

Edited by
Lukas Werther, Hartmut Müller, Marion Foucher

Alkiviadis Ginalis, Dominik Heher, Andreas Külzer,
Johannes Preiser-Kapeller, Grigori Simeonov

HARBOURS AND LANDING PLACES ON THE BALKAN COASTS OF THE BYZANTINE EMPIRE (4TH TO 12TH CENTURIES)

EUROPEAN HARBOUR DATA REPOSITORY



Jena 2019

How to cite this volume :

A. Ginalis, D. Heher, A. Külzer, J. Preiser-Kapeller, G. Simeonov, *Harbours and landing places on the Balkan coasts of the Byzantine Empire (4th to 12th centuries)*. In: L. Werther / H. Müller / M. Foucher (ed.), *European Harbour Data Repository*, vol. 04 (Jena 2019). DOI: <https://doi.org/10.22032/dbt.38384> (pdf), <https://doi.org/10.22032/dbt.38386> (csv), <https://doi.org/10.22032/dbt.38385> (excel).

How to cite a specific dataset in this volume:

A. Ginalis, D. Heher, A. Külzer, J. Preiser-Kapeller, G. Simeonov, *Harbours and landing places on the Balkan coasts of the Byzantine Empire (4th to 12th centuries)*, ID [add number ID_place]. In: L. Werther / H. Müller / M. Foucher (ed.), *European Harbour Data Repository*, vol. 04 (Jena 2019). DOI: <https://doi.org/10.22032/dbt.38384> (pdf), <https://doi.org/10.22032/dbt.38386> (csv), <https://doi.org/10.22032/dbt.38385> (excel).

European Harbour Data Repository

Table of contents

General introduction and critical comments	4
Specific introduction and critical comments	8
Key words and thesauri	11
References	33
Database	50

European Harbour Data Repository

General introduction and critical comment

General introduction and critical comments

The European Harbour Data Repository is a series of databases which were compiled in the framework of the DFG-funded Priority Program 1630 “Harbours from the Roman Period to the Middle Ages” (Kalmring/von Carnap-Bornheim 2012; Engel/Kunz/Müller/Werther 2018; <http://www.spp-haefen.de/en/home/>). It is part of the virtual HArbour Research Environment “HARE” (<http://haefen.i3mainz.hs-mainz.de/>) and catalogues harbours, harbour-related infrastructure, and vessels all over Europe with a chronological focus on the Roman and Medieval Period.

Different digital volumes of the data repository have been compiled by several project teams within and without the Priority Program. Therefore, the spatial and chronological focus, as well as the size of the datasets, differ significantly. Furthermore, some of the datasets cover a specific region and period which is representative as possible, whereas other datasets focus on selected sites. We try to minimize data overlap, but in some cases, this was not possible.

A cross-disciplinary, cross-period, and cross-border database is a challenge. We hope that our method will have a benefit for the research community. Given the spatial and chronological scale and the diversity of sources, this Data Repository does not aim to be exhaustive – and it is still growing, thus not yet completed. Before using this data collection for further analysis, it is absolutely necessary “to verify and restrict content spatially and temporally,” as recommended by Roosen and Curtis (2018), since the data is patchy especially on a supra-regional scale. We should add that the topics have to be carefully chosen as well, and the data quality must be kept in mind (see e.g. Cooper / Green 2015; Roosen / Curtis 2018; Wilson 2011).

Every user has to be aware of these restrictions, especially when combining different datasets for quantitative analysis!

Scientific, Authentic and Ethical Data Collection

In his paper “Geospatial Big Data and Archaeology”, McCoy (2017) discusses the need to “produce data and results that are scientific (testable, replicable), authentic (a faithful representation of the archaeological record and the human past), and ethical (protects cultural resources).”

To produce data that is scientific, the relevant sources are described for every dataset as well as their accuracy, nature and quality. Furthermore, each database has a specific introduction and critical comments [the “Stand-alone Quality Report” after (McCoy, 2017)], which contains detailed information on the data’s quality and nature, collection methodology, strengths, pitfalls and gaps. Every database and volume of the European Harbour Data Repository is based on an identical database architecture and uses the same thesauri to guarantee interoperability. Before publication, every database is checked by the editors with a specific protocol to prevent inconsistencies, gaps, spelling mistakes or thesaurus misuse.

To produce data that is authentic, each dataset has one or several clearly named author(s), who have been responsible for data collection and the transfer and translation in the database architecture. All these authors are experts in specific research on their field. Furthermore, the data collection is part of a distinct research project with a clearly defined topic as well as spatial and chronological boundaries.

To produce data that is ethical and to protect the archaeological heritage and prevent looting and vandalism, the spatial accuracy of longitude and latitude has been reduced to three decimal places. Nevertheless, the precision is still sufficient for manifold spatial analysis.

Data and Database Architecture

Ordinary EXCEL sheets have been used for data acquisition, similar to the established process of data collection in the Harvard “Digital Atlas of Roman and Medieval Civilizations” (<https://darmc.harvard.edu/>), “The Oxford Roman Economy Project” (<http://oxrep.classics.ox.ac.uk/>) and the “Database of Ancient Ports and Harbours” (<http://www.ancientportsantiques.com/> and de Graauw 2016).

Each entry (i.e., each row of the table) has a specific ID (i.e. column «ID_place») and consists of a certain number of details/attributes (i.e., columns of the table), such as the site name, its geo-coordinates, the function or the dating and the certainty of these data. As the EXCEL structure does not allow for a relational data model, datasets are sometimes split for locations with heterogeneous information: for example, a harbour city with a roman quay and a medieval landing site.

Specific obligatory thesauri (see below) have been predefined for most of the columns in order to standardise details/attributes. Nevertheless, the level of detail of data entry may differ significantly from author to author. In fields with multiple entries, these are separated by a semicolon. Each dataset is referenced with short titles of modern and/or ancient authors in the database, which refer to the full and separate bibliography.

Due to legal restrictions and ethical issues (looting and vandalism), some of the databases have not been published completely with all the existing datasets and sites. In this case, the authors specify the restrictions and scientific use of the full version for a specific purpose, as it may possibly be on inquiry.

Geographical localisation

All geographical coordinates are latitude and longitude in decimal degrees (WGS 84). We distinguish between the security and the precision of the localisation. The security is the spatial reliability of the localisation, which is highest for a precisely-measured archaeological feature and lowest/very uncertain for locations in written sources which are located with weak indications. The precision is more technical, and is mainly determined by the precision of the base map or zoom factor during mapping.

For very fuzzy geographic information from written sources, which only allow for the identification of a specific watercourse (e.g. “navigation on river xy”), the specific key code “fuzzy location” has been used. In these cases, the geo-coordinates have been placed at a location at the watercourse which seemed most likely to the author.

Chronological information

Chronological information is based on manifold data, whereas precision and reliability differ significantly, which is documented in detail. The main chronological information could be found in the columns by century. If the chronological information is reliable, a “yes” has been filled in; if the chronological information is not reliable or the author had to deal with intervals of uncertainty (e.g. ¹⁴C-dates), “assumed” has been filled in. Additionally (!), the columns “Date_min” and “Date_max” are used for precise numerical dates, especially in case of a precise terminus post quem or terminus ante quem. Nevertheless, every author determines how he exactly used these fields.

At the end of each dataset, you may find comments of the authors or additional information, which did not coincide with the database scheme.

Mistakes are inevitable – please contact us, if you find any of them!

Data Formats

The databases are available as Excel-file as well as .csv to allow for long-term reusability. They could easily be integrated in geographic information systems and data management and analysis tools. All additional information is available as .pdf.

Credits

The European Harbour Data Repository is edited by Lukas Werther, Hartmut Müller, and Marion Foucher, supported by Sebastian Steppan. Every volume of the Data Repository is authored by one or several specialists. The European Harbour Data Repository is a result of the DFG-funded Priority Program 1630 “Harbours from the Roman Period to the Middle Ages.” The database has been designed by a team of archaeologists, historians, geographers, and information technology specialists at Jena University and the University of Applied Sciences Mainz. The work is strongly supported by the Centre for Baltic and Scandinavian Archaeology Schleswig (Claus von Carnap-Bornheim) as well as the other PIs of the Priority Program (Falko Daim, Peter Ettel, and Ursula Warnke) as well as all projects in the Priority Program (<http://www.spp-haefen.de/en/projects/>). Data publication and archiving for long-term availability is supported by Digitale Bibliothek Thüringen (<https://www.db-thueringen.de>).

License

The European Harbour Data Repository is licensed under a Creative Commons License CC-BY-NC-SA (<https://creativecommons.org/licenses/by-nc-sa/4.0/>). Therefore, you are free to copy and redistribute the material in any medium or format, to remix, transform, and build upon the material under the following terms: You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. You may not use the material for commercial purposes. If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original. You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.



Bibliography

Cooper / Green 2015 - A. Cooper/ C. Green: "Embracing the complexities of 'big data' in archaeology: the case of the English Landscape and Identities project", Journal of Archaeological Method and Theory 23 (1), 2015, 271-304.

McCoy 2017 - M. D.McCoy, Geospatial Big Data and archaeology: Prospects and problems too great to ignore. In: Journal of Archaeological Science, 84, 2017, 74-94.

