

Oceanic deaths aboard the Manila galleons

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Abstract

In the present investigation we aim to make an approach to some aspects concerning life aboard the Manila Galleon (from the 16th to the 19th centuries), such as diseases, death and burial of bodies, the psychology of the crew in face of these facts, etc. All with the aim of contributing to a better knowledge of the life of the crew and the passengers on one of the most complex and long-lasting sea trade routes that have ever existed in the Modern Age.

Keywords: Manila Galleon, *Tornaviaje*, Acapulco, Life Aboard, Marquis of Ovando

Introduction

The present text focuses on an event that happened quite often on the Manila Galleon trade route: the death of some, sometimes many of its passengers, especially during the *Tornaviaje* (return journey) from Manila to Acapulco. There are several cases that we have been able to collect as examples during the course of our investigation. One of these cases is particularly significant based on the importance of the person involved in it. We refer to the death of Don Francisco José de Ovando y Solís, marquis of Ovando, in 1755, who was on his way back to Spain after having served as Governor and Captain General of the Philippines from 1750 to 1754. Through the analysis of this case and similar others we aim to approach the way in which death was confronted in one of the hardest and oldest overseas communication routes in History.

A hard and long journey: the trans-pacific galleon

Both the Acapulco-Manila outward route (which set sail in the month of April) and the Manila-Acapulco return route (which set sail in the month of June) were long and full of difficulties. More than 2000 leagues were covered from Acapulco to Manila. The *Tornaviaje*, which was longer, used to take about five or six months. Although in 1724,

the *La Sagrada Familia* galleon took nine months to complete the voyage (Luque Talaván, 2013: 64). In such a long journey, diseases were very frequent, with scurvy being very common and one of the diseases that claimed more casualties. This feared illness, of which nineteen crew members of the Fernando de Magallanes – Juan Sebastian Elcano journey (1519-1522) were the first casualties in the Pacific, used to appear in about two or three months from the beginning of the route due to the lack of vitamine C (Pigafetta, 1988: 61-62)¹. One of the ships of the expedition lead by Miguel López de Legazpi, the famous patache *San Lucas*, would reach the novohispanic port of La Navidad in 1565 after a very hard voyage: lack of water and supplies, scurvy and an attempted revolt aboard that ended with two men thrown into the sea as a measure of punishment and to set an example. Even at the late date of 1806, the *San Andrés* galleon suffered the loss of thirty six men due to the scurvy (Carrera Stampa, 1959: 104-105; Schurtz, 1992: 207, 241-242; Veyrat, 1995: 186; Vas Mingo and Luque Talaván, 2002: II, 603-618).

Judging from the preserved testimonies, the journey, especially from Manila to Acapulco, was very harsh; which caused great mortality (Cruz, 1962: 139-141)². The severity of this navigation is attested by, for example, the statements of father Pedro Cubero Sebastián dated to the 17th century (Cubero Sebastián, 1680, chapter XLV); or the ones made by the Italian passenger Giovanni Francesco Gemelli Careri, who took the mentioned journey from 1697 to 1698 and left the statements written in his renowned *Giro del Mondo*³.

Health issues aboard

Health issues aboard the Manila Galleon were similar to those given in the West Indies Fleet. Thus, to diseases that might appear on journeys across the Pacific like colds and other lung conditions arising from the ascent towards the north in order to avoid the

¹In this same expedition travelled a surgeon and three barbers, of whom only one survived (Pollak, 1973: 231). Domingo Galán Ahumada has transcribed the list of products of which the expedition first aid kit consisted of, see: Galán Ahumada, 1988: 16-18.

²In regard to the voyagem see: Schurz, 1919: 632-638; Cruz, 1962: 97-118; Velázquez, 1968: 159-178; García de los Arcos, 1996: 175-180; Yuste, 2000: 139-150.

³In recent days a new study about Gemelli Careri's work has been published: Bernabéu Albert, 2012: 229-317.

trade winds; several types of dermatitis, the already mentioned scurvy, dysentery, etc. we need to add the ones transmitted by mice and insects (Veyrat, 1995: 186, Nussio, 2001: 106). Many of the aforementioned diseases were contracted or made worse due to the weakness of the passengers and the crew, which had its origin in sudden changes of temperature, along with undernourishment or lack of hygiene. Diet was, for most people, poor in variety and quality; consisting mainly of biscuits made from bran, salted fish and meat, and some legumes. Big quantities of water that tended to go bad a few weeks after having boarded and was strictly rationed⁴, and wine were stored in clay pots in order to drink (Pérez-Malláina Bueno, 1992: 152; Nussio, 2001: 103-104). Due to their importance, provisions in the Manila galleons were under the care of a master of provisions and rations, a cook, a storekeeper and a waterkeeper (Lorente Rodrigáñez, 1944: 112-113; Carrera Stampa, 1959: 103).

