



Scuderie del Castello di Miramare

21.12.2023

16.06.2024

*"Here, on the edge of what we know,
in contact with the ocean of the unknown, the mystery
of the world, the beauty of the world shine and leave us breathless."*

Carlo Rovelli

The Scuderie del Castello di Miramare — Stables of Miramare Castle — reopen in Trieste completely transformed by a major exhibition, a tribute to the endless voyage of knowledge and the undying thirst for discovery.

"KOSMOS. The Sailing Ship of Knowledge" is a tribute to the expedition of the frigate Novara and the wonderful season of scientific exploration of the world that took place in the nineteenth century and that continues up to this very day.

The exhibition, curated by Andreina Contessa and the Exhibition Office of the Museo Storico e del Parco del Castello di Miramare, an autonomous national museum of the Ministry of Culture, revolves around the voyage as a metaphor for the eternal human yearning to surpass our boundaries of study and knowledge.

The exhibition opens to the public on 21 December 2023 at the Stables of Miramare Castle.

Trieste, 20 December 2023

The voyage, a metaphor for the eternal human yearning to go beyond our boundaries of study and knowledge, is the focal point around which the exhibition "KOSMOS. The Sailing Ship of Knowledge," curated by Andreina Contessa and the Museum's Exhibition Office (Alice Cavinato, Fabio Tonzar, and Daniela Crasso), revolves. It opens to the public on 21 December 2023 at the Stables of Miramare Castle.

The exhibition space at the Castle's stables has been reopened for this occasion, after a long post-pandemic hiatus, with a spectacular and innovative setup that also employs high-tech instruments to narrate to today's audience how scientific knowledge was born and continues to be both a spur and a goal for many scholars. The path also includes digital installations, scale models, and dioramas that immerse visitors in the experience of life aboard a ship adapted for a significant scientific expedition. In the "Cosmic Vertigo Hall," contemporary travellers can float among galaxies, while Artificial Intelligence is the main protagonist of one of the exhibition sections, extending our view towards tomorrow, the journey of science, knowledge, and understanding from the nineteenth century to the future.

The centrepiece and beginning of the exhibition is the voyage that saw the frigate Novara set sail from Trieste on 30 April 1857 to cover 51,856 nautical miles, with 22 main stops across five continents. The exhibition design develops many scenic components and displays significant artifacts and works never exhibited before, mainly from the frigate's journey and presented upon the expedition's return to Trieste in 1860 at the Palazzo della Borsa. The exhibition features over 150 items, including naturalistic specimens, ethnographic objects, historical navigation and data collection instruments, scientific tools, photographs, antique books, paintings, and watercolours.

The primary goals of the nineteenth-century expedition were the exploration and cartographic description of uncharted areas of the Earth, understanding and studying indigenous populations, and the collection and cataloguing of mineral specimens, as well as plant and animal species, in addition to the important purpose of forging new economic, strategic, and diplomatic bonds. Never before had so much of the Earth been explored in such a short period as in the nineteenth century; so many anthropological artifacts and botanical, zoological and geological specimens were discovered, catalogued and studied, producing a considerable body of documents.

Andreina Contessa, director of the Museo Storico e del Parco del Castello di Miramare, explains: *"In the same years that Maximilian was building Miramare Castle and defining the botanical collection of its vast garden, he was promoting science by supporting a network of knowledge and contacts among scholars of the time."*

The exhibition is indeed a tribute to Maximilian of Habsburg and his love for the sea, voyages, and ships. As the main promoter of international missions of the Austrian Navy, which he commanded from 1854, he directly participated in the expedition to Brazil between 1859 and 1860 and closely followed the Novara's diplomatic, scientific, commercial, and military journey, which aimed to circumnavigate the globe between April 1857 and August 1859.

The exhibition's title, on the other hand, is a tribute to the great German geographer and naturalist Alexander von Humboldt and his work, Kosmos, published just a few years before the Novara's departure, and one of the most comprehensive efforts of physical description of the world as it gathered all known knowledge of the time.