Engel/Kunz/Müller/Werther 2018 - T. Engel/A. Kunz/H. Müller /L. Werther: Towards a Virtual Research Environment for Ancient Harbour Data. In: C. von Carnap-Bornheim/F. Daim/P. Ettel u. a. (ed.): Harbours as object of interdisciplinary research. Archaeology + history + geosciences. RGZM Tagungen 34 (Mainz 2018) 59–69.

De Graauw 2016 - A. de Graauw: Ancient Ports and Harbours. Volume 1: The Catalogue. <http://www.ancientportsantiques.com/docs-pdf/> [access: 24 June 2016].

Roosen / Curtis 2018 - J. Roosen/D. R. Curtis: Dangers of noncritical use of historical plague data,. In: Emerging Infectious Diseases, Vol. 24-1, January 2018, 103-110.

Wilson 2014 - A. Wilson: Quantifying roman economic performance by means of proxies: pitfalls and potential. In F. de Callataÿ (ed.): Quantifying the Greco-Roman economy and beyond. Pragmateiai 27 (Bari 2014), 147-167.

Kalmring/von Carnap-Bornheim 2012 - S. Kalmring/C. von Carnap-Bornheim: DFG-Schwerpunktprogramm 1630 «Häfen von der Römischen Kaiserzeit bis zum Mittelalter. Zur Archäologie und Geschichte regionaler und überregionaler Verkehrssysteme» bewilligt. Jahresbericht Zentrum Baltische und Skandinavische Archäologie 2011, 2012, 28–31.

Volume 4

Project Harbours and landing places on the Balkan coasts of the Byzantine Empire (4th to 12th centuries)

Specific introduction and critical comment

FRAMEWORK OF DATA COLLECTION

Data collection for this database took place during 2013-2018, in the framework of Priority Program 1630 Harbours, project “Harbours and landing places on the Balkan coasts of the Byzantine Empire (4th to 12th centuries)” based on a cooperation between the Römisch-Germanische Zentralmuseum (RGZM - Mainz, Prof. Dr. Falko Daim), the Dept. for Byzantine and Modern Greek Studies of the Univ. of Vienna (Prof. Dr. Ewald Kislinger) and the Institute for Medieval Research/Division of Byzantine Research, Austrian Academy of Sciences (Prof. Dr. Andreas Külzer) in collaboration with the National Hellenic Research Foundation, Institute of Historical Research (IHR/NHRF, Athens), Section of Byzantine Research, Programme for the Historical Geography of the Greek Territory (Prof. Dr. Taxiarchis Kolias, Dr. Anna Lampropoulou, Dr. Ilias Anagnostakis, Dr. Maria Leontsini, Dr. Angeliki Panopoulou, Dr. Anastasia G. Yangaki)

The responsible authors are (in alphabetic order): Dr. Ilias Anagnostakis (IHR/NHRF), Dr. Alkiviadis Ginalis (RGZM-Mainz), Dr. Dominik Heher (RGZM-Mainz), Prof. Dr. Andreas Külzer (Institute for Medieval Research/Division of Byzantine Research, Austrian Academy of Sciences), Dr. Johannes Preiser-Kapeller (RGZM-Mainz and Institute for Medieval Research/Division of Byzantine Research, Austrian Academy of Sciences), Mag. Grigori Zhivkov Simeonov (RGZM-Mainz).

The principal investigator of the project is Prof. Dr. Falko Daim (RGZM-Mainz).

TOPICS AND CONTENT

The main topics of this database are harbours and landing sites of Late Antiquity and the Byzantine period along the Balkan coasts.

The database contains 667 datasets, including 661 harbours, 5 navigable waterways and 1 other dataset.

SPATIAL COVERAGE - DETAILS

The working areas for data collection have been the Balkan coasts from Dalmatia to the mouth of the Danube; for these areas, a systematic data collection has been carried out.

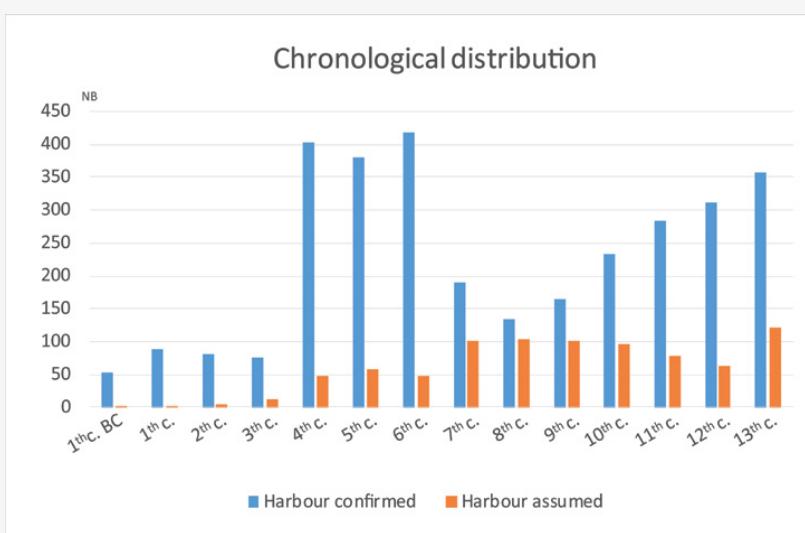
SPATIAL STRENGTHS AND LIMITATIONS

It was the aim to create a dataset as representative as possible for the whole area; the research, however, was restricted to mainland coastal areas and nearby islands, while the majority of the islands in the Aegean, for instance, has not been covered. Equally, the framework of the SPP demanded a limitation to coastal areas in the European provinces of the Byzantine Empire.

TEMPORAL COVERAGE - DETAILS

The temporal focus of the database is the period 300 to 1200 AD.

The aim was to cover the entire period with the same resolution; lack of (historical or archaeological) evidence, especially for the 7th to 9th century AD, however, limits the amount of reliable information for some centuries. The reliability of data and dating are indicated according to the KeyCodes.



SOURCES

Data collection for this database is mainly based on written and archaeological sources, which have been collected in a systematic survey of published literature (and, if possible, unpublished archaeological reports). A source of information of special value were (if existing for the respective regions) the volumes of the *Tabula Imperii Byzantini* (TIB, a project of the Institute for Medieval Research/Division of Byzantine Research, Austrian Academy of Sciences, headed by Prof. Dr. Andreas Külzer and Doz. Dr. Mihailo Popović; <https://tib.oeaw.ac.at/>) respectively the systematic collection of written sources on record cards of the TIB, whose usage was based on a cooperation agreement between RGZM-Mainz and the home institution of the TIB.

For sites on the Northern Sporades and in Thessaly, information could also be based on recent excavations and survey undertaken by the team member Dr. Alkiviadis Ginalis during earlier projects. Furthermore, the harbours of Constantinople and its environs have been systematically analysed in a separate publication:

F. Daim (ed.), Die byzantinischen Häfen Konstantinopels. Mainz 2016 (open access: <http://books.ub.uni-heidelberg.de/propylaeum/catalog/book/330>).

All data was also compared carefully with the “Catalogue of Ancient Ports” of Arthur de Graauw (<http://www.ancientportsantiques.com/the-catalogue/>), which covers the entire Mediterranean and

beyond, but with a focus on the centuries preceding the period investigated in our project. The data of de Graauw shows also a considerably lower resolution with regard to the dating and exact localization of sites.

FINAL REMARKS

Data collection and updates will be continued in various frameworks by some of the team members, especially also within the framework of the collaboration with IHR/NHRF, Athens. Therefore, an updated version of this data set will be made accessible over the course of the next months.

European Harbour Data Repository

Key words and thesauri

Harbour Terminology for Data Integration in HARE, Version 1.1

Fields and Key Codes

A list of key codes has been defined for every column of the database as a guideline for the authors. As this list contains information, which is crucial to understand and reuse the database, we reproduce the full version.

ID_place	Numeric ID of each dataset
Author	Editor/author of the dataset, multiple references possible; format " <u>M. Mustermann/S. Sample</u> "
Project	If you are a member: project assignment in Priority Program 1630, use the short titles on http://www.spp-haefen.de/en/projects/ [thesaurus obligatory]; If you are no member: use a coherent short title of your project or affiliation
Year	Year of the creation of the data set; You could add the year(s) of substantial revisions
Status	<u>1</u> : Data set completed and confirmed in most instances, <u>2</u> : Data set in progress, <u>3</u> : Data set uncompleted and not confirmed [thesaurus obligatory]
Public	<u>internal</u> (only visible/accessible for registered HARE user), <u>open</u> (open access in the WebGIS); [thesaurus obligatory]
Latitude	Decimal Degrees if possible, minimum two and maximum six decimal places; negative values in the South if necessary; Projection WGS 84; Best practice: Google Earth - Options - Longitude/Latitude - Decimal Degrees
Longitude	Decimal Degrees if possible, minimum two and maximum six decimal places; negative values in the West if necessary; Projection WGS 84; Best practice: Google Earth - Options - Longitude/Latitude - Decimal Degrees
Country	Country (English name)
Name_mod	Modern or common scientific name, usually toponym of the town/village/place, if necessary supposed place/locality
Name_hist	Historic name, multiple references possible
Hydro_type	Hydrological position: <u>River</u> , <u>Lake</u> , <u>Sea</u> ... [thesaurus obligatory]; the assignment determines if it is an inland harbour or a maritime harbour; multiple alternative entries possible in case of transition areas