Meanwhile, prophylaxis was almost non-existent. The limited space of the ships resulted in overcrowding and, along with it, in the accumulation of waste and odours coming from stagnant water in the holds, excrements, stored food and body effluvia, that rarefied the atmosphere aboard. This became a breeding ground for numerous infectious-contagious diseases. To gain a clear understanding of the problem, it should be taken into account that there were between four and six hundred people in each ship, passengers and crew combined (Lorente Rodrigáñez, 1944: 113; Landín Carrasco, 1978: 68; Pérez-Malláina Bueno, 1992: 139-148; Veyrat, 1995: 176). Another important matter in these sailings was the psychological suffering that came from the fear and the mental exhaustion of people obliged to live in the limited space of the ships, under dangerous circumstances and with no sign of land for months. This situation kept happening well into the 19th century on the sailing ships en route between Cadiz and Manila. Furthermore, this situation could cause all sort of conflicts and arguments among the members of the crew and the passage (Fernández Palacios, 2011: 111-119).

⁴For example, the *San Diego* transported fifty five barrels of water —the equivalent of 24000 litres—; valid for a month of self-sufficient navigation (Veyrat, 1995: 182). Several large clay pots where the precious liquid was stored have been found in the wreckage of the ship, some of which are exhibited at the Naval Museum of Madrid (Spain), See: VV.AA., 2000: 260-261.

The ships that made the trans-pacific route were not always provided with the services of a qualified health professional. Surgeons, doctors, pharmacists or barbers were taken on board many times only on the condition that they owned a well-stocked medicine chest. In each case, these persons had to face the medical emergencies resulting from the previously described diseases or from the accidents that tended to happen aboard the ship bruises after sudden swerves of the ship, blows from the sea, falls from the yard arm, etc (Veyrat, 1995: 186-187; Vas Mingo and Luque Talaván, 2002: II, 603-618). The naval health staff's medicine chests from the 16th and 17th centuries were mainly stocked with remedies of vegetable origin that were applied by using the language of those times *anointings, rubbings, garglings and fumigations, antidotes, syrups and purgatives* (Ballesteros et al., 1947: 521-523; Zúñiga Cisneros, 1978: 381-382; Veyrat, 1995: 186-187; Schaedel, 2000: 433; Gracia Rivas, 2006: 167-185). In addition to these medicines, health staff had tools such as saws, trepans, bandages, dressings, mortars and pestles in order to crush powders and prepare ointments, weighing scales to calculate dosages, funnels, palette knives, spoons, braziers to warm up preparations, etc⁵. The preferred methods to alleviate the patients' diseases or *humors* were purging by means of enemas and syringes and bloodletting performed in the arms, sometimes on an ongoing basis, which instead of relief could cause the hastening of the death of a weak patient. These practices, as well as surgical operations, were performed at the bottom of the main mast; close the ship's centre of gravity, in order to achieve the maximum possible stability to perform such delicate procedures.

Medical attention in the ports of Manila and Acapulco

Although health measures were taken on board, these were not always effective and either the patient died, or he reached the port of destination in a precarious state of health. For the latter case, two hospitals were built: one in Manila and another one in Acapulco. The one known as Hospital de las Naos del Comercio was built in Manila in 1625. The only information of its existence is provided by Díez de la Rosa, who says that

⁵Several objects that must have belonged to a surgeon have been found in the wreckage of the *San Diego* galleon, such as a small golden porcelain jar for ointments, two big containers made of the same material, weighing scales lead weights in conical shapes and a bronze mortar (Veyrat, 1995: 186-187).