"Alexander Von Humboldt," continues Contessa, *"in the volume where he referred to all the scientific discoveries known at the time, theorized that everything was interconnected, anticipating our concept of ecology. The exhibition aims to frame the continual path of discovering the world. Every initiative and desire for discovery is born from an innate need for knowledge within us. To discover the world, one must embark on a voyage, and this path leads to other questions and inevitably, to other cultures."*

"KOSMOS. The Sailing Ship of Knowledge" documents how even today, data collection remains a highly relevant issue and contributes to the construction of knowledge. It examines the contemporary journey and the current, undying thirst for discovery, now characterised by instruments and technologies that allow for universal knowledge of the world but, on the other hand, leave no room for unawareness.

Thanks to loans from Vienna's most important museums and collaboration with numerous institutions - the University of Trieste, the Civic Museum of the Sea of Trieste, the Civic Museums of Trieste, the International Foundation of Trieste, SISSA, OGS – the exhibition at the Stables of Miramare Castle reiterates the magnificent experience of travel and the history of discoveries by narrating the experiences of travellers and scientists, of knowledge and traditions, spectacularly revealing the knowledge kept in libraries, collections, and archives and transmitted to the present day by brilliant and visionary minds.

| CONTRIBUTIONS

STEFANO FANTONI, President of the International Trieste Foundation for the Advancement and Freedom of Science.

The KOSMOS exhibition not only documents the scientific expedition of the Novara in its global circumnavigation of 1857-1859 but also aims to bear witness to the tempestuous voyage of science from the days of Darwin and Babbage to the present, towards an unpredictable future, as is always the case in the journey towards knowledge. This testimony unfolds through the achievements of physics, with the extraordinary development of fundamental theories (such as quantum mechanics and relativity) and the equally remarkable development of particle accelerators from ADA to CERN, extending to the great evolution of knowledge about the constituents of the oceans and their impact on human life and vice versa - evidence of this is seen in the large oceanographic data centers and the recent expedition of the ship Laura Bassi to the southernmost point of the globe, never before reached. Not to forget astronomy, the "midwife of the sciences," as Henri Poincaré once said, and the observation of deep space in search of solutions to the mysteries of the universe. All of this is seasoned with the phenomenal development of "data science," which, starting from Babbage's visionary intuition of a "universal calculator" and Turing's dreams of "thinking machines capable of outdoing man," has led to the construction of modern supercomputers and the discovery of artificial intelligence. What a marvel! And in all this, the Trieste of science holds a fundamental place in the world with its universities and research institutes.

GUIDO ABBATTISTA, Guido Abbattista - Professor of Modern History, University of Trieste -Department of Humanities

The "Global Sea Routes" project, directed by Professor Guido Abbattista at the Department of Humanities of the University of Trieste with Dr Erica Grossi, Ginevra Zelaschi, and Valentina Rumiz, has contributed to the "Kosmos" exhibition at the Museum of Miramare Castle with materials for the exhibition and scientific contributions to the catalogue. The materials mainly concern aspects of the Novara's scientific collections never considered before. A considerable amount of manuscripts and printed documents brought back to Trieste and Vienna has been discovered, along with the objects kept at the A. Hortis Civic Library in Trieste. Secondly, a systematic analysis and cataloguing of the naturalistic specimens from the expedition kept by the Civic Museum of Natural History of Trieste was undertaken, initiating the study of the scientific volumes published after the expedition and the search for further zoological and ethno-anthropological specimens, as well as physical models of the ship present in Viennese and Italian museums and in private collections. Finally, in collaboration with Animdrops-Animation and Creative Studio by Mattia Talò, a highly detailed digital 3D reconstruction of the Novara was created, accessible also in virtual reality: thanks to cutting-edge technology, we now have a realistic and absolutely unprecedented digital representation of the interiors and exterior of the ship.