Hydro_name_mod	Modern name of the hydrological unit (River, Lake, Sea, Specific part of a coastline...)
Hydro_name_hist	Modern name of the hydrological unit in the specific context of the source
Locat_secure	Reliability of the localisation/spatial reliability; <i>highly reliable</i> (e.g. excavated features), <i>reliable</i> , <i>uncertain</i> , <i>very uncertain</i> [thesaurus obligatory]
Locat_text	Descriptive text concerning the reliability of the localisation/spatial reliability and the underlying data , e.g. "Location at river xy", "Location because of having the same name as a modern place/town/village"
Locat_precision	Precision of the localisation (1: meters, 2: hundreds of meters, 3: kilometers, 4: modern place mapped, 5: modern hydrological unit mapped, <i>fuzzy location</i>) [thesaurus obligatory]
Source_hist	Historic proof for the harbour/locality (written source, picture, map...); <i>yes/no/assumed</i> [thesaurus obligatory]
Source_feature_arch	Archaeological or geo-archaeological features for the harbour/locality; <i>yes/no/assumed</i> [thesaurus obligatory]
Source_find_arch	Archaeological finds as an indication for the harbour/locality (imported goods, coins, parts of ships...); <i>yes/no/assumed</i> [thesaurus obligatory]
Source_other	Other proof/sources; please use key words (e.g. toponym, oral tradition...)
Place_type_general	General definition of the place described: <i>harbour</i> [including anchorages, <i>ferry harbours</i> , start and end points of transport by ship in written sources], <i>canal/portage</i> , <i>waterway</i> [especially for written sources, e.g. proof for navigation on a certain river without specific information about a harbour locality], <i>vessel</i> , <i>other</i> [thesaurus obligatory – see the full thesaurus below for details and definitions]
Place_technique	Harbour terminology in matters of construction/building technique. Constructive key termini: <i>landing</i> [general term for quay, wharf, jetty, pier], <i>quay</i> , <i>quay wall/wharf</i> , <i>pier/jetty</i> , <i>mole</i> , <i>breakwater</i> , <i>landing place</i> (<i>hythe</i> , <i>landing site</i>), <i>landing place with installations</i> , <i>bank revetment</i> . Other constructive termini: <i>pontoon</i> , <i>canal</i> , <i>anchorstone</i> , <i>floating barrier</i> , <i>boat slip/slipway</i> . Ship-specific termini: <i>raft</i> , <i>planked vessel</i> , <i>logboat</i> , <i>extended logboat</i> , <i>flat bottomed vessel</i> , <i>keelboat</i> , <i>other water vessel</i> [e.g. with textile shell] <i>boat/ship parts</i> [e.g. <i>paddles</i> , <i>rows</i> , <i>ropes</i> , <i>sails</i>] [multiple entries possible; thesaurus obligatory – see the full thesaurus below for details and definitions]
Place_topography	Topographic position of the harbour. Main topographic terms: <i>sea harbour/port</i> , <i>inland harbour</i> , <i>river harbour</i> , <i>lacustrine harbour</i> , <i>river mouth harbour</i> , <i>confluence harbour</i> , <i>island harbour</i> , <i>tidal harbour</i> , <i>lagoonal harbour</i> , <i>fjord harbour</i> , <i>canal harbour</i> , <i>harbour basin</i> , <i>anchorage</i> , <i>natural obstacle for navigation</i> [details in comments]. Other topographic terms: <i>open harbour</i> [permanent access], <i>closed harbour/dock</i> , <i>harbour basin separated by a mole</i> , <i>parallel harbour</i> [riverine], <i>outer harbour</i> , <i>dead-end harbour canal</i> , <i>Geestrandburg</i> , <i>Gewerbewurt</i> , <i>Langwurt</i> [multiple entries possible; thesaurus obligatory – see the full thesaurus below for details and definitions]
Place_infrastructure	Infrastructure for harbour operation and additional facilities. Central infrastructural terms: <i>shipyard</i> , <i>dockside crane</i> , <i>boathouse</i> , <i>boat slip</i> , <i>lighthouse</i> , <i>storehouse</i> , <i>corporation of boatmen/guild</i> [e.g. <i>nautae</i>], <i>river crossing</i> , <i>bridge</i> , <i>ford</i> , <i>connected to important terrestrial route/road</i> . Other infrastructural terms: <i>dolphin</i> , <i>mooring pole</i> , <i>bollard/belaying post</i> , <i>buoy</i> , <i>fender</i> , <i>cairn</i> , <i>Vorr</i> , <i>Baumhaus</i> , <i>harbour palisade</i> , <i>barrage</i> , <i>derrick/davit</i> , <i>tow path</i> , <i>sluice</i> , <i>fishery</i> , <i>water mill</i> , <i>dam</i> . [multiple entries possible; thesaurus obligatory – see the full thesaurus below for details and definitions]
Place_function	Function and purpose of the harbour. Central function-specific terms: <i>commercial/trade harbour</i> , <i>naval base</i> , <i>origin/destination of transportation by ship</i> [from written sources], <i>ferry harbour</i> , <i>landing place</i> [synonym <i>hythe</i> , <i>landing site</i>], <i>port</i> , <i>fishing harbour</i> , <i>transhipment harbour</i> , <i>safety harbour</i> , <i>beach market</i> , <i>shipyard</i> , <i>water toll/naval duties</i> , <i>waterway</i> . Other function-specific termini: <i>dockland/waterfront</i> , <i>staple port</i> , <i>Schiffsländenburgus</i> , <i>villa maritima</i> . Ship-specific termini: <i>inland vessel</i> , <i>seagoing vessel</i> , <i>ferry</i> , <i>cargo vessel</i> , <i>naval ship</i> , <i>fishing/working vessel</i> , <i>rowing facilities</i> , <i>sailing facilities</i> , <i>towing/hauling facilities</i> , <i>paddling facilities</i> , <i>punting/staking facilities</i> . [multiple entries possible; thesaurus obligatory – see the full thesaurus below for details and definitions]
Goods_finds	Proof for specific transported goods and other specific finds and groups of material: <i>cargo</i> , <i>passengers/people</i> , <i>food</i> , <i>fish</i> , <i>wine</i> , <i>grain/cereal</i> , <i>oil</i> , <i>salt</i> , <i>people</i> , <i>pottery</i> , <i>amphorae</i> , <i>barrels</i> , <i>stone</i> , <i>timber</i> , <i>straw/hay</i> , <i>iron/ore</i> [Multiple entries possible; thesaurus obligatory – see the full thesaurus below for details and definitions]

Actors_activity	Harbour- and navigation-specific actions and events as well as specific user groups: <i>upstream navigation, downstream navigation, hauling/towing, sailing, paddling, rowing, stake/punt, shipwreck, piracy</i> [Multiple entries possible; thesaurus obligatory – see the full thesaurus below for details and definitions]
Place_hierarchy	Individual expert evaluation concerning the hierarchical order and importance of the harbour concerning the spatial extent of its importance, its position in the harbour network, the frequency and duration of its use, the general constructive effort, the spatial connection to sites of production and consumption as well as terrestrial routes: <i>global importance, supraregional importance, regional importance, local importance, seasonal/periodical use, permanent use, peripheral location, central node, short-term use, long-term use, no proof for actual use, substantial harbour infrastructure/buildings, no substantial harbour infrastructure/buildings, Connected to important terrestrial route/road, Connected to an important productive site, Connected to an important consumer site, connected to an important center of administration or power, connected to an important religious center, connected to an important military base.</i> [Please use multiple entries; thesaurus obligatory – see the full thesaurus below for details and definitions]
Place_secure_info	Comments on the reliability of the classification of the harbour/location, free text (general, technique, topography...); e.g. (always together with a specific classification/category): explicit archaeological features/historical proof; implicit/highly interpretive archaeological features/historical proof; classification of a modern author/academic based on an unsecure/unclear basis
Date_min	Earliest proof in absolute calendar years [if only the century/centuries or a certain period is known: fill in the starting year/terminus post quem]; <u>only one number [numeric], no text and no special characters!</u>
Date_max	Earliest proof in absolute calendar years [if only the century/centuries or a certain period is known: fill in the end year/terminus ante quem]; <u>only one number [numeric], no text and no special characters!</u>
Date_pre_1_cent_BC	Dating before 1st century BC documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_1_cent_BC	Dating 1 st century BC documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_1_cent_AD	Dating 1 st century AD documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_2_cent_AD	Dating 2 nd century AD documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_3_cent_AD	Dating 3 rd century AD documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_4_cent_AD	Dating 4 th century AD documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_5_cent_AD	Dating 5 th century AD documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_6_cent_AD	Dating 6 th century AD documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_7_cent_AD	Dating 7 th century AD documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_8_cent_AD	Dating 8 th century AD documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_9_cent_AD	Dating 9 th century AD documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_10_cent_AD	Dating 10 th century AD documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_11_cent_AD	Dating 11 th century AD documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_12_cent_AD	Dating 12 th century AD documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_13_cent_AD	Dating 13 th century AD documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_14_cent_AD	Dating 14 th century AD documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_15_cent_AD	Dating 15 th century AD documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_16_cent_AD	Dating 16 th century AD documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_17_cent_AD	Dating 17 th century AD documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_18_cent_AD	Dating 18 th century AD documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_19_cent_AD	Dating 19 th century AD documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_20_cent_AD	Dating 20 th century AD documented; <u>yes/no/assumed</u> [thesaurus obligatory]
Date_secure	Dating quality/reliability: <i>highly reliable</i> (archaeometric dating/dendrochronology/14C, clear dates in written sources...), <i>reliable</i> , <i>uncertain</i> , <i>very uncertain</i> [thesaurus obligatory]