its function was to give assistance to the crew of the merchant ships of the Philippines. The aforesaid hospital was funded by the Real Patronato, which set aside 1000 pesos per year for its maintenance. Francisco Guerra Pérez suggests that such amount was intended to pay the stay of the merchant ship sailors in the Hospital Real de Manila - founded in 1571- therefore raising the question of the existence of a specific Hospital de las Naos del Comercio (Guerra [Pérez], 1994: 548)⁶. Meanwhile, in Acapulco, the health facilities in which the crew and passengers that arrived sick to the novohispanic port were taken care of was the Hospital de Nuestra Señora de la Consolación, founded in 1570. Supported with the income of the Real Patronato, a two percent rate on the goods from the Philippines was used for its repair in 1651. At the beginning of the 18th century the Hospital gave assistance to numerous sailors and soldiers of the Fort of San Diego so, in practice, it was a military hospital. For this reason, those in charge - the Brothers of Charity first, and the Real Caja de Acapulco later - received two *reales*, later increased to three, for each sailor's or soldier's convalescence (Guerra [Pérez], 1994: 262-263; Luque Talaván, 2008: I, 397-398)⁷.

In addition to the port of Acapulco, the galleons anchored occasionally, and between the end of the 16th century and the beginning of the 19th century, in several locations of Baja California - like the Mission San José del Cabo -, as well as in the ports of San Blas, La Navidad or Barra de Navidad, Manzanillo and Zihuatanejo. The progressive development of this network of small ports of anchorage to support the navigation of the Manila galleon also served the purpose of the Crown of consolidating its presence in such a vast region, especially during the troublesome - from a warlike point of view - 18th century⁸. In this regard, it should be noted that the first land that the ships on the Manila-Acapulco route spotted in months was the coast of California, where they could replenish provisions. *“The journey of the Nuestra Señora del Rosario in 1706 can be considered to be representative. It set sail from Manila on July 6, it left behind the*

⁶In Manila, during the 16th century, there was a scarcity of doctors, pharmacists and medicines (García-Abásolo [González], 2000: 202). In regard to the Army health facilities on Philippine soil, see: Clavijo y Clavijo, 1944: 289-306; Clavijo y Clavijo, 1950a: 383-Ss; Clavijo y Clavijo, 1950b; Casero Nieto, 1985: 101-124.

⁷Francisco Santiago Cruz tells how the Manila galleons used to leave some of those gravely ill in the Jesuit Mission San José del Cabo, located on the southern end of Baja California. After the expulsion of the Order in 1767, the mission was abandoned (Cruz, 1962: 141).

⁸The following book is very useful: Pinzón Ríos, 2011.

*Embocadero*⁹ on August 3, it crossed the meridian of the Marianas on September 29, it found “signs”¹⁰ on November 16, it sailed past Cabo San Lucas on December 4 and entered the port of Acapulco on December 20, after a journey of five months and fifteen days” (Schurtz, 1992: 240).

Religious practices on the high seas: oceanic death and burials

The issue of death on the sea is deeply related to the sailors’ and passengers’ devotions and religious practices, who were obliged to use this uncertain means of transportation. Orations, prayers, ex-votos, rituals, faiths and legends are plentiful in this transport. These questions have been addressed very efficiently by specialized historiography, for different ages and geographical spaces (Gil Muñoz, 2004; Ferrer Albelda et al., 2012). We are only going to address then the issue of death and burial on the high seas of the members of the crew and passengers that died during the course of the navigations. For example, the 1606 galleon registered a total of eighty deaths during its journey; while the 1629 galleon only had five deaths. A very tragic case is that of the *San José*, which was found drifting in 1657, a year after it set sail from Manila, with all its crew and passengers dead. In 1678, father Cubero Sebastián made the journey to Acapulco aboard the *San Antonio de Padua* galleon, where only a hundred and ninety two men out of the four hundred who left Manila arrived alive. Just on the journey between the coasts of California and Acapulco he officiated at a hundred and ninety two funerals (Cubero Sebastián, 1680: 321-339; Schurtz, 1992: 241-242). The ceremonial followed in these occasions was very simple for the sailors, whereas a more elaborate funeral could be arranged for distinguished people. The bodies, wrapped in a shroud, were weighed down with stones or water pots (Tempère, 2002: 115-116). It is not hard to imagine the terrible feeling that the death of their colleagues might cause among the persons embarked.

The oceanic death of the marquis of Ovando (1755)

We could mention innumerable examples of all of the aforesaid until now. In this regard, documentation is well explicit, but we will only focus on one of them¹¹: the death of the

⁹Particular reference is made to the Embocadero of San Bernardino [Strait of San Bernardino].

¹⁰Natural signs that indicated the proximity of the American coast.