ROBERTO TROTTA, Professor of Theoretical Physics & Head of Data Science, SISSA

The exhibition opens and closes with two immersive experiences in the contemporary research landscape, inspired by the common thread of collecting and analysing data about the cosmos surrounding us, already evident in the Novara's voyage.

In the first room, the audience will have the opportunity to experience five centuries of scientific discoveries and explorations in the span of five minutes, in a dreamlike video created using generative artificial intelligence by artist and videomaker Gigi Funcis, with scientific advice from Prof. Roberto Trotta of SISSA. The video not only transports the viewer through time and space but also highlights the creative and imaginative power achieved by artificial intelligence. The final room presents some examples of how cutting-edge scientific research makes use of increasingly huge amounts of complex data, which can only be analysed and understood through statistical techniques and artificial intelligence. In a spectacular infinity room that reproduces the dizzying sensation of a boundless universe, visitors are immersed in the observations of the cosmos from the Euclid space telescope, experience the world of the infinitely small at CERN in Geneva, and accompanies the icebreaker Laura Bassi on an Arctic exploration journey. The room was set up with the scientific advice of SISSA, the Trieste Observatory, INFN, and OGS, with the musical contribution of Gigi Funcis.

DIEGO GIACHELLO, Administrator at Officina delle idee

Anyone who designs temporary exhibitions is acutely aware of the brief lifespan of their creations, swiftly built and just as rapidly dismantled and discarded. The enduring legacies of such exhibitions are primarily the experiences of visitors and the digital images they capture on their smartphones. Photographs and short videos, possibly preserved indefinitely in reliable data centers scattered around the planet, are the lasting remnants. In working on the installation, we too produced thousands of shots, exchanged for queries, comparisons, and confirmations, as the exhibition path envisioned during the summer months materialised in just a few days. However, it is within us that we will jealously cherish the value of this small adventure, marked by perfect understanding among people working together for the first time, united in the goal of best illustrating the contents of the exhibition. There are many scenic components to this installation, an exhibition path that is primarily a narrative and not just an orderly sequence of works and artifacts, however exceptional, left alone in the cold context of the Stables. For this reason, when everything is dismantled and we observe the empty rooms, we are certain that a sort of subtle melancholy will remain in us, the same that characterises the end of any journey.

| THE VOYAGE OF THE FRIGATE NOVARA (30 April 1857 – 26 August 1859)

Departing from Trieste on 30 April 1857, the frigate Novara, escorted by the corvette Carolina, stopped at Gibraltar and then at Funchal on the island of Madeira. On 20 June, the frigate separated from the corvette (which then headed first to the state of Pernambuco in Brazil, then along the west coast of Africa), arriving in Rio de Janeiro in early August. In October of the same year, the Novara made its only scheduled stop on the African coast at the Cape of Good Hope. Visiting the islands of St. Paul, Amsterdam, and Ceylon, the frigate stopped in India (Madras, now Chennai), the Nicobar Islands, Singapore, and Java, reaching Manila (Philippines) on 15 June. During the summer, the frigate reached Hong Kong and Shanghai, then set sail for Australia (Sydney) and New Zealand (Auckland), where geologist Ferdinand von Hochstetter spent nine months studying the islands from a geographical and geological perspective.

In January 1859, the frigate touched Tahiti and, on 17 April, reached the coast of Chile (Valparaiso). On 8 May, the ship's officers received news by mail of the conflicts against France and the Kingdom of Sardinia (the Second Italian War of Independence had already begun on 27 April) and cancelled the planned South American stops. Karl von Scherzer left the Novara to gather commercial, ethnographic, and statistical information useful to the expedition and to learn about the fate of Tyrolean immigrant families in Peru, passing through Lima and reaching Panama by land, from where he embarked on a steamship to Gibraltar and reboarded the Austrian frigate.