Date_text	Descriptive text about the dating (what is dated, how was it dated, how reliable is the date, how reliable is the context...); you can fill in "fuzzy" dating information here, if the dating is very uncertain, for example a roman or early medieval date is assumed without further details
Ref_hist	Historic/written source, which contains information about the specific harbour; if possible with information about the author (e.g. Einhard, Vita Caroli Magni/Das Leben Karls des Großen)
Ref_mod	Modern references/bibliography, which contains crucial information about the specific harbour; fill in at least a short title/lemma with the authors name and the year of publishing; if possible, please fill in the full title to every short title/lemma in the sub-table "References". For unpublished data/archivalia please add a clear reference such as "unpubl. material/documents from museum XY".
Comments	Comments to the dataset, additional information; free text
Punctuation/ Separators	If multiple entries are necessary in a specific field: separate alternatives/synonyms with a forward slash "/"; separate rival entries or entries of multiple sources/references with a semicolon ";". The comma "," only divides longer entries and is not allowed to be used as a separator!

Thesauri

This terminology is provided as a tool for systematic data entry in the data sheets of HARE. It has been developed in the framework of SPP 1630 "Harbours". The terminology and definitions are based on the German harbour terminology provided by the working group "Terminology" in SPP 1630 ([J. Daum/I. Eichfeld et al.] with contributions from Julia Daum, Marion Foucher, Sven Kalmring, Lars Kröger, Natascha Mehler, Manuela Mirschenz, and Johannes Preiser-Kapeller). It has been reduced, simplified and regrouped thematically based on the pre-existing structure of HARE, which allows for smooth data migration and easy data entry. The English terminology has been provided by Lukas Werther, Thomas Engel, and Nina Korbel using (and referring to) existing thesauri such as Getty. Please help us improve this terminology in version 1.1. Please contact us in case of mistakes, questions, and ideas.

Table of content

1. Place_type_general
2. Place_technique
3. Place_topography
4. Place_infrastructure
5. Place_function
6. Place_goods_finds
7. Actors_activity
8. Place_hierarchy

Place_type_general

Grobe Einordnung des beschriebenen Ortes [\[Thesaurusbinding\]](#)

General definition of the place described [\[thesaurus obligatory\]](#)

Term DE	Term EN	Definition SPP 1630	Definition extern
Hafen <i>[beinhaltet Ankerplatz, Fähranleger, Start-/Endpunkt eines Transports per Schiff aus hist. Quellen]</i>	Harbour <i>[including anchorages, ferry harbours, start and end points of transport by ship in written sources]</i>	An einem Ufer gelegener Ausgangs- und/ oder Endpunkt für die Schifffahrt. In der Regel handelt es sich um Bereiche, die aufgrund natürlicher und/oder baulicher Anlagen besonderen Schutz bieten. <i>Starting and/or terminal point of waterways at a shore. Usually areas with natural and/or edificial constructions in terms of protection.</i>	
Kanal/Schleppstrecke <i>[Synonym: portage]</i>	Canal/portage	Anthropogen hergestellter Wasserlauf zur Schaffung einer Wasserstraße. <i>Man-made watercourse to create a navigable waterway.</i>	

Wasserstraße [v.a. für hist. Quellen, z.B. Beleg für Schifffahrt auf Fluss xy, aber keine konkrete Hafenlokalität]	Waterway [especially for written sources, e.g. proof for navigation on a certain river without a specific harbour locality]	(Regelmäßig) Befahrene Verkehrsroute der See- und Binnenschifffahrt. (Frequently) Used traffic route in maritime and inland navigation	
Wasserfahrzeug	Vessel	Alle Arten von Wasserfahrzeugen. All kinds of vessels.	
Sonstiges	Other	Alle anderen Einrichtungen/Objekte. All further facilities/items.	

Place_technique

Hafenterminologie bautechnisch spezifiziert; Mehrfachnennungen möglich [Thesaurusbindung]

Harbour terminology in matters of construction/building technique; multiple entries possible [thesaurus obligatory]

Term DE (Abb.1)	Term EN (Fig. 1)	Definition SPP 1630	Definition extern
Zentrale bautechnische Termini	Constructive key termini		
Anleger [Synonym: Anlegestelle; Sammelbegriff für Kai, Mole, Brücke, Pier, Steg usw.]	Landing [general term for quay, wharf, jetty, pier]	Einrichtung im Wasser, an der Schiffe schwimmend heranfahren und festmachen können. <i>Installation in the water to moor afloat.</i>	IHO
Kaianlage [Antonym: Schiffslände]	Quay	Künstlich errichtete Anlagen, die ein schwimmendes Anlegen ermöglichen. <i>Artificial construction to moor afloat.</i>	
Kaimauer [Synonym: Kai]	Quay wall [built on fill]; Wharf [built on piles]	Künstlich errichtete Anlage, die parallel zum Ufer verläuft. <i>Artificial construction to moor afloat, parallel to the shore, built on fill (quay wall) or piles (wharf). Use "Quay wall/wharf" when no detailed information about the construction.</i>	Getty
Landebrücke/Pier [Synonym: Schiffbrücke] a, Landebrücke/Pier auf Stützen b, Landebrücke/Pier mit massivem Unterbau	Pier/jetty a, pier/jetty on piles b, pier/jetty on fill	Künstliche errichtete Holzkonstruktionen, die rechtwinklig vom Ufer in tieferes Wasser führen, Anlegen längs und/oder an der Stirnseite möglich. Auf hölzernem Unterbau [auf Stützen] oder Dämmen [auf massivem Unterbau/Aufschüttung], Artificial wooden [on piles] or damlike [on fill] construction to moor afloat, rectangular to the shore into deeper water.	IHO, IHO
Mole	Mole	Dammartige Bauwerke mit Verbindung zum Ufer zum Schutz eines Hafens oder einer Hafeneinfahrt gegen Wellen, Strömung und Versandung. <i>Damlike construction connected to the shore, protection of the harbour or the harbour entrance against waves, currents or sedimentation.</i>	Getty

Wellenbrecher	Breakwater	Zum Auffangen der Seegangsgesnergie und für die Schaffung einer Zone des Wellenschattens zum Schutz der Schiffe im Hafen, ohne Verbindung mit dem Ufer. <i>Protections against waves, offshore, without connection to the shore.</i>	IHO
Schiffslände [Synonym: Bootslände, Landestelle, Landeplatz, Lände, Hude; Antonym: Kai-anlage; beinhaltet Tidehafen, da nur andere Gewässeranbindung]	Landing place [synonym hythe, landing site]	Einfacher Landeplatz ohne künstliche Ausbauten. <i>Simple landing without artificial installations.</i>	Getty
Schiffslände mit festem Zugang / Einbauten	Landing place with installations	Schiffslände mit künstlichen Ausbauten, die u.a. dem verbesserten Zugang dienen. <i>Landing with artificial installations, among others, to improve the access.</i>	
Uferbefestigung [Synonym: Faschine; Uferrandbefestigung; Ufersicherung; Uferschutz; Uferverbau, Schlachte; Funktion ggf. unklar]	Bank revetment	In der Regel parallel zum Ufer verlaufende, vertikale oder liegende Konstruktion (z.B. → Faschine) zur Fixierung des Sediments oder gegen die Beschädigung des Gewässerufers. <i>Bank parallel construction to stabilize the bank.</i>	
Weitere bautechnische Termini	Other constructive termini		
Ponton [Synonym Schiffsbrücke, Schwimmsteg]	Pontoon	Schwimmender Hohlkörper, vorwiegend zum Anlegen v. Schiffen od. als Arbeitssplattform.	IHO
Kanal	Canal	Anthropogen hergestellter Wasserlauf zur Schaffung einer Wasserstraße (hier als Nebenelement, ansonsten unter Place_type_general), auch zur Wasserzu- oder -ableitung. <i>Man-made watercourse to create a navigable waterway, further used for supply with/or discharge of water.</i>	Getty
Ankerstein [Synonym: Vertäuungsstein]	Anchorstone	Ein mit mindestens einem Loch versehener Stein, welcher fest in die Kaianlage oder Mole verbaut ist und dem Vertäuen von Schiffen dient. <i>A stone with at least one hole, which is integrated in the quay or mole and used to anchor ships.</i>	
Schlengel	Floating barrier	Einfacher, niedriger Ponton zum Anlegen und Festmachen für Boote in Tidengewässern oder schwimmende, bewegliche Absperrung . <i>Basic, low pontoon to land or fasten boats in tidal waters, or as a swimming, transportable blockage.</i>	
Slip	Boat slip	Schiefe Ebene (z. B. auf Werften), um Boote an Land zu ziehen oder ins Wasser zu lassen. <i>Inclined plane (e.g. at shipyards), to pull boats ashore or launch them.</i>	IHO ; Getty

