# **Course Syllabus**

**Port Cities Between Global Networks and Local Transformations**

Carola Hein, Tino Mager

**Course Description**

Throughout history, the access to large bodies of water facilitated the foundation, rise and prosperity of human settlements. Besides the vital quality of fresh water, the connecting potential of water was the decisive factor that prompted these developments. Since centuries, oceans, seas, rivers and lakes allowed for transportation, exchange and trading. Thereby, they connected places around the world and enabled a direct connection between different cities, states and cultures on a global scale. Over time, these distant places faced similar challenges and took part in related developments. People around the world developed ports, warehouses, and other facilities to accommodate rapidly changing types of ships and containers, from papyrus boats to sail ships and super tankers; and neighboring cities had to contemporaneously adapt to new technologies, flows of goods, people and ideas.

Of course, the unique geographical, topographical, climatic, economic, political, and historical conditions of each port city led to the development of individual forms, but still port cities developed common threads as they faced similar challenges from flooding, piracy or cholera to shifting shipping networks. Water has become a linking element that unites locations that are far away from each other to a community of destiny. Needless to say, these strong connections also result in close architectural and urbanistic relationships between port cities. The artificial coastlines, ports and waterfronts that can be found in these cities come along with facilities such as wharfs or quays, piers or jetties, docks and various specialized structures. Besides that, particular constructions like trade buildings, passenger terminals, warehouses, head offices, beacons, loading cranes and other facilities can be found in port cities all around the world. In turn, ports require connection to efficient means of transport for the movement of goods and people, as well as they require large workforce and thereby close residential areas and urban infrastructures.

The History of port cities goes back to the Mesopotamian city foundations. Transportation on water was easier and more efficient than overland transport. Furthermore, it allowed for connecting places that were difficult to reach by land, and therefore port cities became hotspots for knowledge and cultural transfer. Many port cities prospered during the Middle Ages due to their trade relations and some got wealthy after the discovery of the New World. There, in the overseas colonies, it was again port cities that were founded first and that gained importance as colonial capitals. Here, the direct exchange of goods, people and ideas took place. A new era begun with industrialization. Not only the ships got larger and faster thanks to steam engines and more durable iron. Also, the ports required adaption to the new circumstances, railways were built and new canals and basins substantially changed the appearance of the ports. As the facilities grew, the historic ports that often existed in close proximity to the city centers could not keep up with novel needs of space and technology. At the latest when containerization in the 1960s led to an entirely new era of transportation, the days of the historic harbors that dominated the cities appearance for centuries were doomed. But it gave way to new developments, to the discovery of water as an enriching quality. Subsequently many cities like London, Baltimore, Barcelona, Osaka, or Hamburg built new waterfronts with diverse urban formulas, focusing on corporate headquarters such as in the London docklands, diverse leisure and shopping oriented redevelopment projects, such as in Baltimore, or multifunctional urban districts such as in Hamburg.

The lectures deal with a variety of built form and urban layouts and demonstrate their transformation. A focus lies on the unique way of intercontinental exchange of knowledge and specific solutions that led to distinctive architectural phenomena that can’t satisfactorily be explained by western canonic architectural history. They demonstrate how similar buildings types, from engineering structures to urban areas and specific buildings emerged in relation to each other as part of long existing global exchanges. The module pays respect to structures like port and shipping related headquarters or logistics centers and engineering facilities, refineries, container terminals, and the actual form of the port. On an urbanistic scale, it addresses aspects like transportation infrastructure, train connection and the occurrence of shipping related districts like Chinatowns, red light districts, sailor towns, amusement facilities, hotels, and migrants’ towns. This includes the architecture of the port infrastructure, such as ware- and storage houses, industry buildings or cruise ship terminals. The scope of the lecture covers ancient ports and architectures, their development through the Middle Ages and early modern era until the end of the 20th century. It pays attention to paradigm changes in technical and cultural respect, deals with the influences of trade routes, colonialization and industrialization, the relocation of ports as a consequence of containerization, the redevelopment of historical ports and the current shaping of waterfronts.

**Structure and Lectures**

1. Port Cities
2. Ancient ports and architectures
3. The Maritime Silk Road and the medieval European port cities
4. Sail ships and port cities
5. Amsterdam and the Dutch East India Company
6. Colonial and slave ports
7. Industrialization, steam ships, oil tankers, first cruise ships
8. Destruction and containerization
9. Early and contemporary waterfront regeneration

**Lecture 1: Port Cities**

(developed by Carola Hein and Tino Mager)

The first lecture provides an introduction into the topic by highlighting the role of navigable water for port and city development. It deals with fundamental aspects of port city architecture and its urban planning peculiarities. Moreover, it addresses maritime networks, flows and connectivity between place.

