comme un personnage historique*'<sup>14</sup>. In a report of 1572 drafted by Battista Roseto, master builder of the arsenal of Messina, it is possible to deduce that the sum to permit a *bucò sottile* was able to sail was about *scudi* 8444.5<sup>15</sup>.

These ships were generally long about 50 meters and 7 meters broad, with 2 meters of draught. Such a short draught permitted to go on easily also along the coast and to set ashore "*per prua*". Galleys secured an easy handling, opposite they were very unstable and subject to serious dangers in case of tempest<sup>16</sup>.

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<sup>10</sup> The galley arsenal at Birgu was sited in the Grand Harbour 'one of the most capacious and finest in the Universe': J. Sandwich (1799): 513. The Order's arsenal was specialized in galley building, but other work was done to repair, modify and overhaul other types of vessels. The transmission of techniques from father to son continued for centuries to the great benefit of local tradesmen.

<sup>11</sup> Among the various activities linked to the arsenal life and involved in the economic development there was the production of hemp. Hemp represented, until the arrival of steel and steam, a strategic good, necessary for the realization of hawsers, riggings and sails. Nevertheless hemp could be used by the ship industry if it presented some characteristics such as medium length, high resistance to traction and torsion and good stretch. The increasing demand of the arsenals, the necessity to enhance the production of fibers able to satisfy the parameters of exigent producers, stimulated the attention of landowners but also of agriculturalists and, sometimes, of the States, who diffused and imposed rules and manufacture practices in order to protect the hemp field from weeds, insects and parasites. See: D. Celetti (2009).

<sup>12</sup> During the kingdom of Philip II for the fitting-out of a big Mediterranean fleet, whose base was in Messina, it was necessary to order wood in Calabria. See: G. Galasso (1992): 218.

<sup>13</sup> For further details on the age of galley see: R. Gardiner (1995); L. Lo Basso (2003).

<sup>14</sup> M. Aymard (1973): 50.

<sup>15</sup> The *galera sottile* was a little bit smaller than the ordinary one: the first presented 22-24 *banchi*, the second one about 26-27.

<sup>16</sup> Together with galleys they were used galliots, brigantines and frigates. During the battle of Lepanto will be used also the galleass. See: V. Favaro (2007): 294.

The visible sheds were sixteen and because of their length it is supposed they were able to receive two or three galleys each, one after the other, on the stocks or under repair.

But this Messinese industrial jewel came to an end in the seventeenth century.

It was in fact dismantled in 1615 by order of the viceroy Duke of Ossuna to give place to the artilleries of the Fort St. Salvatore and the shipbuilding activity dispersed in various smaller dislocations. The end of this arsenal was due to different reasons: the official one was that it was built too close to the Fortress of St. Salvatore disturbing the artillery, moreover this closeness represented a real danger as the enemy could take possession of the arsenal and attack the Fortress. The Messinese citizens instead attributed this demolition to the intrigues of Palermo inhabitants who were their ancient rivals<sup>17</sup>. It is possible the dismantling of the 'New Arsenal' was been influenced by the *Palermitani* antagonists scheming who acted in order to diminish the power of Messina, but there were also serious technical reasons: the building of the galleys in fact were not required like before as this kind of ships was considerate obsolete (and the long sheds of this arsenal could serve only to build them), supplanted by the big sailing ships. The Mediterranean navies counted on galleons and vessels rather than on the traditional rowing ships. The 'old arsenal', the second one, continued to be 'working' and was enough to satisfy the demands of oars ships.

The sixteenth-century cartography gave us the image of a city-port which was one of the most prestigious in the Mediterranean scenery, surrounded with embattled walls, protected in the west by the royal castles, in the east the Fortress of St. Salvatore and by the Montorsoli (Michelangelo's pupil) tower<sup>18</sup> on the St. Raineri isthmus, by the palace-castle in the Terranova area.

According to Nicola Aricò, in the sixteenth-century military perspective and cartography it was not represented the real state of the city but only the 'plan' of its defensive system. Not the city like it was but the city like the authorities 'wished' it was represented. So it was the city-image of a urban icon by which it was possible spreading Messina in the Mediterranean and in Europe, by which showing a 'military engine', its impregnability, the unquestionable stronghold of the solid territoriality of the whole viceroyalty of Sicily. An open harbour which is 'closed' at the same time. Enormous but very sure. Safe refuge in the hell of the Straits<sup>19</sup>.

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<sup>17</sup> The city of Messina enjoyed a large number of privileges. The city tried to preserve its autonomy paying high amounts of money – the so called *donativi* - to the Spanish Crown. The way to get this money was to impose the inhabitants new taxations on consumer goods. See: G. Arenaprimo, (MCMVI): 115-121.