¹¹In the Archivo General de Indias, we have been able to locate one of them. For example, that referred to the death of the Bishop of Troas, Friar Ginés de Barrientos (OP), aboard the *Nuestra Señora del*

marquis of Ovando, who died aboard *the Santísima Trinidad y Nuestra Señora del Buen Fin* galleon during the return journey to Spain across New Spain. The large ship left Manila on July 23rd 1755 commanded by the marquis of Villamediana. The diseased and casualty statistics are highly significant: twenty sick persons on October 1st, sixty on November 30th, eighty on December 24th, one hundred and two on January 4th 1756; one hundred and fifty on the 13th of the same month. On February 1st, two hundred sick persons were disembarked in Cabo San Lucas, at the southern end of the Baja California peninsula, and left to the care of the Jesuits of Mission San José del Cabo. Out of the four hundred and thirty five crew members that initially left Manila, eighty two died on the high seas. The cause of such many deaths was a *tabardillo* or typhus epidemic outbreak that made a significant dent in great part of the members of the crew and passengers. William Lytle Schurtz notes that upon arriving in Acapulco, the ship had no more than twenty seven men able to stand on their own feet.

It was a thankless journey for Ovando since, in addition to the terrible disease and its fatal outcome he suffered the loss of his infant son, Ignacio José Camilo, on August 5th born aboard the ship on July 29th. Ovando fell ill on August 16th. On December 6th he was brought the Viaticum. Finally, death took him on December 9th, 1755 when the ship was sailing on the same latitude as the Gulf of California, in whose waters, following the seafaring tradition, he was laid to rest (Ortiz de la Tabla Ducasse, 1974: 241-242; Zárate Toscano, 2000: 418). Before his death, he was able to make his will; a document rich in information in which he wanted to leave his earthly and spiritual matters sorted out. Among the aspects related to his burial, Ovando ordered to be shrouded in the habit of St. Francis, to whose Third Order he belonged; to have his heart extracted in order for it to be placed inside a reliquary at the foot of the Nuestra Señora del Buen Fin statue in the convent of Santa Clara in Cáceres (Spain), and to have masses celebrated for the eternal repose of his soul. Ovando's firstborn son, José Francisco, II marquis of Ovando¹², unable to comply with the request relating to his father's heart, ordered a

Rosario, San Francisco Javier y Santa Rosa galleon, in 1698 – Archivo General de Indias (Seville), Filipinas, 119, N. 4-.

¹² He himself born aboard *the Nuestra Señora del Rosario* galleon on April 15 1750, on his parents' outward journey from Acapulco to Philippines (Zárate Toscano, 2000: 418).

golden heart to be made so it could replace that of his father's and be placed in the location stated in his will (Ortiz de la Tabla Ducasse, 1974: 242-243).

Final thoughts

The aforementioned Gemelli Careri's words in relation to the oceanic voyage may serve as a good summary of what has been said above: *"The voyage from the Philippine Islands to the American continent can be considered the longest and hardest that exists worldwide, not only because of the vastness of the ocean to be crossed, almost half of the globe, against the headwinds, the storms that take place in it, one after the other, and the diseases that afflict the people on board for seven or eight months, remaining for a long period of time close to la Línea, sometimes in the cold, sometimes in temperate weather, sometimes in warm weather, which is sufficient to wreck a man as tough as iron, and much more a man of flesh and blood, who during the navigation is not fed very well (...)." (translated from: Schurtz, 1992: 233).*

In short, what we have intended is to point out, with several examples, some of the aspects related to life aboard the Manila galleon, contributing to delve deeper in the understanding of a sea route that is still in need of new studies of the many aspects that compose it.

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References

- Ballesteros Gaibrois, M. R., Santaella, D., Espinosa Navarro., 1947. Aportaciones de los médicos y farmacéuticos españoles a la obra de España en América. *Anuario de Estudios Americanos* (Sevilla), Vol. 4: 521-578.
- Bernabéu Albert, S., (coordinador), 2012. Dossier: los trabajos y los días en el Galeón de Manila: el relato de Gemelli Carreri. *Anuario de Estudios Americanos* (Sevilla), Vol. 69 (1): 229-317.
- Carrera Stampa, M., 1959. La nao de la China. *Historia Mexicana* (México), Vol. 9 (1): 97-118.
- Casero Nieto, J. A., 1985. Hospitales y enfermerías navales en las islas Filipinas durante la colonización española. *Revista de Historia Naval* (Madrid), Vol. 9: 101-124.