On 11 June 1859, the Novara crossed its 1857 route, completing the circumnavigation of the globe and heading back to Trieste via Gibraltar, concluding the journey on 26 August 1859.

| THE EXHIBITION PATH

The Metaphor of the Voyage The first impact with the exhibition is scenic and immersive: it conveys the idea of travelling to explore the unknown, at the edges of the Earth, in the depths of the seas, in the infinite vastness of the cosmos, or in the incomprehensibly small world of subatomic particles.

From Natural Philosophy to Science and the History of the Novara. A tale of the transition from a philosophy intertwined with natural sciences to the modern conception of science. The figure of the traveller-philosopher gives way to that of the scientist. The expeditions carried out in the spirit of the Enlightenment (eighteenth century) and the founding of European scientific societies.

Objectives of the Circumnavigation Preparation of the Voyage The project for a scientific and diplomatic world expedition was proposed in 1856 by Archduke Ferdinand Maximilian of Habsburg, commander-in-chief of the Austrian navy. The expedition aimed to make a substantial contribution to the natural sciences by collecting observations, measurements, data, and artefacts for the imperial scientific academies. A history of previous experiences and knowledge kept in books.

Life Aboard the Frigate, Travel Episodes, the Ship's Log. A room seemingly designed to attract the attention of adults and children alike on the complex organisation of a scientific expedition. Scenic devices and digital instruments open a curious window into life aboard the Novara and the daily routines of the sailors on board.

The Officers. Who were the scholars aboard the Novara? In this room, visitors learn about their biographies, interests, and the scientific goals each of them pursued in the expedition.

Research Onboard. This room evokes the life on board of the researchers, represented by a portrayal of their cabins. It recalls the cabin of the ethnographer, the zoologist, the botanist, and the painter Selleny with a selection of original watercolours loaned from the Albertina in Vienna and period objects from the Novara's journey.

The Paths of Knowledge. A large panel illustrates the stages of the Novara's voyage. Using a contemporary device, the webcam, visitors are catapulted into the present to experience life today in the ports visited by the frigate in the nineteenth century.

Results and Acquired Knowledge. This room displays restored naturalistic artifacts and recounts exhibitions to make the results known to the scholarly community and the general public. It also showcases the weapons that were hung on the walls of the grand staircase of Miramare Castle in ten compositions. For the first time, they can now be observed closely after recent restoration. The zoological collection of the Novara expedition is impressive: over 26,000 specimens of animals, bones, nests, and eggs. It features the rockhopper penguin of St. Paul Island, with its distinctive crested head, which was frequently depicted by the onboard painter Selleny.

Sharing of Data and Artifacts and Publications. The scholars onboard the Novara collected 376 ethnographic artefacts, representative, from their perspective, of the customs and habits of the inhabitants of the places visited. The collection is impressive for its typological variety: everyday objects, ornaments, garments, weapons, instruments, books, and documents. Some of these items remained at Miramare for a few years: they were intended for a museum to be built in the park, planned by Maximilian but never realized. In 1883, these items were sent to Vienna and are today in the collections of the Weltmuseum Wien. The scientific results of the circumnavigation were published in 18 volumes, dedicated to the knowledge acquired in various fields.

A Sea of Data. Now comes the most technologically advanced and spectacular part of the exhibition. Today, as then, cutting-edge research relies on increasingly detailed and complex observations of the cosmos surrounding us, as well as powerful computer simulations. From the extraordinary deep space images of the Euclid space telescope to the reconstruction of dark matter in the universe; from subatomic fragments produced in collisions at CERN's Large Hadron Collider in Geneva to the polar explorations of the icebreaker Laura Bassi, our thirst for knowledge goes beyond the frontiers of the known.

| BIGLIETTERIA

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€12.00

Ridotto Mostra (6-25 anni)
Reduced Exhibition Ticket (age 6-25 years)
€6.00

Intero Combinato Mostra + Museo (non applicabile le prime domeniche del mese)
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€20.00

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Classes
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