Beyond the introduction, this lecture briefly outlines these case studies:

Cenova

New York

Gdansk

Amsterdam

Singapore

Montreal

Barcelona

**Readings**

Hein, Carola: Port Cities – Dynamic Landscapes and Global Networks, London: Routledge, 2011.

Quartermaine, Peter: Port architecture: constructing the littoral, Chichester: Academy Editions, 1999.

Carola Hein, Petroleumscapes: How oil shaped the built environment, 2016. https://youtu.be/IQgfTPQPZag

Carola Hein, History of Port Cities Part 1, AMS MOOC, 2016. https://youtu.be/NSJPMC1ZYw4

Carola Hein, History of Port Cities Part 2. AMS MOOC, 2016. https://youtu.be/2K2TFTu5WWU

**Lecture 2: Ancient ports and architectures**

(developed by Carola Hein and Tino Mager)

The second lecture sheds light on ancient port cities in Mesopotamia and Egypt, along the coast of the Mediterranean Sea and in East Asia. These cities prospered due to their role as trading hub for goods. Hosting such trade hubs also meant important military and defense investments. Other networks of shipping existed in South East Asia, creating their own architectural patterns.

Sites of Lecture 2:

Carthage

Piraeus

Milet

Alexandria

Ostia

Leptis Magna

**Readings**

Kerstin Hoghammar,‎ Brita Alroth,‎ Adam Lindhagen (Eds.).Ancient ports: the geography of connections. Proceedings of an international conference at the department of archaeology and ancient history, Uppsala University, 23-25 September 2010. Uppsala: Uppsala Universitet, 2016.

Arthur de Graauw.Ancient Ports – Ports Antiques: THE catalogue of Ancient Ports.http://www.ancientportsantiques.com

Arthur de Graauw.“Port engineering aspects of the Magnus Portus in Alexandria.”PIANC Bulletin N°103, pp 31-41, Brussels, 2000.

David J. Blackman. “Ancient harbours in the Mediterranean.” The Int. Journal of Nautical Archaeology and Underwater Exploration (1982),11.2 & 3.

**Lecture 3: The Maritime Silk Road and the medieval European port cities**

(developed by Carola Hein and Tino Mager)

Maritime trade linked places along the sea, such as around the African coast and all the way into China. The Maritime Silk Road also led to the travel of religious practices, with a mosque being built in Guangzhou. This lecture explores the multiple practices that travelled in conjunction with trade. Huge investments in warehouses, merchant homes, but also leisure buildings displayed the importance of the trade.

Sites of lecture 3:

Istanbul

Venice

Genoa

Lübeck

Canton

Hoi An

**Readings**

Silvia Orvietani Busch. Medieval Mediterranean Ports: The Catalan and Tuscan Coasts, 1100-1235. Brill, 2001.

Filiz Yenişehirlioğlu, Eyüp Özveren, Tülin Selvi Ünlü. Eastern Mediterranean Port Cities: A Study of Mersin, Turkey—From Antiquity to Modernity. Springer, 2018.

Benjamin Arbel. Intercultural Contacts in the Medieval Mediterranean. Routledge, 2013.

Ralph Kauz. Aspects of the Maritime Silk Road: From the Persian Gulf to the East China Sea. Otto Harrassowitz, 2010.

Phlōra G Karagiannē. Medieval Ports in North Aegean and the Black Sea. Thessalonike: European Centre for Byzantine and Post-Byzantine Monuments, 2013.

**Lecture 4: Sail ships and port cities**

(developed by Carola Hein and Tino Mager)

With the discovery of the Americas and the development of the Atlantic trade, numerous cities lost their trade and decayed. The establishment of colonies and the construction of major trade hubs led to the creation of cities such as Havana and many ports in Latin America. With the ships came urban planning concepts that were implemented through the Laws of the Indies and that specified the form of urban plazas, the location and design of churches and many more buildings.

Sites of lecture 4:

Lisbon

Sevilla

Havana

Cartagena

Mozambique Island

New Amsterdam

Dejima

**Readings**

Basil W Bathe, Jean Merrien, and Joseph Jobé. The Great Age of Sail. Cambridge: Stephens, 1977.

US National Park Service.Salem: Maritime Salem in the Age of Sail. Washington, D.C: U.S. Department of the Interior, 1987.

Peter Stone and Nick Buxey. The History of the Port of London: A Vast Emporium of All Nations. Barnsley, South Yorkshire: Pen & Sword History, 2017.

Franklin W. Knight, Peggy K. Liss. Atlantic Port Cities: Economy, Culture, and Society in the Atlantic World, 1650-1850. Univ. of Tennessee Press, 1991.