Schiffsspezifische Termini	Ship-specific termini		
Floß	Raft	Schwimmende Plattform aus z. B. Baumstämmen. <i>Swimming platforms, made from e.g. trunks.</i>	Getty
Plankenfahrzeug	Planked vessel		
Einbaum	Logboat		
Mischform Einbaum/ Plankenfahrzeug	Extended logboat		
Flachbodenfahrzeug/Prahm	Flat bottomed vessel		
Kielfahrzeug	Keelboat		
Sonstiges Fahrzeug	Other water vessel		
[z.B. Textilbespannung o.ä.]	[e.g. with textile shell]		
Fahrzeugteile	Boat/ship parts		
[z.B. Paddel, Ruder, Tauwerk, Segel]	e.g. paddles, rows, ropes, sails]		

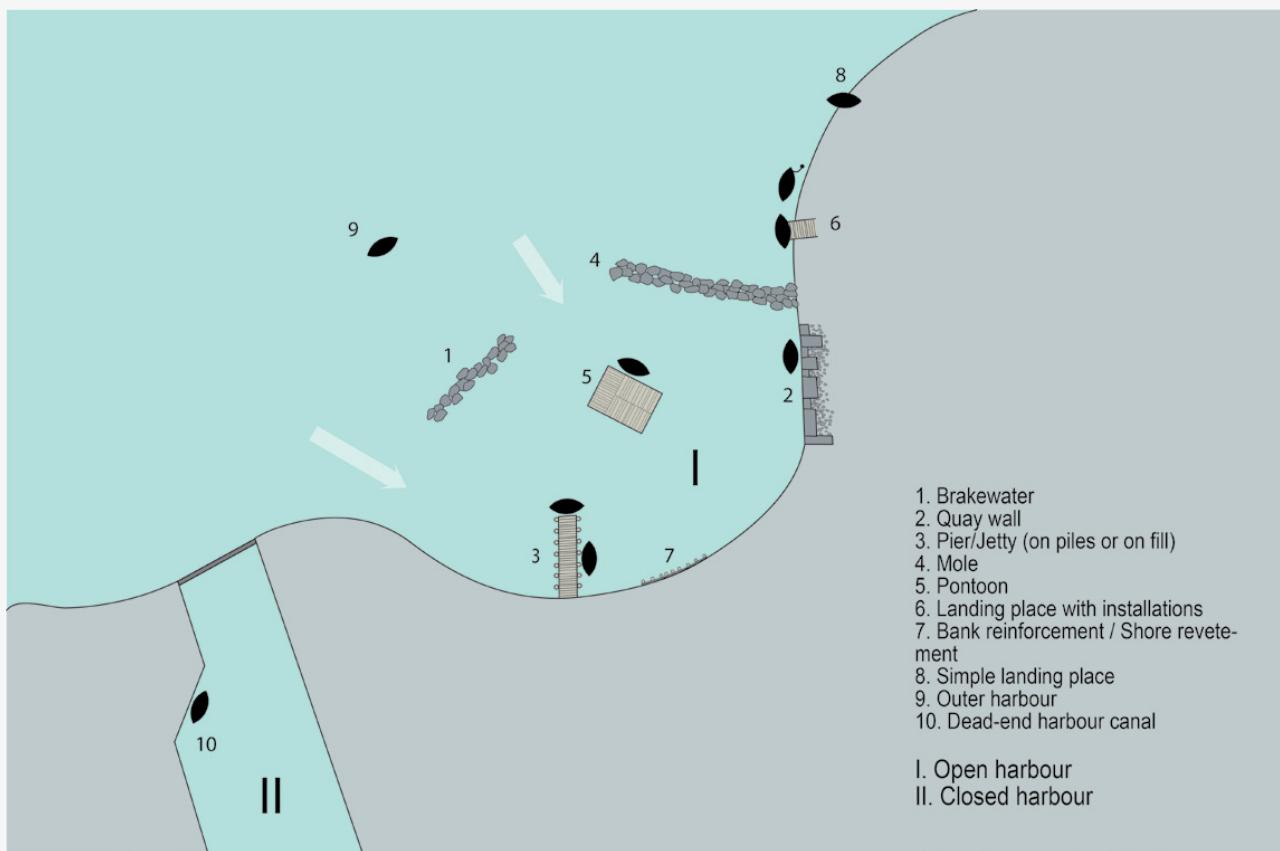


Abb. 1/Fig. 1. Hafenterminologie bautechnisch spezifiziert / Harbour terminology in matters of construction

Place_topography

Topographische Lage des Hafens; Mehrfachnennungen möglich [Thesaurusbindung]

Topographic position of the harbour; Multiple entries possible [thesaurus obligatory]

Term DE (Abb.2)	Term EN (Fig. 2)	Definition SPP 1630	Definition extern
Zentrale topographische Termini	Main topographic terms		
Seehafen <i>[Antonym: Binnenhafen; Sammelbegriff]</i>	Sea harbour/port <i>[antonym: inland harbour; general term]</i>	Ein Hafen, der von seegängigen Schiffen angelaufen werden kann, i.d.R. an der Küste gelegen <i>A harbour for seagoing ships, usually on the coast</i>	Getty
Binnenhafen <i>[Antonym: Seehafen; Sammelbegriff]</i>	Inland harbour <i>[antonym: sea harbour/port; general term]</i>	Anlagen für den ruhenden Schiffsverkehr an einem Binnengewässer. <i>Construction for stagnant navigation at inland waters.</i>	Getty
Flusshafen	River harbour	Topographisch an einem Fluss gelegener Hafen. An einem Flussufer gelegene Stelle, die dem Ein- und Aussteigen von Personen sowie dem Ein- und Ausladen von Waren bzw. ganz allgemein dem ruhenden Schiffsverkehr dient. <i>Harbour, which is topographically situated on the banks of a river. Used for embarking and exiting a boat, loading, and discharging of cargo or generally to serve stagnant navigation.</i>	IHO
Binnenseehafen	Lacustrine harbour	Topographisch an einem Binnensee gelegener Hafen. <i>Harbour, which is topographically situated at lacustrine bodies of water.</i>	Getty
Flussmündungshafen	River mouth harbour	Topographisch an einer Flussmündung gelegener Hafen, von See und Fluss aus erreichbar. <i>Harbour, which is topographically situated at a river mouth; can be reached by both sea and river.</i>	IHO, Getty
Binnenhafen an Zusammenfluss	Confluence harbour	Topographisch am Zusammenfluss von mehreren Binnengewässern gelegener Hafen. <i>Harbour, which is topographically situated at a confluence of two or more inland waterways.</i>	Getty
Inselhafen	Island harbour	Topographisch auf einer Insel gelegener Hafen. <i>Harbour, which is topographically situated on an island.</i>	IHO
Tidehafen	Tidal harbour	Natürlicher Hafen ohne feste Einbauten im Wattenmeergebiet, der Schiffen mit flachem Boden ohne Kiel das Trockenfallen ermöglicht. <i>A natural harbour without permanent constructions in an area affected by the tides, which allows ships with a narrow bottom (without keel) to fall dry.</i>	IHO

Lagunenhafen	Lagoonal harbour	Hafen in einer von der offenen See abgetrennten und dadurch geschützten Zone mit Salz- oder Brackwasser. <i>Harbour in an enclosed and therefore protected area of salt or brackish water, separated from the open sea.</i>	Morhange/ Marriner <i>et al.</i> 2017; IHO
Fjordhafen	Fjord harbour	Hafen in einem Fjord, einem langen und schmalen Meeresarm, der zwischen steilen Ufern oder Klippen verläuft. <i>Harbour in a fjord, a long narrow arm of the sea, running up between high banks or cliffs.</i>	IHO
Kanalhafen	Canal harbour	Hafen in einem Kanal, Nutzung der Kanalflanken und/oder des Kanalandes zum Anlanden der Schiffe. <i>Harbour on a canal, which uses the sides and/or the end of a canal to moor a ship.</i>	
Hafenbecken	Harbour basin	Mehrseitig umschlossener Teil der Wasserfläche eines Hafens <i>Water body at a harbour, which is enclosed on several sides.</i>	de Graauw 2016, 10
Ankerplatz [Synonym: Reede; Liegestelle]	Anchorage	Platz an dem Schiffe sicher liegen können, entweder an Land gezogen, ankernd in flachen Gewässern oder vertäut. Künstliche Strukturen oder permanente Siedlungen müssen nicht vorhanden sein. Oft nur saisonal oder in Notzeiten genutzt. <i>Area, in which vessels can safely lie, either pulled ashore, anchored in narrow water or moored. Artificial structures or permanent settlements are not required to be present. Often used seasonally or in times of need.</i>	IHO , Getty
Natürliches Hindernis für die Schifffahrt	Natural obstacle for navigation	Natürliche Hindernisse für die Schifffahrt, z.B. Katarakte, Klippen, Untiefen oder Strudel/ gefährliche Strömungen [Wenn unabhängig von Hafenlokalität: Place_type_general „Sonstiges/other“]. <i>Natural obstacle for navigation, e.g. cataracts, cliffs, shoals, or whirls/dangerous flows [If independent of a harbour location: Place_type_general „Sonstiges/other“].</i>	
Weitere topographische Termini	Other topographic terms		
Offener Hafen [Antonym: Geschlossener Hafen]	Open harbour [permanent access; antonym: closed harbour/ dock]	Hafen mit zur anschließenden Wasserstraße ständig ausgespiegelten Wasserständen <i>Harbour with water levels, which mirror those of the attaching watercourse</i>	
Geschlossener Hafen [Synonym: Dockhafen; Antonym: Offener Hafen, Tidehafen]	Closed harbour/ dock	Hafen, der keinen unmittelbaren Zugang zum Gewässer hat, sondern durch eine Schleuse oder ein Dockhaupt/Docktor von diesem getrennt ist. <i>Harbour, which has no direct access to waters, but is separated by a watergate or a dock sill.</i>	Getty