<sup>18</sup> The characteristic tower called the '*Lanterna*' was built by Giovan Angelo Montorsoli as an integral part of the defensive system, in place of the old medieval tower existing in the same spot. An inscription, attributed to Francesco Maurolico, indicates this building was executed in 1555 with the purpose to help the sailors who, at night, could face the terrible whirlpool called '*Calofato*'. See: F. Chillemi (1990): 121.

<sup>19</sup> N. Aricò (2002): 19-88.

But the arsenal in Messina assumed in reality the form of one of the most remarkable city institutions where were exerted the projection and the control of the ruling class; the productive structure – with its offices, its shipyards, its ships – provoked a considerable interest in the city, as the leading class could use it as source of incomes and as centre of power. It also meant to participate – with the decision to build a certain number of boats or a certain typology of ships – in another big business, that is privateering.

The arsenal is integral part of the city and it has always been present in the Messinese historiography, from Giuseppe Buonfiglio Costanzo to Francesco La Farina and Caio Domenico Gallo<sup>20</sup>. The presence of the arsenal showed the power and the strategic importance of the city of the Straits. It could be used as sort of *instrumentum regni* but it represented, at the same time, the force of the workers. The arsenal represented a sort of factory, an embryonic form of industrial organization. It had a double dimension: extra-national and local.

Instrument of defense and instrument of cohesion from below.

*‘Tout le monde était solidaire. Non pas en tant qu’individus vis-à-vis de la collectivité. Mais solidaire de son groupe et chaque groupe solidaire des groupes voisins selon une hiérarchie et un respect de la division du travail qui ne pouvaient changer que très lentement car tacitement admis de tous. La démocratie des cites méditerranéennes était corporative, c’est-à-dire basée sur des spécialisations, et oligarchiques’<sup>21</sup>.*

The importance of the workers’ role was fundamental. In the documentary sources of the *Tavola Pecuniaria* there are a lot of references to the voices related to the expenses, which show the importance assumed by the arsenal in the city economy and the dynamism which it gave to the commercial movement. In these records there are all the payments done to the carpenters, *mastri d’ascia*, workers and *garzuni* who operated in this productive structure. In the arsenal of Messina occurred the entire productive cycle: from the construction of the hulls to that of the rudders, the oars and the foremasts, diversifying the use of various kinds of wood depending on what was necessary. The arsenal needed various skills: they executed iron works, but also painting and carving. In conclusion the arsenal was not only the place where the ships were produced, but it became the centre and the meeting point of qualified and specialized workers who united their technical abilities to the pride of their artistic creativity.

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<sup>20</sup> Among the most important historians of the city of Messina see: G. Buonfiglio Costanzo (1606); G. La Farina (1840); C.D. Gallo (1756-1758) .

<sup>21</sup> For a remarkable interpretation of the concept of ‘arsenal’ see: P. Adam (1980).

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World history. Beginnings - 600 BCE. The Neolithic Revolution and the birth of agriculture. The Neolithic Revolution and the birth of agriculture. The Neolithic Revolution and early agriculture. The dawn of agriculture. The spread of agriculture. Practice: Where did agriculture come from? Early civilizations. Social, political, and environmental characteristics of early civilizations. This is the currently selected item. Practice: Why did human societies get more complex? Practice: Neolithic Revolution and the birth of agriculture. Why did human societies get more complex? Up Next. Why did human societies get more complex? Carmelina Gugliuzzo " Department of History and Human Science " University of Messina - Italy Mediterranean dockyards in the Early Modern Age: the case of Messina The history of a maritime city like Messina, living thanks its strategic position in the Mediterranean, cannot set aside the complex history of its arsenal. In reality an arsenal is a military structure of fundamental importance for every seafaring city, usually protected by walls and fortifications. Arsenals are very complex structures with shipyards destined to build, to repair, to arm and to render "working" the ships of a military fleet. So a maritime arsenal is constituted, besides scales and dry docks, by every kind of workshops, storehouses, warehouses and administration offices. Proposal for the 3rd MMHN Conference Carmelina Gugliuzzo (University of Messina) Mediterranean dockyards in the Early Modern Age: the case of Messina Messina owes its peculiarities to the secular maritime and commercial tradition. PhD in "Economy, Society and Institutions of the Mediterranean Europe; "cultore della materia" in the Modern History (2004) and active member of the Research team on "Confraternities in Southern Italy" within the PRIN Project of the University of Messina.