



Mediterranean Ships and Trade in the Long Nineteenth Century

Game Rules



General Remarks

SeaLiT the game, is fruit of a research project in Maritime History, the ERC STG 2016 project entitled 'Seafaring Lives in Transition, Mediterranean Maritime Labour and Shipping, 1850s-1920s' (SeaLiT). The game is an entertaining and educational journey into the world of maritime history of the Mediterranean and Black Sea during the long nineteenth century, namely from the French Revolution to the World War I as defined by the historian Eric Hobsbawm. In the game players take on the role of shipowners and must develop their business, upgrade their ships, and adapt their strategies to the changing circumstances caused by external factors. While playing the game, players will explore the universe of maritime trade, they will get a feel for its mechanisms and its historical evolution and they will learn more about:

- The main types of sailing ships and steam ships used in maritime trade.
- The important ports of the Mediterranean and the Black Sea in the nineteenth century.
- The important commodities traded during this period.
- The navigation rules that dictated the way ships sailed back in time.
- The mechanisms of shipping industry like demand, freight rates, insurance, ship repairing etc.
- The external factors that affected shipping industry like wars, epidemics, strikes etc

The game includes

- A Map with
 - The logo of the game
 - The High/Low demand table
 - The name of each port
 - The anchor mark of each port
 - The symbols of the products exported from each port
 - A Timeline from 1790 to 1910.
- A Table of Ships with the necessary information on ship types, costs and profits.
- A set of navigation cards (100 pieces)
- A set of extraordinary demand cards (26 pieces)
- A set of ship tokens (120 pieces)
- A set of Pound sterling coins of 5 (30 pieces), 10 (30 pieces), 20 (24 pieces), 50 (24 pieces), 100 (24 pieces).
- A set of agent tokens (24 pieces)
- Bases for the ship and agent tokens (30 pieces)
- Four note blocks
- Two 6 sided dices

¹ "This game is part of a project that has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No 714437)".

Game Rules

The game can be played by 2 to 4 players. Each player is a shipowner and his aim is to overcome his adversaries and become the wealthiest.

The game is extended to a chronological period of 120 years from 1790 to 1910, covering the long nineteenth century. Every year corresponds to one round. Given that the 120 rounds of play may result in a long game, players may choose to play a pre-determined number of rounds and stop at any round they decide among themselves. This also gives the opportunity to start at the game from any year, not necessarily the first one, namely 1790. Thus, indirectly the game offers different scenarios (e.g. The last period of the supremacy of sail from 1790-1830 or the period of consolidation of the steamship, 1880-1910).

There are two ways to determine the winner of the game:

- a) if the rest of the players have gone bankrupt and none of them survives or
- b) if the players decide to finish the game at some point. In this second case, they have to count:
 - i) their money,
 - ii) the value of their ships and (according to the depreciation columns (scrap price) indicated on the Table of Ships)
 - iii) the value of the cargoes their ships are carrying at the moment they decide to finish the game.

To the aggregated sum each player must deduce any still unpaid loans. The player that aggregates the higher sum of the above three assets is the winner.

Port and initial capital settings

At the beginning of the game, each player has to pick randomly one of the Extraordinary Demand cards and find out which of the 26 ports will be his/her commercial base. This never changes during the game.

Each shipowner starts with a capital of 80 £ (British Pounds) and one (1) lateener up to 1830 and with one (1) schooner from 1831 onwards. Ships are divided into ten types of sailing and steam vessels that existed historically from 1790 to 1910. Among these, nine are trading vessels and only one, the privateer, is a corsair vessel intended only for chasing or fighting. All information about the ship types, their costs of purchase, repairs, profits, etc., is indicated in the appropriate Table of Ships. All kind of payments prescribed by the rules of the game are made through the bank, which has to be settled next to the board map and in front of all players. One player has to assume the role of the banker.

Setting the demand, extraordinary demand and ship repairs.

Once all players are settled in their homeports and have taken their 80 £ and 1 lateener or 1 schooner they may start to play. The first thing to do is to determine if the demand of the ten (10) trading commodities enlisted on the board map will be high or low by throwing the dice for each commodity. If the result is between 1 and 3 the demand is low and if between 4 and 6 is high.

Demand changes every five rounds and every time this happens (except the starting round), players also must pay the ship repair expenses of their ships indicated in the Table of Ships. Once demand is fixed, the card of extraordinary demand has to be picked up from the top of the set. This similarly changes every five rounds like the regular demand, and offers the opportunity to the players to earn some higher profits (check the Table of Ships about the exact rate) by transporting a specific commodity to a specified port (e.g. Alexandria, timber) within these five rounds.