Clavijo y Clavijo, S., 1950a. *La Orden hospitalaria de San Juan de Dios en la Marina de guerra de España: Presencia y nexos IV centenario de la muerte del Santo Fundador 1550-1950*. [S.n.], Madrid.

Clavijo y Clavijo, S., 1950b. *La obra de la Orden Hospitalaria de San Juan de Dios en América y Filipinas*. Artes Gráficas Arges, Madrid.

Clavijo y Clavijo, S., 1944. *La trayectoria hospitalaria de la Armada española*. Consejo Superior de Investigaciones Científicas, Instituto Histórico de la Marina, Madrid.

Cruz, F. S., 1962. *La Nao de China*. Editorial Jus (figuras y episodios de la historia de México), México, D.F.

Cubero Sebastián, P., 1680. *Breve relación, de la peregrinación que ha hecho de la mayor parte del Mundo Don Pedro Cubero Sebastián, Predicador Apostolico del Assia, natural del Reyno de Aragon; con las cosas mas singulares que le han sucedido, y visto, entre tan barbaras Naciones, su Religion, Ritos, Ceremonias, y otras cosas memorables, y Curiosas que hà podido inquirir; con el viage por tierra, desde España, hasta las Indias Orientales. Escrita por el mismo Don Pedro Cubero Sebastian*. Por Iuan Garcia Infançon, Madrid.

Fernández Palacios, J. M^a., 2011. De la aventura incierta al placer de viajar en el siglo XIX: la evolución de las comunicaciones navales entre España y Filipinas a través del relato de los viajeros. *Revista Española del Pacífico* (Madrid), Vol. 24: 101-131.

Ferrer Albelda, E., M^a C. Marín Ceballos, Á. Pereira Delgado., (coordinadores), 2012. *La religión del mar. Dioses y ritos de navegación en el Mediterráneo antiguo*. Universidad de Sevilla, Secretariado de Publicaciones (Spal monografías; 16), Sevilla.

Galán Ahumada, D., 1988. *La farmacia y la botánica en el Hospital Real de Marina de Cádiz*. Editorial Naval (Hombres, hechos e ideas; XX), Madrid.

García de los Arcos, M^a F., 1996. *Forzados y reclutas: Los criollos novohispanos en Asia (1756-1808)*. Potrerillos Editores, México, D.F.

García-Abásolo [González], A. [F.], 2000. Formación de las Indias orientales españolas. Filipinas en el siglo XVI. In L. Cabrero Fernández (coordinador), *Historia General de Filipinas*, Ediciones de Cultura Hispánica (Historia): Agencia Española de Cooperación Internacional (Ministerio de Asuntos Exteriores), Madrid: 171-205.

- Gil Muñoz, M., 2004. *La vida religiosa de los mareantes. Devociones y prácticas*. Ministerio de Defensa, Secretaría General Técnica : Instituto de Historia y Cultura Naval, Madrid.
- Gracia Rivas, M., 2006. La Sanidad naval española: De Lepanto a Trafalgar. *Cuadernos de Historia Moderna. Anejos* (Madrid), Vol. 5: 167-185.
- Guerra [Pérez], F., 1994. *El hospital en Hispanoamérica y Filipinas 1492-1898*. Ministerio de Sanidad y Consumo, Secretaría General Técnica, Madrid.
- Landín Carrasco, A., 1978. *Mourelle de la Rúa. Explorador del Pacífico*. Ediciones Cultura Hispánica del Centro Iberoamericano de Cooperación, Madrid.
- Lorente Rodríguez, L. M^a., 1944. El Galeón de Manila. *Revista de Indias* (Madrid), Vol. 15: 105-120.
- Luque Talaván, M., 2013. Océano Pacífico, océano de intercambios. In Varela, J.; A. Gutiérrez; M. Luque; A. Reséndez, *De La Florida de Ponce al Pacífico de Balboa (1513-2013)*, Ayuntamiento de Valladolid: Fundación Consejo España-EE.UU: Centro de Estudios de América (Casa Colón): Universidad de Valladolid, Seminario Iberoamericano de Descubrimientos y Cartografía, Valladolid: 59-82.
- Luque Talaván, M., 2008. Galeón de Manila. In L. Cabrero Fernández; M. Luque Talaván; F. Palanco Aguado (coordinación y dirección), *Diccionario histórico, geográfico y cultural de Filipinas y el Pacífico*, Agencia Española de Cooperación Internacional para el Desarrollo (Ministerio de Asuntos Exteriores y de Cooperación de España): Fundación Carolina, Madrid: Vol. I, 397-398.
- Nussio, E., 2001. Vida y muerte en los viajes a las Américas, durante el siglo XVI. In E. Martín Acosta; C. Parceró Torre; A. Sagarra Gamazo (compiladoras), *Metodología y nuevas líneas de investigación de la Historia de América*, Servicio de Publicaciones, Universidad de Burgos, Burgos: 103-114.
- Ortiz de la Tabla Ducasse, J., 1974. *El Marqués de Ovando, Gobernador de Filipinas (1750-1754)*. Consejo Superior de Investigaciones Científicas, Escuela de Estudios Hispano-Americanos, Sevilla.
- Pérez-Mallaína Bueno, P. E., 1992. *Los hombres del Océano. Vida cotidiana de los tripulantes de las flotas de Indias. Siglo XVI*. Sociedad Estatal para la Exposición Universal Sevilla 92 : Servicio de Publicaciones de la Diputación de Sevilla, Sevilla.