Molenhafen	Harbour basin separated by a mole	Durch eine Mole vom offenen Gewässer separiertes Hafenbecken. An Flüssen ist der M. ein Parallelhafen, der gegen die Wasserstraße durch einen parallel zum Ufer verlaufenden Trenndamm abgegrenzt ist, um die liegenden Schiffe vor Wasserbewegungen und dem Einfluss des durchgehenden Verkehrs zu schützen. Der Begriff wird vorwiegend bei Binnenhäfen verwendet <i>Harbour basin separated from open water by a mole. At rivers, the harbour basin separated by a mole is a parallel harbour, which is marked-off from the waterway by a divide dam parallel to the shore: this is to protect moored ships from water movement and constant traffic. This term is primarily used with inland harbours.</i>	
Parallelhafen [Fluss]	Parallel harbour [riverine]	Direkt am Fahrwasser befindlicher, parallel zum Ufer verlaufender Flusshafen. Der P. verfügt generell über eine Steilkante, an der Schiffe schwimmend anlegen können. Dabei kann es sich um eine natürliche Formation oder einen artifiziell errichteten Kai handeln <i>River harbour parallel to the bank, which is situated directly at the fairway. The parallel harbour has a steep bank, which is used to land vessels afloat. This can be a natural formation or an artificially constructed quay.</i>	
Vorhafen	Outer harbour	Ein geschützter Bereich vor dem eigentlichen Hafen, in dem Schiffe Ankern und auf Reede liegen können. <i>Protected part of the harbour where vessels can anchor and lie in the roads.</i>	IHO
Stichhafen	Dead-end harbour canal	Künstlich angelegte Abzweigung von einem Flusslauf. Diese Form des Flusshafens soll dazu dienen, dass der ruhende Schiffsverkehr den laufenden Schiffverkehr nicht behindert. <i>Artificially constructed branch of a river course. This type of river harbour is supposed to keep the inactive traffic from disturbing the active navigation.</i>	
Geestrandburg	Geestrandburg	Auf der küstennahen Geest an der Schnittstelle von überregionalen Land- und Wasserwegen gelegene Befestigung, oft in der Nähe von Siedlungen, in denen Handel und spezialisiertes Handwerk betrieben wurden. <i>Structure at the interface of interregional overland routes and waterways at the geest close to the shore, often in close proximity to a settlement in which trading and specialised craft activities take place.</i>	
Gewerbewurt	Gewerbewurt	Sich im Frühmittelalter entwickelnder Siedlungstyp in der Küstenmarsch der Nordsee. Anthropogen erhöhte Siedlungen (Wurten) mit einer auf Handel und spezialisiertes Handwerk ausgerichteten Wirtschaftsstruktur <i>Settlement type emerging in the Early Middle Ages in the marsh of the North Sea. Artificially elevated settlements (wharf/terp) with an economic structure aimed towards trading and specialized craft activities.</i>	

Langwurt	Langwurt	<p>Sich im Frühmittelalter entwickelnder Siedlungstyp in der ostfriesischen Küstenmarsch der Nordsee. Namengebend für diese anthropogen erhöhten Siedlungen (Wurten) ist ihre langgestreckte Siedlungsstruktur, die aus der Lage an einem schiffbaren Priel mit Verbindung zur Nordsee resultiert. Traditionell als Handelssiedlung interpretiert. Aufgrund des unsicheren Zusammenhangs zwischen Siedlungsstruktur und wirtschaftlicher Ausrichtung ist für sicher gewerblich ausgerichtete Wurten der Begriff <i>Gewerbewurt</i> vorzuziehen</p> <p><i>Settlement type emerging in the Early Middle Ages in the East Frisian marsh of the North Sea. This artificially elevated settlement (wharf/terp) is named after its elongated structure, which results from the position at a navigable tideway with a connection to the North Sea. Traditionally seen as a settlement used for trading. Because of the uncertain context between settlement structure and economical orientation, the term <i>Gewerbewurt</i> should be used for wharfs/terps, which certainly had an commercial focus.</i></p>
----------	----------	---

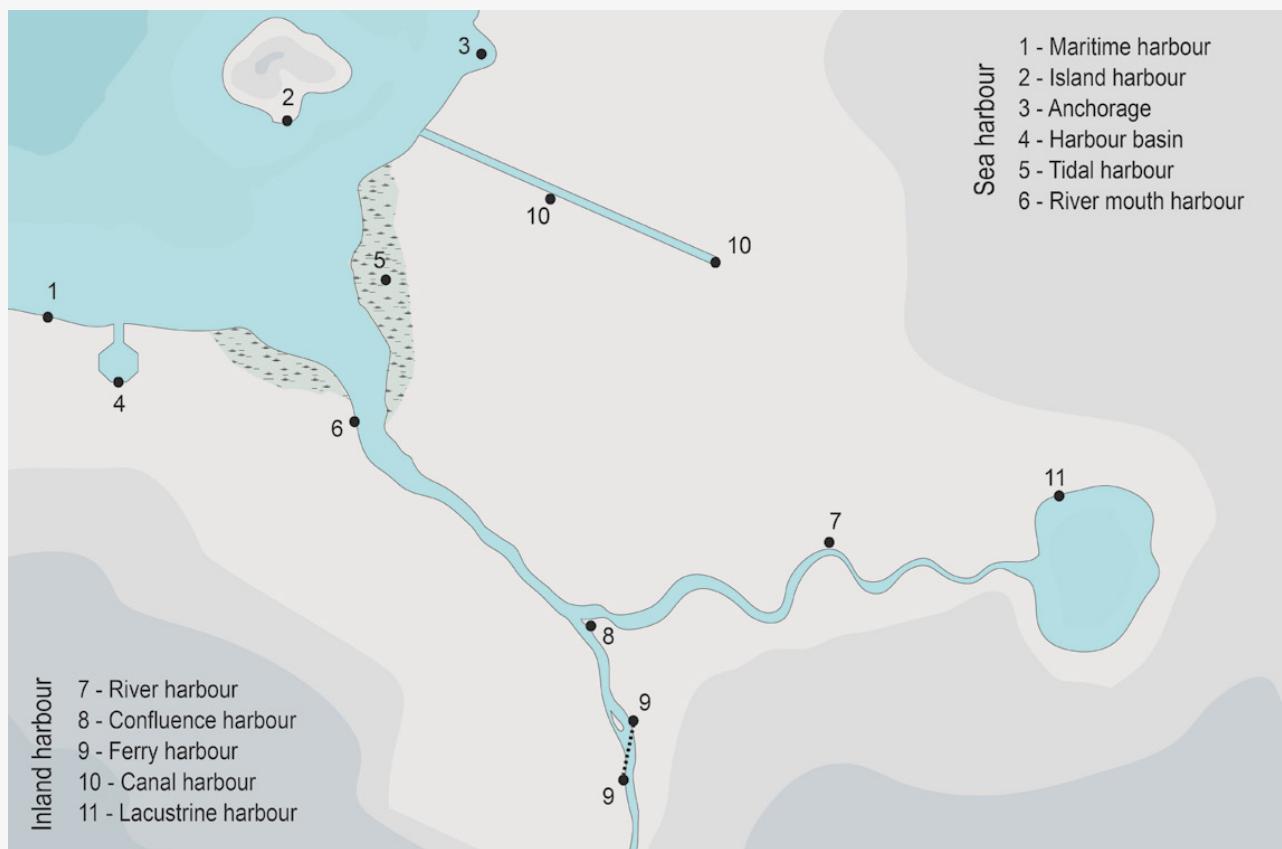


Abb. 2 / Fig. 2. Topographische Lage des Hafens / *Topographic position of harbours.*

Place_infrastructure

Hafentechnische und ergänzende Einrichtungen; Mehrfachnennungen möglich
 [Thesaurusbindung]

Infrastructure for harbour operation and additional facilities; Multiple entries possible [thesaurus obligatory]