Michael Naylor Pearson. Port Cities and Intruders: The Swahili Coast, India, and Portugal in the Early Modern Era. Johns Hopkins University Press, 1998.

**Lecture 5: Amsterdam and the Dutch East India Company**

(developed by Carola Hein and Tino Mager)

The lecture traces the founding of the Dutch East India Company (Dutch: Vereenigde Oostindische Compagnie; VOC) in Amsterdam and the associated invention of capitalism. At the beginning of the 17th century, the Netherlands quickly established a worldwide empire based on maritime trade. This was accompanied by the construction of harbours, forts and factors that exported the Dutch architectural language of the 17th century to the rest of the world.

Sites of lecture 5:

Amsterdam

Batavia

Melaka

Cape Town

**Readings**

Prakash Om, V B. Gupta. *The Dutch Factories in India: A Collection of Dutch East India Company Documents Pertaining to India*. New Delhi: Manohar, 2007.

Wendy van Duivenvoorde. *Dutch East India Company Shipbuilding: The Archaeological Study of Batavia and Other Seventeenth-Century Voc Ships,* Texas A & M University Press, 2015.

Yasuko Suzuki. *Japan-netherlands Trade 1600-1800: The Dutch East India Company and Beyond*. Kyoto, Japan: Kyoto University Press, 2012.

Masashi Haneda. *Asian Port Cities, 1600-1800: Local and Foreign Cultural Interactions*. Singapore: NUS Press, 2009.

Femme Gaastra, Peter Daniels. *The Dutch East India Company: Expansion and Decline*. Zutphen: Walburg Pers, 2003.

**Lecture 6: Colonial and slave ports**

(developed by Carola Hein and Tino Mager)

The slave trade developed into a multi-continental system of commerce and exploitation. European traders robbed people in Africa, enslaved them and shipped them to American ports for sale. The slave trade is the largest involuntary migration movement of all time and has left its mark to this day. This dark chapter of the Port Cities has left few material traces, they have to be searched very carefully.

Sites of lecture 6:

London

Liverpool

Gorée

Rio de Janeiro

**Readings**

James A. Rawley, Stephen D. Behrendt. *The Transatlantic Slave Trade: A History.* University of Nebraska Press, 2005.

Hugh Thomas. *The Slave Trade.* Hachette, 2015.

Holger Weiss. *Ports of Globalisation, Places of Creolisation: Nordic Possessions in the Atlantic World During the Era of the Slave Trade*. Boston: Brill, 2016.

Randy J.  Sparks. *Where the Negroes Are Masters: An African Port in the Era of the Slave Trade*. Cambridge, Massachusetts: Harvard University Press, 2014.

Mariana P.  Candido. *An African Slaving Port and the Atlantic World: Benguela and Its Hinterland*. Cambridge University Press, 2015.

**Lecture 7: Industrialization, steam ships, oil tankers, first cruise ships**

(developed by Carola Hein and Tino Mager)

Industrialization and rapid technological innovation from the telegraph to steam ships changed ports, cities and the port city architecture rapidly. Around the world new types of harbors and docks led to the creation of monofunctional zones. The Docklands of London and the associated transformation of the City of London inspired port and city transformation around the world. The construction of waterfronts in the port cities of Asia with their trading headquarters, merchant homes, religious and leisure places, demonstrated the emergence of global trade. The construction of several canals (Suez, Panama) and adjacent cities illustrated this further. The use of ships for cruises in winter time, started a trend that is still ongoing.

Sites of lecture 7:

Liverpool

Hamburg

Suez

Panama Canal

Baku

**Readings**

Carola Hein. “Oil Spaces: The Global Petroleumscape in the Rotterdam/The Hague Area”, in: *Journal of Urban History*, *44*(5), 2018, pp. 887–929.

Kevin H. O'Rourke, Jeffrey G. Williamson: *Globalization and History: The Evolution of a Nineteenth-century Atlantic Economy.* MIT Press, 1999.

Franklin W Knight, Peggy K. Liss. *Atlantic Port Cities: Economy, Culture, and Society in the Atlantic World, 1650-1850*. Knoxville: University of Tennessee Press, 1991.

Magda Pinheiro, Henk van Dijk. *Failure or success The impact of industrialisation and de-industrialisation on port cities in Europe*. 2011.

Konvitz, Josef W. “The Crises of Atlantic Port Cities, 1880 to 1920.” *Comparative Studies in Society and History*, vol. 36, no. 2, 1994, pp. 293–318.