Before the ship's departure: cargo, insurance and coal.

Each player is obliged to sail from the port that has been assigned as his/her commercial base only for the first voyage. Afterwards, he/she may continue trading from his/her homeport, or from other ports. In addition, every time a player purchases a new ship he/she has to depart from the port assigned as his/her commercial base in the first voyage. Each player has to load his/her vessel with only one type of commodity (e.g. wine) and no mixed cargoes are allowed. Whenever the port the player is about to load has more than one exporting commodities, he/she may choose among the available

goods, otherwise he/she has to load the only existing commodity. The player is also free to navigate on ballast (without cargo onboard) to another port, if he/she wishes so. When the player is about to load his/her vessel then, before setting sail, he/she must declare what commodity he/she chooses (if more than one exporting commodities are available) and pay the amount required to load it according to the Table of Ships. The player also has to declare if he/she decides to insure his/her ship and, if so, he/she also has to pay the insurance rate according to the type of trading vessel indicated in the Table of Ships. In case of loss, the insurance covers the 50% of the value of cargo and of the depreciated ship value. To find the depreciated value of the ship the player must check the age of the ship and its scrap price in the Table of Ships (e.g. if a ten year old lateener loaded with any commodity is lost, but insured, the player takes back 15 £ for the ship and 10 £ for the cargo). In case of steam ships, players must pay for the coal along with cargo and insurance (optional) before the departure.

Agent

Each player has a discount of 50% when he/she loads cargo from the port assigned as his/her commercial base (e.g. a player pays 20 £, instead of 40 £ to load a brig). If the players want to extend the discount to other ports, they have to pay 70 £, once, for the services of an agent. The appropriate marker of the Agent is then placed on the specific port to indicate this advantage. However, if a second player hires an agent and places him/her on the same port together with another player or on the commercial base port of his/her adversary, then the discount is reduced for each of them to 25%. This means that it is no longer convenient to place three or more agents in the same port. Note that the discount service of an agent lasts for the whole duration of the game and players have no other fees to pay.

Lending and Borrowing

Players may receive a loan from the Bank of minimum 50 to maximum 200 pounds. The interest is 10% for five (5) years and if the player is unable to pay back within this period then he/she can have an extension of (5) five more years with an increase to the interest at 20%. After that, the players must forcibly pay the loan and if they are unable to do so, they bankrupt, unless some other player offers to save them. If they need another bank loan, they must wait for one round after the payment of the previous loan. Players may also lend money to each other, but they have to fix the amount, the interest, the collaterals and the duration of the loan amongst themselves. In case of a disagreement between the lender and the borrower, the other two players not involved in the loan must create an arbitration committee to settle the dispute.

Ports

Once the player has loaded and insured his/her ship he/she may start to navigate to any port he/she wishes to reach. The player has to bear in mind, however, that if he/she wants to sell the cargo, he/she must carry it to a port that has not such a commodity, indicated in its label on the map (e.g. a ship loaded with wine from Chania cannot sell it to ports that also export wine, like Marseille or Malaga, but only to those that do not export this type of commodity). Only in Malta, Syros and Constantinople, which are transit trade ports, players may sell all types of cargo, but they cannot load anything there. They have to leave on ballast to load cargo on other ports.

At each round, players may move all ships they own or may leave some of them idle if they wish so, unless the ships are afloat. In this latter case, the players must necessarily move their ships. Before picking a navigation card, the players must declare which ship they move (e.g. Brig 1 or Paddle Steamer 2) and do so for each of their vessels, if they own more than one vessel during that round. When a player has more than one ship to play and some of them are at port and others at sea, those at sea are always moved first.

Navigation takes place through picking the top placed navigation card. Every navigation card has precise orders for what the players must do. For example, when a gale card is picked, the player, if at sea, stops for a round, does not move further and must check the Table of Ships for the Gale repairs to be paid immediately according to the ship type. If at port, he/she ignores it and draws another card to

continue sailing. When a dead calm card is picked, no type of sailing vessels moves, except of the privateers and the steamships according to the number of movements per type indicated on the card. When a pirate card is picked, if the ship is at port, the player ignores it, but cannot take another card in the same round. This is because the pirates are just outside the port and the player cannot take the risk to sail. If the ship is afloat, based on the navigation card instructions, he/she throws the dice and if the result is between 4 and 6 he/she escapes the danger; if the result is between 1 and 3 he/she loses the ship to the pirates, but gets back 50% of the value of the ship and of the cargo, if insured. When a card that is outdated is picked (e.g. Pirates (1790-1830) and the game is e.g. in the year 1845, the player ignores the card and takes another. When the Requisitioned for Military Use card is picked and there are more than one equidistant ports (e.g. if the ship is within two hexagons of equal distance to Marseille, Livorno and Genova), the player may decide to which port wishes to send his/her ship.

