## European Society for Environmental History (ESEH)

# "The Sea as a whole - Ideological reservoir and environmental concerns"

# 5<sup>th</sup> Summer School in Environmental History

4<sup>th</sup>-8<sup>th</sup> July 2014 in Porto, Portugal

University of Porto, Faculty of Humanities (FLUP)

**Sponsors:** Porto University (UP-FL); National Science Foundation (FCT); European Society for Environmental History (ESEH); Research Centre for Transdisciplinary Studies: Culture, Space and Memory (CITCEM);

## Convenor: Inês Amorim



#### **Participants:**

#### **Graduate and Post-Graduate Students**

Elke Ackermann (Institute of European History Mainz / JGU Mainz)InêsLeah Vaughan Aronowsky (Harvard University)Ranj.Alyssa Battistoni (Yale University)JadarTroels Land Christiansen (University of Copenhagen)Jim CGoran Đurđević (Independent Researcher)RonaAndrea Giordano (University Federico II of Naples)WilkKatherinne Giselle Mora Pacheco (National University of Colombia)WilkJohn Emrys Morgan (University of Warwick)PoulTemitope Oyedotun (University College London)DollyFabíola Pires (University of Porto)Bo PQiao Yu (Capital Normal University Beijing)Alfredo Ricardo Silva Lopes (Federal University of Santa Catarina)Manuel José da Silva Miranda Fernandes (CEGOT / FCT, University of Porto)Ottoaleksi Tähkäpää (University of Turku)Anna Wilson (University of Melbourne)Full

## Junior and Senior Scholars

Inês Amorim (University of Porto) Ranjan Chakrabarti (Vidyasagar University/ Jadavpur University) Jim Clifford (University of Saskatchewan) Ronald E. Doel (Florida State University) Wilko Graf von Hardenberg (University) Wisconsin-Madison) Poul Holm (Trinity College Dublin) Dolly Jørgensen (Umeå University, P of ESEH) Bo Poulson (Aalborg University)

## Introduction

The four-day ESEH Summer School 2014 organized by Inês Amorim took place in Porto, Portugal, from 4<sup>th</sup> to 8<sup>th</sup> July. This graduate summer school brought together students and scholars from various countries to discuss the wide-ranging topics of environmental history under the umbrella theme "The Sea as a whole – Ideological reservoir and environmental concerns". There could have hardly been another location as suitable for this event as Porto. Representing one of the oldest cities of Europe, Porto is located at the confluence of the Atlantic Ocean and the Douro river estuary, and is embedded with a rich and long historical relationship between humans and the sea. The region around Porto is known internationally for its salt and cork production, trade of Port wine, fishery products and also for its old city center, which was declared World Heritage in 1996. This environment promised to be a stimulating example and inspiration for the days to come.

Accompanied by the calls of sea-gulls, a salty warm breeze and keen interest in environmental history, 15 students and eight scholars from various institutions and countries of the world<sup>1</sup> arrived at the Faculty of Humanities on Friday, 4<sup>th</sup> July 2014. After travelling shorter or very long distances from their places of origin, all participants were received warmly by Inês Amorim, who gave us general information and orientation about the upcoming days. The summer school was organized to offer space for presenting and discussing his or her research to a peer group and specialists of the environmental history field, to promote rich methodological discussion and to create networks for future collaboration. Additionally, the coffee and lunch breaks which were offered during the well-structured summer school agenda gave room for reflection and informal chats, presented great opportunity to discuss details of research projects and enhanced future collaboration among the participants. Moreover, a full-day excursion was organized by bus on Sunday, 6<sup>th</sup> July, in order to explore the maritime coastline of Northern Portugal on-site and visit a place of memories connected with this area: the Ílhavo Museum and Aquarium.

## Summer School

The Porto summer school gathered together a variety of research projects in environmental history dealing with the sea in one form or the other. Issues were raised that relate to history of science, social and (bio-) political history, ancient history, international history, and cultural history. The research projects addressed areas and regions of Europe, Australia, South and North America and their interactions with oceans, rivers, estuaries, floods and extreme weather events. Student presentations were grouped around five panels including:

- Transoceanic exchange and diffusion of species
- Environmental changes between land and sea
- Landscape and environment evolution
- Disasters and hazards
- Bio, politics and science