Term DE	Term EN	Definition SPP 1630	Definition extern
Zentrale infrastrukturelle Termini	Central infrastructural terms		
Werft	Shipyard	Platz für die Konstruktion und Reparatur von Booten und Schiffen. <i>Area used for the construction and repair of boats and ships</i>	IHO , Getty
Hafenkran	Dockside crane	Einrichtungen für den Lade- und Entladebetrieb <i>Installations for charging and discharging.</i>	
Bootshaus	Boathouse	Unterstand für Schiffe gegen Wettereinflüsse im Winterhalbjahr sowie als Lagerplatz für Schiffsgeräte und möglicherweise von Handelsgütern. <i>Shelter for vessels against weather effects during the winter and as a storage location for ship equipment as well as trade goods.</i>	Getty
Slip <i>[Synonym: Helgen, Helling]</i>	Boat slip	Zum Wasser geneigte Ebene, auf der Schiffe gebaut und zu Wasser gelassen werden <i>Level, which is inclined towards the water, and used to build and launch ships</i>	IHO , Getty
Leuchtturm	Lighthouse	Architektonisch geformte Seezeichen, die die Einfahrten von Häfen oder gefährliche Küstenabschnitte markieren. <i>Architectural navigation marks that flag the entrances of harbours or dangerous parts of the coast</i>	Getty
Lager- /Speicherbauten	Storehouse	Bauten zum Lagern unterschiedlicher Güter, oft in Hafennähe. <i>Buildings for storing various goods, often close to a harbour</i>	Getty
Schiffervereinigung <i>[nautae u.a.]</i>	Corporation of boatmen/guild <i>[e.g. nautae]</i>	Vereinigung/Zusammenschluss von Schiffsmännern, meist regional organisiert. <i>Association of boatmen, usually organised in a regional manner.</i>	
Flussübergang	River crossing	Übergang über einen Fluss, meist Furt/ Fähre oder Brücke, Sammelbegriff. <i>Passage over a river, usually a ford/ferry or bridge; this is a collective term.</i>	Getty
Brücke	Bridge	Übergang über einen Fluss durch eine Brücke [Steinbrücke, Holzbrücke, Schiffsbrücke/Schwimmbrücke]. <i>River crossing, which is a bridge [stone bridge, wooden bridge, pontoon bridge].</i>	Getty
Furt	Ford	Flacher Bereich eines Flusses, an dem dieser ohne Wasserfahrzeug überquert werden kann. <i>Narrow section of a river where it can be crossed without a vessel.</i>	Getty

Verbindung mit wichtiger Straße/Landweg	Connected to important terrestrial route/ road		
Weitere infrastrukturelle Termini	Other infra-structural terms		
Dalbe <i>[Duckdalbe, Vertäudalbe; Reibepfahl]</i>	Dolphin	Pfahl oder Pfahlbündel im Wasser, zum Festmachen von Schiffen . <i>Pole or group of poles in the water where a ship can be attached.</i>	
Vertäuungspfähle am Ufer	Mooring pole	Pfähle am Ufer, zum Festmachen von Schiffen. <i>Poles at the shore where a ship can be attached.</i>	
Poller/Kreuzholz <i>[Festmacheinrichtungen]</i>	Bollard/belaying post	Ein kurzer Pfahl oder eine pfahlstumpfartige Vorrichtung zum Festmachen von Schiffen mit Trossen oder Tauen, z.B. an Kais oder Landebrücken. Steht an Land, im Gegensatz zur Dalbe, die im Wasser steht. <i>A short pole or something similar used to tie ships up with ropes, e.g., at quays or piers. On land, in contrary to a dolphin, which is located in the water.</i>	Getty , IHO
Boje/Bake/Tonne	Buoy	Am Grund verankerter Schwimmkörper, z. B. zum Festmachen von Booten oder Schiffen oder als Markierung für den Anker (Ankerboje). <i>Floating body anchored in the ground, e.g. used to tie boats or ships to or as a marker for the anchor (anchor buoy).</i>	IHO
Reibholz	Fender	An Wasserfahrzeugen und Kaianlagen angebrachte (fest oder lose) Scheuerleiste oder Fender zum Schutz von Bordwand und Hafenanlage. <i>(Fixed or loose) Rubbing strake attached to vessels or quays to protect a ship's side and the harbour installation.</i>	RGZM
Varde <i>[Synonym: Steinmännchen]</i>	Cairn	Norwegisch: Steinmännchen, Seezeichen als Navigationshilfe zum Auffinden und Einfahren in den Hafen. <i>Norwegian: stone manikin, navigation mark to help find and enter a harbour.</i>	IHO
Vorr <i>[Shetland: virr]</i>	Vorr	Norwegisch: Eine oder zwei Steinreihen, die eine Slippe begrenzt, meist außerhalb eines Bootshauses. In der Rampe dazwischen wird das Boot hochgezogen. <i>Norwegian: one or two stone alignments, which border a slip, usually outside of a boathouse. On the ramp between, a boat can be lifted.</i>	
Baumhaus	Baumhaus	An Hafeneinfahrt. Durch Baumhäuser konnte bei Nacht oder bei einer drohenden Gefahr mit Hilfe eines Baumstamms beziehungsweise einer Hafenkette die Einfahrt in die Häfen gesperrt werden. Auch eine zollrechtliche Bedeutung wird erwogen. <i>At the entry of a harbour. A Baumhaus could be used at night or in the face of an imminent danger to block the entrance to the harbour, with a tree trunk or a chain. A connection to tolls has been discussed too.</i>	

Hafenpalisade	Harbour palisade	Verteidigungsanlage zum Schutze des Hafens gegen Angriffe; Begrenzung eines gesonderten Rechtsraumes mit Schutzherren und Handelszöllen. <i>Defense to protect a harbour against attacks; Border of a separated judicial area with a patron and tolls.</i>	Getty
Sperrwerk <i>[Synonym: Seesperrwerk, Sperrwerk, Pfahlsperre]</i>	Barrage	Quer zum Seeweg Verteidigungsanlage zur Kontrolle des Seewegs inkl. Erhebung von Handelszöllen. Uferparallel zur Befestigung von Flottenstützpunkten an Seewegen. <i>Defence facility crossing a sea route to control it, including the collection of tolls. Bank-parallel to protect naval bases on a sea route.</i>	cf. Grøn/Nørgård Jørgensen 1997
Wippe	Derrick/davit	Einrichtung für den Lade- und Entladebetrieb, die den Warenumschlag zwischen Hafenanlagen und Frachtschiffen ermöglicht. Wippen entwickelten sich aus der Verwendung der Rah der Fahrzeuge als Ladebaum, die sich mit Hilfe der Brassen kippen und schwenken ließ. <i>Installations for charging and discharging, which allows cargo handling between docks and cargo ships. Derricks/davits emerge from the usage of the vessel yard as derrick boom, which could be moved with help of the brace.</i>	Getty , Getty
Treidelweg	Tow path		Getty
Schleuse/Wehr	Sluice	Anlage zum Heben oder Senken von Wasserfahrzeugen durch Füllen oder Leeren einer Schleusenkammer / Stauanlage zur Kontrolle des Zu- oder Abflusses eines Fließgewässers. <i>Installation to lift and lower vessels by filling or emptying a lock chamber / dam to control the in- and outflow of a watercourse.</i>	IHO
Fischereieinrichtung	Fishery	Ortsfeste oder teilmobile Einrichtungen der Fischerei [Fischwehre, Reusen, Becken u.a.] <i>Stationary or partially mobile installations used for fishing activities [weirs, fish traps, basins, and others].</i>	Getty
Wassermühle	Water mill	Mit Wasserkraft betrieben Mühle am oder auf/im Fluss [Wassermühle, Bootsmühle u.a.] <i>Mill powered by hydraulic energy at or on/in a river [water mill, ship mill and others].</i>	Getty
Damm <i>[u.a. Flussseitendamm, Leit-damm]</i>	Dam	Aufschüttung unterschiedlicher Funktion zur Kontrolle des Wasserflusses <i>Embankment of various functions to control the water flow.</i>	Getty

Place_function

Verwendungszweck des Hafens; Mehrfachnennungen möglich [Thesaurusbindung]

Function and purpose of the harbour; multiple entries possible [thesaurus obligatory]

Term DE	Term EN	Definition SPP 1630	Definition extern
Zentrale funktionsspezifische Termini	Central function-specific terms		
Handelshafen [beinhaltet Exporthafen u.a.]	Commercial/trade harbour	Verwendungszweck: Umschlag von Handelsgütern <i>Purpose: movement of traded goods.</i>	
Kriegshafen	Naval base	Verwendungszweck: Stationierung von Flotten. <i>Purpose: deployment of fleets.</i>	Getty
Start-/Endpunkt eines Transports per Schiff (aus hist. Quellen)	Origin/destination of transportation by ship [from written sources]	Alle in Schriftquellen dokumentierten Start- und Endpunkte von Transporten per Schiff [<i>Fracht/Passagiere in Place_goods_finds spezifizieren</i>] <i>All starting points and destinations of transport by ship which are documented in written sources.</i>	
Fährhafen	Ferry harbour	Verwendungszweck: Übersetzen von Passanten, Wagen und Großvieh. <i>Purpose: to ferry passengers, vehicles and livestock</i>	
Landeplatz	Landing place [synonym hythe, landing site]	Einfacher Liegeplatz, der sowohl im agrarischen Kontext als auch für spezialisierte ökonomische Ausrichtungen genutzt werden kann. Er unterstreicht die zur Küste hin orientierte ökonomische Struktur des Wirtschaftsraumes. Verwendung primär in maritimem Kontext. <i>Simple berth, which can be used in an agricultural context, as well as for a specific economic purpose. It highlights the economic structure of a region oriented towards the coast. Primarily used in a maritime context.</i>	Getty