In the same round, each ship can only reach one port and sell the cargo, but the ship has to wait for the following round in order to load and set sail again. Note that the specific speed given by the navigation card at each round for a specific ship type ends when this ship enters a port (e.g. a player picks up a Running Downwind card Barque 3 and his/her ship is two hexagons from the port destination. The ship, once arriving in the port, cannot move further for the same round despite having one more hexagon to advance). However, players can purchase, load, insure and set sail to as many new ships he/she can afford to in the same round. If a player wishes to purchase a new vessel, he/she must declare and buy the new vessel before moving the existing ones. When players buy a new ship they must sign down the year/round of purchase in order to be able to calculate the ship's depreciation rate (scrap price) indicated in the Table of Ships at the end of the game, when players count assets and money to determine the winner. Note that players may purchase specific ship types (e.g. paddle steamer) only between the years indicated in the table of ships (e.g. for a paddle steamer 1830-1860, they cannot buy it before 1830 and after 1860).

Once the player reaches a port, where is allowed to sell its commodity, he/she immediately receives the amount assigned in the Table of Ships according to the current state of demand for the commodity the ship carries, namely high or low. In case a player reaches a port

carrying a commodity that corresponds to extraordinary demand he/she is paid the amount prescribed to the extraordinary demand Table of Ships regardless if the commodity is high or low.

Fighting

The only vessel that can engage in battle is the privateer against either trading vessels or enemy privateer. Trading vessels never attack other ships. A privateer may attack a trading vessel or another privateer only while afloat and never when the enemy vessels are at port. When the privateer attacks a trading vessel, the player who owns the privateer throws the dice and if the result is between 4 and 6 he/she captures the trading vessel and replaces it with the same ship type of his/her own colors, but if the result is between 1 and 3 the trading vessel escapes capture. The player who captures a trading vessel can also carry the cargo of the captured ship to a port and sell it. If in the meantime the ship sinks, its insurance is not valid to the new 'owner'. Instead, the player that has lost the trading vessel to a privateer is allowed of insurance indemnity for ship and cargo. Note, that a privateer cannot be insured. In the case of a privateer attacking another privateer, the player who attacks throws the dice and if the result is between 4 and 6 he/she captures the other privateer, if between 1 and 3 his/her own privateer is captured.

Summary of sequence of the actions

1. Choose the year you want to start the game
2. Select a player as a banker
3. Choose randomly a homeport from the extraordinary demand cards for every player
4. Get your ship and 80 pounds from the bank
5. Set the demand, the extraordinary demand and the repairs for five rounds (repairs are not paid on the first round, when the ships are new) and repeat this every five rounds
6. Pay for loading cargo, for insurance (not compulsory) and coal (if steamship) of the ship
7. Take a navigation card to sail
8. Upon arrival at a port sell your cargo and receive the money from the bank

Map Credit

Processed on a map of the Mediterranean Region created by Frances Bowen in 1810 (David Rumsey Historical Map Collection, www.davidrumsey.com)