Student panels were enriched by stimulating lectures, round table discussions and commentaries by international junior and senior scholars. Among these international authorities in environmental history were: Inês Amorim, organizer of the summer school and expert in maritime history; Dolly Jørgensen, current president of ESEH and expert in the relationship between environment and technology; Ranjan Chakrabarti, expert in the environmental history of South-East Asia and history of science and technology; Jim Clifford, expert in global environmental history, innovative historical research methods and visualization techniques; Ronald E. Doel, expert in the history of science in 20<sup>th</sup> century America and beyond; Wilko Graf von Hardenberg, expert the connections between environmental history, social history and the digital humanities; Poul Holm, expert in fisheries and marine environmental history, coastal communities and culture; and Bo Poulson, expert in global

<sup>&</sup>lt;sup>1</sup> Participants came from: Australia, Brasil, Canada, China, Colombia, Croatia, Denmark, England, Finland, Germany, India, Ireland, Italy, Portugal, Sweden, and USA.

marine environmental history and the Nordic countries. Their expertise and friendly advice provided fresh input for each research project and contributed to the successful outcome of the summer school.

# SATURDAY, 5<sup>th</sup> JULY 2014

After an opening and welcome address by the Dean of the Faculty of Humanities, University of Porto, **Dolly Jørgensen** gave a <u>lecture</u> about ocean policy history emphasizing the issue of turning old oil rigs into reefs and asked how policies regarding these manmade ecosystems developed differently in various countries over time. To answer this question she applied an environmental history and policy history approach involving actor-network theory and enactment. Based on three analytical streams – the history of oil, enactment of naturalness and the role of science, she examined three different areas (Gulf of Mexico, North Sea offshore oil and California) in order to compare and show how actors aligned differently, how and why science and knowledge of scientists was not always enough to create environmental policy, why policies were not happening or how policies had been negotiated over time. Dolly's lecture highlighted important factors in writing global policy history, namely retracing comparisons, investigating networks, technical systems and nature, drawing connections between ideas and exposing processes and values that result in different policy outcomes.

The following <u>round table</u> discussion chaired by Jim Clifford, Ronald E. Doel and Wilko Graf von Hardenberg, dealt with interdisciplinary approaches in the history of natural resource management. Jim Clifford introduced the summer school participants to his blog "Trading Consequences" and emphasized with this example innovative ways for historians to deal with history and highlighted challenges and advantages in working with other disciplines. Ronald E. Doel reflected on the important work of historians for environmental resource management and gave insight into the role of the US National Science Foundation and the Mellon Foundation. Wilko Graf von Hardenberg talked about his experience with interdisciplinary work, funding issues and the importance of networks. Subsequent discussion raised questions on the importance of establishing networks across disciplines. To interrogate this discussion, the formulation of research designs, hypotheses and research questions, the role of peer review publications and new tools in digital humanities, as well as the role of interdisciplinary research projects for environmental historians were discussed.

The <u>first panel</u> (Panel I) of this day titled "Transoceanic exchange and diffusion of species" was opened by **Anna Wilson** with her presentation titled "Uprooting Melbourne: A Story of a city as revealed by trees". Anna took a new perspective, that of the trees, in order to retrace what stories emerge from trees in the city-making of Melbourne from its origins in 1835 to now. Taking a post-humanist approach, Anna analyzed trees as they exist in many forms; as organisms, as timber, as ideas, as organic machines, etc. In her presentation Anna focused on the first chapter of her PhD-dissertation revealing how Melbourne came to life, when and in the form it did, due to its location at the sea. She emphasized the ideas, people and seeds travelling over the oceans, a time of dynamic exchange, constitutive in the formation of this colonial city.

From Australia, summer school participants were carried to Mesoamerica and back to Europe by **Manuel José da Silva Miranda Fernandes**, who gave a presentation titled "In the shade of a Farnesian acacia: introduction and diffusion of a Mesoamerican species in Europe". Through his research Manuel combines the fields of biological science and historical geography from the early modern period to the 19<sup>th</sup> century. Retracing the Farnesian acacia from its Mesoamerican origins brought to Roman gardens in 1625, Manuel followed the geographical diffusion of this species in Europe, from Portugal to Italy, highlighting socio-economic factors contributing to its diffusion embedded in the network of transoceanic routes circling the globe.