- Pigafetta, A., 1988. *Primer viaje alrededor del globo*, Ediciones Grech, Madrid.
- Pinzón Ríos, G., 2011. *Acciones y reacciones en los puertos del Mar del Sur. Desarrollo portuario del Pacífico novohispano a partir de sus políticas defensivas, 1713-1789*. Universidad Nacional Autónoma de México, Instituto de Investigaciones Históricas (Serie Historia Novohispana; 87) : Instituto Mora, México, D.F.
- Pollak, K., 1973. *Los discípulos de Hipócrates. Una historia de la Medicina*. Círculo de Lectores, Barcelona.
- Schaedel, R. P., 2000. La nueva farmacopea. In *Historia General de América Latina. Volumen II. Director del volumen: Franflin Pease, G.[arcía]-Y.[rigoyen]. Codirector: Frank Moya Pons*, Ediciones Unesco: Editorial Trotta, París: 433-451.
- Schurt, W. L., 1992. *El Galeón de Manila*. Estudio introductorio, notas y bibliografía de L. Cabrero [Fernández]. Traducción al español de P. Ortiz Armengol, Ediciones de Cultura Hispánica, Madrid.
- Schurz, W. L., 1919. The Voyage of the Manila Galleon from Acapulco to Manila. *Hispanic American Historical Review* , Vol. 2 (4): 632-638.
- Tempère, D., 2002. Vida y muerte en alta mar. Pajes, grumetes y marineros en la navegación española del siglo XVII. *Iberoamericana* (Berlín), Vol. 5: 103-120.
- Vas Mingo, M. M. del; M. Luque Talaván., 2002. Medicina y terapéutica medicamentosa en las navegaciones transpacíficas del Galeón de Manila (1565-1815). Notas para su estudio. In F. A. Antón Burgos; L. Ó. Ramos Alonso, *Traspasando fronteras: el reto de Asia y el Pacífico*, Asociación Española de Estudios del Pacífico: Universidad de Valladolid, Centro de Estudios del Asia, Valladolid: II, 603-618.
- Velázquez, M^a del C., 1968. La navegación transpacífica. *Historia Mexicana* (México), Vol. 18 (2): 159-178.
- Veyrat, E., 1995. Vida a bordo. In VV.AA., *El San Diego. Un tesoro bajo el mar*, Compañía Española de Petróleos, S.A. CEPSA, Madrid: 170-194.
- VV. AA., 2000. *El galeón de Manila. Catálogo*. Aldeasa: Ministerio de Educación, Cultura y Deporte, [s.l.].
- Yuste, C., 2000. Un océano de intercambios. In VV.AA., *El galeón de Manila. Catálogo*, Aldeasa, Ministerio de Educación, Cultura y Deporte, [s.l.]: 139-150.

Zárate Toscano, V., 2000. *Los nobles ante la muerte en México. Actitudes, ceremonias y memoria (1750-1850)*. El Colegio de México, Centro de Estudios Históricos: Instituto Mora, México, D.F.

Zúñiga Cisneros, M., 1978. *Historia de la Medicina. Tomo II. La Medicina de los tiempos modernos: siglos XVI y XVII*. Ediciones Edime, Caracas-Madrid.

Biography

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