Navigation Cards Credits

- Dead Calm: Ange-Joseph-Antoine Roux -The French brig Nouvelle Adeline preparing to set sail to Smyrna (1826) (Wikimedia Commons)
- Close Hauled: William Clark - A British topsail schooner (1833) (Wikimedia Commons)
- Beam Reach: Unknown-Spanish corbeta (barque) Habana (Courtesy of Maritime Museum of Barcelona)
- Broad Reach: Unknown-Greek brig Kalliopi of Captain Koutsodontis (Greek Merchant Ships. Seamen's Pension Fund Centenary Edition, plate 28).
- Running Downwind: Nicolas S. Cammillieri- Ship Portland, 1834 (Wikimedia Commons)
- Gale: Frederick Tudgay - A dismasted ship riding out the gale, 1861 (Wikimedia Commons)
- Fire: Samuel Walters- Ocean Monarch, 1848 (Wikimedia Commons)
- Shipwreck: William Bradford- Shipwreck off Nantucket, 1860-61 (Wikimedia Commons)
- Pirates: Nils Simonsen- Seegefecht 1844 (Wikimedia Commons)
- Blockade/Visit: Thomas Buttersworth-Nelson's Inshore Blockading Squadron at Cadiz, July 1797 (Wikimedia Commons)
- Epidemic Disease: Cholera Quarantine at Marseilles, (Illustrated London News, 1884, p. 28)
- Requisitioned for Military Use: Temple, R.; Clark, I.; William Haines, William- Upton Castle at Ile de France 1810 (Wikimedia Commons)
- Crew Insubordination: Sailors 1854, published in the Illustrated London News in early 1854 (Wikimedia Commons)
- Dock Workers Strike: Engaging Dock Labourers at the West India Docks, 1886 (Illustrated London News, 1886)
- Mutiny: Hablot Knight Browne- Mutiny on the Bounty (Wikimedia Commons)
- Damaged Engine and Boilers: SS Humboldt engine room, Harper's New Monthly Magazine, No. XII, May 1851, Vol. II (Wikimedia Commons)
- Seamen's Desertion: Designed by Korina Doerr.

Companion to the game

Navigation points

Close-hauled

A sailing craft is said to be sailing close-hauled (also called beating or working to windward) when the craft's course is as close to the wind as allows the sail(s) to generate maximum lift. This point of sail lets the sailing craft travel diagonally to the wind direction, or 'upwind'.

Beam reach

When the wind is at a right angle to the sailing craft, this is called beam reach.

Broad reach

In a broad reach, the wind is coming from behind the sailing craft at an angle. This represents a range of wind angles between beam reach and running downwind.

Running Downwind

On this point of sail (also called running before the wind), the wind is coming directly from behind the sailing craft. In this mode, the sails act in a manner substantially like a parachute.



*The port of Marseille 1886 by Hugo D'Alesi
(Archives of the CCIM)*

Ports

The twenty six ports on the map are among the most important hubs of sea trade in the Mediterranean and the Black Sea during the nineteenth century. Far from being exhaustive, this selection of ports offers a representative picture of the maritime communications and trade of the period. The criteria for the selection of the specific ports were historical and practical. Namely, the specific ports were selected: a) on the basis of their historical development and role in the trade routes of the nineteenth century and b) their position on the map in order to cover the whole playing area if possible. Ports like Malta, Syros and Constantinople had predominantly a transit character and this is why, in contrast to the rest of the ports in the game, ships are allowed to sell all types of goods there. On the other hand, very often ships had to leave on ballast from these ports and seek cargo elsewhere. Ports like Venice, too close to the most developed port of Trieste were not included. Instead, Ragusa/Dubrovnik in the middle of Adriatic as well as Alicante, Larnaca, Trabzon and Patras were selected not only because of their importance as ports, but also as intermediate connecting points of regional trade between greater ports.



*Cotton bales on docks of the port of Barcelona around 1900
(Courtesy of Maritime Museum of Barcelona)*

Commodities

The ten commodities selected were among the most significant types of goods in demand during the period. Raw materials like cotton, wool, iron and timber were destined for the manufacture and industry; along with them mass consumption goods like cereals, colonial goods, tobacco, olive oil, wine and manufactured products, formed the great majority of cargoes in the Mediterranean and Black Sea. For the sake of convenience, other types of commodities were omitted. However, the ten selected commodities in combination with the ports from where they were exported offer a comprehensive picture of the exchanges between areas with different levels of industrialization.

Companion to the game

Ship types

Included in the game are ten types of seagoing vessels, nine commercial and one privateer intended for corsairing activities. Six out of ten are sailing vessels, including the most widespread types of the period 1790-1910, which represent the evolution of the merchant sailing ship in hull, rigging and size. The four types of steam powered vessels also represent the stages of technical evolution of the steamship from wooden to iron and steel hull, from paddle wheel to screw propeller and from low-pressure engines to compound and to triple expansion engine. All these developments made the steamship, bigger in size and more economical in operation. See below a list with a short description for each ship type:



Privateer

is a term referred to sailing vessels equipped for corsairing activities. The most representative type of privateer vessels in the Mediterranean was a combination of sails and oars such as chebec or galiota.

The Pinco Conception in Battle with Xebec Le Volcan, 1804, by Nicolas Cammilleri (detail) (Wikimedia Commons)



Lateener

is referred to sailing vessels carrying the lateen sail, a triangular sail, attached to a long yard. The lateen sail was the most popular rig either for coasters or in larger vessels in the Mediterranean from Middle Ages to the Modern era, its main quality being sailing better windward. Among the most common Mediterranean ship types that fall under this broader category were pinque, tartane, chebec and martingana.