The presentation by **Qiao Yu** brought the audience back to Australia under the title "Transoceanic exchange and irrigational farming in colonial Australia from 1830 to 1910". Thereby

she revealed new insights into the history of early irrigational farming in colonial Australia and highlighted irrigation as an important social and historical event for Southeast Australia. Yu emphasized science, technology and the dissemination of trans-national knowledge accompanying irrigation development and practice in her presentation. Through examining European criteria for irrigation within the 'drought discourse', Yu retraced landscape transformation and conflict in resource distribution.

The **second panel** of this day "Environmental Changes: between Sea and Land" was opened by **Temitope Oyedotun**, who was presenting via Skype to the audience. His topic was titled "Estuary-Coast Interaction and Morphodynamic Evolution: A comparative analysis of three estuaries in Southwest England". The aim of his research is to retrace estuary-coast linkages in terms of morphological and sedimentary processes at the North coast of Cornwall, Southwest England, taking into account three estuarine systems – the Hayle, the Gannel, and the Camel estuary. Temitope could show using historical trends how the shoreline shifted landwards and how wind patterns, wave and sea- level rise influenced this phenomenon. Additionally, anthropogenic activities were considered as contributing factors.

**Fabíola Pires** followed and presented on the "Water and Earth property in the Northwest of Portugal – between common and private – The parish of Meadela from the Middle Ages to the XX<sup>th</sup> century". Fabíolas research addresses issues of ownership over time in the micro territory of Meadela, Viana do Castelo. The aim is to draw up a register of ownership and land use containing information regarding aquatic resources, information which is missing for the territory of Northern Portugal. For this purpose she is taking the parish as the model unit retracing characteristics, uses and its evolution in legal and practical terms.

The third presentation was given by **Katherinne Giselle Mora Pacheco**, titled"South American farmers' adaptation to ENSO events in the 18<sup>th</sup> century Bogotá Plateau, New Kingdom of Granada". Katherinne reconstructed ENSO (El Niño South Oscillation) events in the 18<sup>th</sup> century with a focus on droughts and floods and analyzed their impacts on traditional farm systems in the western part of the Bogotá Plateau. She then compared her findings with the Pacific Basin and other areas in New Spain, Peru and River Plate region and could show the multiple strategies and mechanisms of adaptation by traditional farmers and ranchers to ENSO events.

#### SUNDAY, 6th JULY 2014

On Sunday, the summer school group undertook a full-day bus excursion around the maritime coastline between Porto and Aveiro/Ílhavo. Due to heavy rainfall since the early morning, planned stops and visits of the Afurada Harbour and the fisherman's quarters were impossible. However, Inês Amorim guided the tour successfully from the bus and gave the participants exciting insights about the long history of river and sea activities around this part of Portugal. Next stop of the tour was the area around the city of Aveiro, which is an example for the formation and evolution of a Portuguese Lagoon. The Lagoon was not only formed by extensive and rapid natural changes over time, but by the 20<sup>th</sup> century was also heavily shaped by human activities. In addition to Aveiro's importance as a fishing port for Portugal, the area has also been known for its salt production, which has been revived nowadays as heritage of the region.





Salt production in Aveiro

Salt production model in Maritime Museum of Ílhavo

The tour stopped at the Maritime Museum of Ílhavo, place of memories and witness to human-sea relationships of the region, where the summer school group was warmly received and guided through the main and temporal exhibitions. The main exhibition led the visitors through the history of cod fishing connected to Ílhavo and the Aveiro Lagoon and focused in on the daily routine of fishermen. Especially impressing was the built up cod-fishing vessel in the middle of the room that invited the visitors for a "trip" and allowed a real-size experience on board. After insights into the areas and living conditions under deck the tour continued in the next room where full sized boats of the Aveiro lagoon were displayed, a reminder of the region's economic activities.



Main exhibition room, Maritime Museum of Ílhavo





Built up Cod-fishing vessel

Boats of Aveiro lagoor

Following the route through the detailed shells and algae gallery, the group stopped in the seas gallery highlighting the maritime heritage of Portugal using the various boat models and nautical instruments. This was followed by a visit to a room dedicated to local artists and their works dealing with the regions attachment to the maritime environment. The tour ended in the Codfish Aquarium space. This aquarium shelters under optimal conditions representatives of Cod-fish from both natural environments and fish farms from Norway and Iceland. The combination of visually demonstrating the entangled history of ocean-human relationship and maritime identity of the region, the display of real-size codfish vessels and the Codfish Aquarium, rendered the museum visit a vivid and exciting experience for all participants.