**Lecture 8: Destruction and containerization**

(developed by Carola Hein and Tino Mager)

The World Wars have had a major impact on ports and port cities. Their destruction and reconstruction demonstrates the resilience of these cities. It was followed shortly thereafter by containerization, which changed ports, cities, their architecture and infrastructure extensively. Formerly lively sailor districts were soon abandoned and housing districts disappeared. The changes reached far into the hinterland of the cities as throughput and infrastructure construction became most important and new typologies such as logistics centers emerged. With containerization came a huge transformation of port cities. Enormous warehouse districts stood empty waiting for new uses.

Sites of lecture 8:

Rotterdam

Barcelona

London

Cape Town

Adelaide

**Readings**

Lars Amenda: “China-towns and container terminals: shipping networks and urban patterns in port cities in global and local perspective, 1880-1980”, in: Hein, Carola: Port Cities – Dynamic Landscapes and Global Networks, London: Routledge, 2011, pp. 43-53.

Frank Broeze: The Globalisation of the Oceans. International Maritime Economic History Association, 2002.

Hans van Ham, J. C. van Ham, Joan Rijsenbrij: Development of Containerization: Success Through Vision, Drive and Technology. IOS Press, 2012.

Rose George: Ninety Percent of Everything: Inside Shipping, the Invisible Industry That Puts Clothes on Your Back, Gas in Your Car, and Food on Your Plate. New York: Metropolitan Books, 2013.

Boris Vormann: Global Port Cities in North America: Urbanization Processes and Global Production Networks. New York: Routledge, 2015.

**Lecture 9: Early and contemporary waterfront regeneration**

(developed by Carola Hein and Tino Mager)

As the port withdrew and expanded outside the urban area, city government tried to reimagine these areas. Various approaches for waterfront regeneration emerged, some being even promoted by developers, with the result that many of the waterfront regenerations look alike. Waterfront regeneration projects have coincided with numerous events, from European capital of culture to Olympics. As a result, waterfronts have become the focal point for architectural development. New types of housing, sports stadia, musea, universities, various types of large-scale developments are hosted on the waterfront, creating a whole architectural network that is in principle not shipping dependent, but related through its port heritage facilities. Cruise shipping has become a recent way in reinvigorating old waterfronts and bringing ships back to the city.

Sites of lecture 9:

Regenerated Waterfronts and Cruise Destinations

Sydney

Hamburg

Buenos Aires

Cape Town

Baltimore

**Readings**

Rinio Bruttomesso (ed.): Waterfronts - A New Frontier for Cities on Water. Venice, 1993.

Maurizio Carta, Daniele Ronsivalle (ed.): Fluid City Paradigm: Waterfront Regeneration As an Urban Renewal Strategy. Springer, 2018.

Desfor, Gene. Transforming Urban Waterfronts: Fixity and Flow. New York: Routledge, 2012.

Dowling, Ross K, and Clare Weeden. Cruise Ship Tourism. Oxfordshire: CABI, 2017.

Carola Hein: “Hamburg’s Port Cityscape – Large scale urban transformation and the exchange of planning ideas”, in: Carokla Hein (ed.): Port Cities: Dynamic landscapes and global networks, pp. 177-197.

**Contributors’ Bios**

**Carola Hein**

Carola Hein is Professor and Head, Chair History of Architecture and Urban Planning at Delft University of Technology. She has published widely in the field of architectural, urban and planning history and has tied historical analysis to contemporary development. Among other major grants, she received a Guggenheim Fellowship to pursue research on The Global Architecture of Oil and an Alexander von Humboldt fellowship. Her current research interests include the transmission of architectural and urban ideas, focusing specifically on port cities and the global petroleumscape. Her books include: The Capital of Europe. Architecture and Urban Planning for the European Union (2004), Port Cities: Dynamic Landscapes and Global Networks (2011), Brussels: Perspectives on a European Capital (2007), European Brussels. Whose capital? Whose city? (2006), Rebuilding Urban Japan after 1945 (2003), Cities, Autonomy and Decentralisation in Japan. (2006), Hauptstadt Berlin 1957-58 (1991). She has published numerous articles in peer-reviewed journals, books, and magazines.

**Tino Mager**

Tino Mager studied media technology in Leipzig, and art history and the communication sciences in Berlin, Barcelona, and Tokyo. He graduated with a Diplom in 2004 and a Magister Artium in 2009. He received his PhD in 2015 from the Berlin Institute of Technology where he was an Elsa Neumann fellow. After research terms in Japan and at the University of California, Los Angeles, he held lectureships at the Berlin Institute of Technology and Istanbul Technical University. From 2015 to 2017, he has been a research associate at the Chair of History and Theory of Architecture at the Technical University in Dortmund. In 2016 he became a fellow of the Leibniz Association. Since 2017, he is PostDoc researcher at the Chair of History of Architecture and Urban Planning at Delft University of Technology.