Ottoman-Greek lateener Panaya tis Ydras owned by Nikolaos Tombazis 1791 (<http://users.sch.gr/akalant/1821/gallery/e204.htm>)



Schooner

The schooner in its conventional style of rigging is referred to a two masted vessel equipped with gaff sails on both masts and different jibs on the bowsprit. An altered version of the conventional style of schooner was the topsail schooner. That means the addition of one or two square sails, and sometimes a topsail to each mast. The schooner in the Mediterranean is related to a vessel called goelette in French, goleta or scuna in Italian and γολέτα or σκούνα in Greek. *Greek Schooner Therpsicore, belonging to Manolis and Nicolas Tombazis from Hydra, built in 1819 (Wikimedia Commons)*



Brig

The term brig is an abbreviation of brigantine and is referring to a rigging fashion on two masted vessels, equipped with square sails on both masts, gaff sail on the main mast and jibs on bowsprit. Very similar to brig was snow, its main difference being that the later carried a removable trysail mast. The tonnage of brigs varied between vessels under 100 tons and sometimes over 500 tons, the average being between 200 to 300 tons.

Sardinian Brig San Prospero owned by Biagio Simonetti in Malta 1858 (http://www.agenziabozzo.it/antichi_velieri/ZZ_VELIERI/Dipinto_014_SAN_PROSPERO_brigantino.htm)



Barque

In the nineteenth century barque or bark is a type of rig of large three masted vessels, with square sails on the fore and main masts and fore and aft sails (gaff) in the mizzen, called barko or gabara by the Greeks and brigantino a palo, scippe or barck scipp by the Italians.

Italian Barque Giovanni,

Captain Fortunato Bertolotto, 1861 (http://www.agenziabozzo.it/antichi_velieri/ZZ_VELIERI/Dipinto_035_GIOVANNI_brigantino_a_palo.htm)



Ship

The term is used to define any kind of a sea vessel, merchantmen or men-at-war, but also it is used to define the full rigged ship, that is the ultimate development of rigging in sailing ships since the 16th century. Full rigged ship, called also three-masted ship or simply ship, is a three-masted vessel with square sails in the fore and mainmast, a fore and aft sail in the mizzen, with square topsails, plus some additional fore and aft and square foresails and staysails. Practically the entire combination of existing sails.

Spanish Ship Marcelino Jane

(Courtesy of Maritime Museum of Barcelona)



Paddle Steamer

is referred to steam powered vessels driven by lateral paddle wheels. These type of steamers were initially wooden and later iron hulled and were the first type of steam ships developed from the beginning of the nineteenth century.

Steamship Egitto

of the company Austrian Lloyd (http://www.agenziabozzo.it/vecchie_navi/B-Vapore/)

Navi_1850-1950_B509_EGITTO_nave_passeggeri_ruote_a_pale_Lloyd_Austriaco.htm)

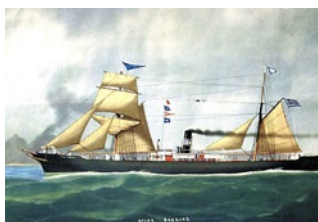


Screw Steamer

were the steam ships that carried a propeller or a screw as a means of propulsion. This type of propulsion developed after the widespread use of paddle wheels and gradually from the middle of the nineteenth century superseded the paddle driven vessels. The use of screw was better suited to iron hulled vessels.

Steamship Duero

of the company Pablo M. Tintore y Cia (Courtesy of Maritime Museum of Barcelona)



Screw Steamer Compound Engine

this type of engine patented in 1853 in Glasgow by John Elder replaced the previous types of engines as more compact and economic one. In this type of engine, the steam expanded in at least two stages in two cylinders, a smaller one with higher pressure and a larger one of lower pressure.

Greek Screw Steamer with Compound Engine Agios Vlassios

(Unknown-Greek Merchant Ships. Seamen's Pension Fund Centenary Edition, 1861, plate 145)



Screw Steamer Triple Expansion Engine

based on the same principle of the compound engine, was the ultimate development of marine engine built in 1881 by Alexander C. Kirk. In the triple expansion engine, the steam was subject to three stages of expansion in a cylinder of high pressure, then a larger one of intermediate pressure and the largest of low pressure.

Greek Triple Expansion Screw Steamer Georgios Michalinos

(<https://www.wrecksite.eu/wreck.aspx?140289>)



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