Codfish Aquarium space at the Maritime Museum Ílhavo

After a generous and delicious lunch sponsored by the Maritime Museum of Ílhavo introducing the group to the diverse gastronomic specialties of the region, the summer school restarted its activities by continuing round table discussions and panels in the local conference room of the museum. We began with a <u>round table</u> chaired by **Jim Clifford**, **Ranjan Chakrabarti** and **Poul Holm** discussing how to map environmental concerns and disasters. Jim Clifford started by introducing advantages and pitfalls of text mining and mapping referring to his involvement in the project "Trading Consequences". He further emphasized innovative possibilities for historians to learn practical digital mapping and GIS skills like with the open access textbook "The Geospatial historian". Ranjan Chakrabarti based his presentation on the diverse region of the Sundarbans highlighting its

significance as nature reserve and buffer zone which is highly influenced by sea level. Thereby he especially foregrounded geophysical conditions, land formation processes and the role of the Sundarbans as tiger reserve in order to emphasize the development of environmental concern in this Bengal Delta. Following Ranjan, Poul Holm reflected on cultural assumptions concerning disaster and environmental concern. He stressed the important role of historians, who are analyzing how and whose values are being attributed to environmental change.

The last session of the day was a <u>panel</u> (Panel III) dealing with "Landscape and environment evolution". **Andrea Gordiano** started with his presentation about "The Great Transformation in Mar Piccolo of Taranto" pointing out changes in fishing as economic factor in the Kingdom of Naples from 1778 to 1853. Andrea emphasized actors, interests and regulations of how techniques and cultivation methods changed over time. Central to his presentation was a description of the shift to mussels cultivation at the sea bottom of Mar Piccolo on a grand scale in the 1820s and how this transformation impacted local and national economies and the natural environment.

**Elke Ackermann** continued and presented her research on the "History of the Galapagos Islands as a World Heritage Site" emphasizing the changing relationship between the Galapagos archipelago and the Pacific Ocean. Elke pointed out one field of conflict evolving between marine resource extraction activities and nature conservation efforts. This conflict was stressed when conservation paradigms on the archipelago shifted in the 1980s towards including marine environments as integral part of ecosystem conservation and globalizing markets triggered an increase in local marine resource extraction.

The third panelist **Goran Đurđević** introduced his research on the "Ancient Adriatic in environmental history literature". Goran's analysis showed that the Eastern Adriatic is underrepresented in environmental history literature about the ancient world. Furthermore he highlighted that existing literature about this region mostly underlined climatology alone, whereas human impact on the environment had not yet been the object of investigation. Goran offered three modes of explanation for this gap in research and emphasized his own research objectives for this field of environmental history.

After a short round of questions, comments and discussion, the excursion day came to an end and the summer school group journeyed back to Porto, satisfied and with many new impressions.

## MONDAY, 7th JULY 2014

Monday morning started with a <u>lecture</u> by **Bo Poulson** about Marine Environmental History. He began by introducing the summer school students to the methodological background of marine environmental history and presented today's challenges relating to global change research, e.g. large-scale fishing vs. limited resources, managerial dilemmas, global food markets, production and distribution, etc. Following Donald Worster, Bo accentuated the need for the environmental historian to take into account production (activity), resources (physical environment) and cognition (perceptions and values about nature), and pointed out types and characteristic of marine environmental history. In the second part of his lecture he introduced some of the projects he has worked with, like his project about Swedish cod and ling fisheries in the 19<sup>th</sup> century and his research on North Sea herring starting from the 17<sup>th</sup> century. Bo's lecture ended by giving further web links related to marine environmental history and stimulated discussion about the importance of narratives in relation to cognitively driven fishery and control, the role of historians and its implications for historical research.

The next session of this day was the <u>panel</u> (Panel IV) about "Disasters and Hazards". **Alfredo Ricardo Silva Lopes** started with his presentation about "Environmental Disasters and Memory in the South of Santa Catarina State-Brasil (1974-2004)". Asking whether collective memory could be understood as a tool to mitigate disasters, Alfredo analyzed memories of disaster events (floods and hurricane) and if (and how) environmental perception of ordinary people changed after extreme situations. Using oral history and collective memory analysis, the aim of this study is to take into account public perception and representation of the local population in order to formulate adequate public policies for the region.

The second presentation of this panel was by **John Emrys Morgan** about his research on "Negotiating Hazardous Landscapes: regions of risk and cultures of coping in early modern Britain" from the 16<sup>th</sup> to the 18<sup>th</sup> century. John highlighted the cultural production of the meaning of floods in the early modern period and how floods were integrated into daily life. Embedding his findings in the socio-environmental and political context of Britain's history, John analyzed conflicting assumptions, interests and inheritance of floods and integrated the concept of sea as a physical entity and concept.

The presentation by **Troels Land Christiansen** took us to a region further north with his question "Disintegration in the North Atlantic, a Natural Thing?" analyzing how the ocean has been the formative factor of societies of the North Atlantic. He concentrated on Denmark, the Faroe Islands and Greenland. After an insight into the environmental history of the Faroe Islands Troels highlighted how modern whaling changed the Faroe Islands environment. He brought in the Faroese perspective of whaling, showing the human-ocean interrelationship in this particular region.

In the afternoon, the final <u>panel</u> (Panel V) of the summer school began with the topic "Bio, Politics and Science". **Alyssa Battistoni** went first and presented her piece titled, "Anything under the Sea: The Ownership of Life in the Oceans" analyzing intellectual property claims, territorial ownership and ocean governance. Taking into account the evolving relationship between political theory and environmental history Alyssa emphasized the "long 1970s" as the crucial period when issues regarding rights to ocean use and resources crystallized and global discourses of the oceans as "common heritage of mankind" emerged. She especially highlighted the development of marine biotechnology as a site of political and economic contestation.

The second presenter was **Ottoaleksi Tähkäpää** with his presentation about "The Environmental History of the Eutrophication of the Baltic Sea. A social network approach to phosphorus and nitrogen fertilizing in Finnish agriculture 1945-1995". The main objective of his research is to examine why and how agriculture developed as the main polluter of the Baltic sea. Ottoaleksi started by introducing the audience to the historical background of eutrophication of the Baltic Sea. After that he highlighted his social network approach addressing the variety of actors involved in these socio-political and economic processes fostering agricultural development of fertilizers.

Remaining in the second half of the 20<sup>th</sup> century, the final panelist, **Leah Vaughan Aronowsky**, presented on "Doing Marine Biology in a Nuclear Age: Operation Crossroads and the History of Radiation Biology, 1947-1987". Pointing out the central role of Bikini Atoll in the Pacific Ocean for atomic tests known as "operation crossroads", Leah analyzed Cold War techno-politics in global perspective. Her research involves investigating the development of Bikini Atoll into a major site of marine biological research, especially for radiation biology after the atomic tests. In her presentation Leah emphasized the strategic deployment of technology for military ends in Cold War negotiations and stressed the involvement of scientific research.

The final part of the summer school was composed of a <u>round table</u> with **all participants**. This round table was intended to give practical advice, provide room for open questions and reflect on future career paths. Thereby junior and senior scholars talked about their individual careers in the various countries they have lived in and gave advice on what to be aware of while applying for a job after the PhD. During the discussion participants emphasized the importance of networks and environmental history associations; contrasted practical information on how to build up application material for relevant jobs after the PhD in different countries; pointed out the importance of CVs and preparation beforehand about the institution, job and funding possibilities in the country and city of application; provided websites and portals for jobs and opportunities in humanities; and stressed the importance

of availability, initiative, digital footprint and the flexibility of environmental historians. This last part of the summer school was especially helpful and marked a promising and exciting outlook for each of the student participants to reflect on his or her future in the field of environmental history.

# TUESDAY, 8th JULY 2014

Summing up, the Porto Summer School held from 4<sup>th</sup> to 8<sup>th</sup> July 2014 offered all participants a unique platform to come together, discuss their research topics and create networks for future collaboration in environmental history. The umbrella topic "The Sea as a whole" managed to connect the location of Porto and its surroundings with the individual research topics, building bridges between different countries and institutions and opened up new perspectives in the huge field of environmental history. Thanks to the thoughtful and well-structured organization of Inês Amorim, the sponsors UP-FL, FCT, ESEH and CITCEM, the vivid participation of all attendees and the overall friendly and supportive atmosphere, the Porto Summer School 2014 created a lasting impact and experience for all participants.

Having these fruitful days in mind many Summer School attendees departed afterwards to Guimarães for the Second World Congress of Environmental History.



View on Douro estuary, nearby FLUP

With many thanks for this opportunity to meet you all and especially thankful to Anna Wilson for her invaluable support in this report,

Elke Ackermann on August 1, 2014