Hafenstadt	Port	<p>Stadt mit 1.) Lage am Übergang zwischen Land und Meer bzw. Land und Fluss, einhergehen mit Hafenbecken und spezifische Bauten. 2.) Ort des Überganges zwischen den Räumen „Land“ und „Meer/Fluss“ im Sinne von „gateway cities“. 3.) spezifischer Ökonomie, die durch die Konzentration typischer Berufe konstituiert wird (Umschlag von Waren, Vereinigungen von Schiffseignern, Händlern, Trägern, Fischern, usw.). 4.) eigene, spezifische Kultur, die sich von gleichzeitigen Städten im Binnenland abhebt (Orte des Austausches, Informationszentren u.a.).</p> <p><i>City 1.) Located at a crossing between land and sea or land and river, accompanied by a harbour basin and specific buildings 2.) Located at places of transitioning between the spaces of „land“ and „sea/river“ in the sense of „gateway cities“ 3.) Characterized by a specific economy constituted by a concentration of typical professions (movement of traded goods, association of ship-owners, merchants, carriers, fishermen, etc.) 4.) with its own unique culture, which separates it from coexisting inland cities (trading centers, information hubs, et al.).</i></p>	Getty
Fischereihafen	Fishing harbour	<p>Hafen oder Bereich eines Hafens, der besonders ausgerichtet ist auf Fischerei, Fischverwertung und -versand.</p> <p><i>Harbour or part of a harbour, which is particularly oriented towards fishing, fish processing, and fish distribution.</i></p>	
Umladehafen [Synonym: Transithafen, Umschlagplatz]	Transhipment harbour	<p>Verwendungszweck: Hafen, der nicht Zielpunkt eines (Schiffs-)Transports ist, sondern bloß Zwischenstation. Ein Wechsel des Transportmittels ist im Transithafen möglich, aber nicht zwingend. Je nach Bestimmungsort/ Reiseroute kann potentiell jeder Hafen als Transithafen genutzt werden.</p> <p><i>Purpose: Harbour, which is not the terminal point of a transport by ship, but merely a stop on the route. A change of vehicles is possible, but not mandatory. Depending on destination/ itinerary, every harbour can potentially be used as a transhipment harbour.</i></p>	IHO
Sicherheitshafen	Safety harbour	<p>Verwendungszweck. Hafen zum Schutz vor Stürmen und Wellengang.</p> <p><i>Purpose: Harbour for protection from storms and swell.</i></p>	

Ufermarkt [Synonym: Strandmarkt]	Beach market	Hafen an einem Fluss bzw. am Strand, in dessen direktem Umfeld ein Tausch- oder Handelsgeschehen stattfindet und sich auch spezialisiertes Handwerk einfindet. Teilweise nur saisonale Nutzung. <i>Harbour at a river or beach, close to exchange or trading activities and a venue for specialised craft. Sometimes only seasonal use.</i>	Ludowici/Jöns 2010
Werft	Shipyard	Platz für die Konstruktion und Reparatur von Booten und Schiffen. <i>Area, where ships and boats are constructed and repaired.</i>	IHO , Getty
Schiffahrtsabgabe/Zoll	Water toll/naval duties	Gebühren, die Schiffe für die Benutzung der Leuchtfeuer, Seezeichen, Fahrwasser, Kanäle, kanalisierten Flüsse, Schleusen und Hafenliegeplätze entrichten. Impliziert meist einen Hafen am selben Ort oder im Umfeld. <i>Fee ships must pay for usage of beacons, navigation marks, fairways, canals, canalised rivers, locks and port berths. Usually implies a harbour in the location or nearby.</i>	Getty
Wasserstraße	Waterway	Regelmäßig befahrene Verkehrsroute der See- und Binnenschifffahrt. <i>Regularly frequented route used for maritime and inland navigation.</i>	Getty
Weitere funktionsspezifische Termini	Other function-specific termini		
Hafenviertel	Dockland/ waterfront	Areal innerhalb einer Hafenstadt, das sich aus dem Hafen mit seinen wasser- und landseitigen Einrichtungen sowie dem unmittelbar damit in Bezug stehenden Siedlungsteil zusammensetzt. <i>Area of a port, which consists of the harbour with its water- and landside elements, as well as the part of the settlement, which is immediately related to it.</i>	Getty
Stapelplatz	Staple port	Ursprünglich für quasi natürliche Rast- und Handelsplätze des Fernhandels. Diese gerieten später unter herrschaftlicher Kontrolle, ab dem Hochmittelalter mussten Händler hier halten und ihre Waren zum Verkauf anbieten. <i>Originally used for quasi-natural resting places and trading venues of long-distance trade. These areas later fell under control of the ruling, from the High Middle Ages: merchants had to stop there and offer their commodities.</i>	

Schiffsländenburgus	Schiffsländenburgus	Spätömische militärische Festung an Binnengewässern mit Flügelmauern, die senkrecht zur Uferlinie verlaufen und eine Schutzzone zum Anlanden / Aufslippen bilden <i>Late Roman fortress on inland waters with wing walls, which run vertically to the bank and create a protected area for landing ships.</i>	
villa maritima	villa maritima	Villa in Küsten- oder Seeuferlage, die vorrangig der Freizeit und Muße galt und die über Anleger verfügen konnte. <i>Villa on the coast or lake shore, which primarily served spare time and leisure und could offer landing opportunities.</i>	
Schiffsspezifische Termini	Ship-specific termini		
Binnenfahrzeug	Inland vessel		Getty
seegängiges Fahrzeug	Seagoing vessel		IHO
Fähre	Ferry	Fähren dienen dem Übersetzen von Personen, Fahrzeugen, Tieren und Waren an die gegenüberliegenden Uferzonen eines Binnengewässers. <i>Ferries were used to transport people, vehicles, animals, and commodities to the opposite bank of inland waters.</i>	Getty
Transportfahrzeug	Cargo vessel		Getty
militärisches Fahrzeug	Naval ship		Getty
Fischer/Arbeitsboot	Fishing/working vessel		Getty
Rudereinrichtungen	Rowing facilities		
Segeleinrichtungen	Sailing facilities		
Treideleinrichtungen	Towing/hauling facilities		
Paddeleinrichtungen	Paddling facilities		
Stakeinrichtungen	Punting/staking facilities		

Place_goods_finds

Spezifische nachgewiesene Transportgüter und andere spezifische Funde und Material-gruppen; Mehrfachnennungen möglich [Thesaurusbindung]

Proof of specific transported goods and other specific finds and groups of materials; Multiple entries possible [thesaurus obligatory]

Für Ergänzungen bitte orientieren an / For extensions please use:

http://thesaurus.historicengland.org.uk/thesaurus.asp?thes_no=77&thes_name=FISH%20Maritime%20Cargo%20Types%20Thesaurus

Term DE	Term EN	Definition SPP 1630	Definition extern
Fracht	Cargo	Transportierte Güter aller Art. <i>All sorts of goods transported.</i>	HE
Passagiere/Menschen	Passengers/people	Transportierte Menschen/ Passagiere aller Art. <i>Transported people/ passengers of all sorts.</i>	HE
Nahrung	Food		HE
Fisch	Fish		HE
Wein	Wine		HE
Korn/Getreide	Grain/cereal		HE, HE
Öl	Oil		HE
Salz	Salt		HE
Personen	People		HE
Keramik/Tonwaren	Pottery		HE
Amphoren	Amphorae		HE
Fässer	Barrels		HE
Stein	Stone		HE
Holz	Timber		HE
Stroh/Heu	Straw/hay		HE
Eisen/Erz	Iron/ore		HE, HE
Textilien	Textiles		HE
Glas	Glassware		HE
Militärausrüstung	Military equipment		HE
Ballast	Ballast		HE
Gewichte/Waagen	Weights		
Fischereizubehör [Netzsenker u.ä.]	Fishing gear		HE

Actors_activity

Hafen - und schifffahrtsspezifische Handlungen und Ereignisse sowie spezifische Nutzergruppen; Mehrfachnennungen möglich [Thesaurusbindung]

Harbour - and navigation-specific actions and events, as well as specific user groups; Multiple entries possible [thesaurus obligatory]

Term DE	Term EN	Definition SPP 1630	Definition extern
Bergfahrt [Antonym: Talfahrt]	Upstream navigation		
Talfahrt [Antonym: Bergfahrt]	Downstream navigation		
Treideln	Hauling/towing		
Segeln	Sailing		
Paddeln	Paddling		
Rudern	Rowing		
Staken	Stake/punt		
Schiffbruch	Shipwreck		Getty
Piraterie/Kaperung	Piracy		

Place_hierarchy

Individuelle Experteneinschätzung zur hierarchischen Einordnung und Bedeutung des Hafens bezüglich der Reichweite seiner Bedeutung, der Lage im Hafennetzwerk, der Nutzungs frequenz und -dauer, des generellen baulichen Aufwandes sowie der räumlichen Verbindung zu Produktions- und Konsumorten sowie Landwegen; Mehrfachnennungen erwünscht [Thesaurusbindung]

Individual expert evaluation concerning the hierarchical order and importance of the harbour revolves around the spatial extent of his connections, his position in the harbour network, the frequency and duration of his use, the general constructive effort, the spatial connection to sites of production and consumption, as well as terrestrial routes; Please use multiple entries [thesaurus obligatory]

Term DE	Term EN	Definition SPP 1630	Definition extern
Globale Bedeutung	Global importance	Hafen oberster Ordnung, Verbindungen in andere Kontinente oder zumindest völlig andere Wirtschafts- und Verkehrsräume [z.B. Ostia/Portus, London, Venedig] Most important harbours, which are connected to different continents or at least different economic and transportation areas [e.g. Ostia/Portus, London, Venice].	

Überregionale Bedeutung	Supraregional importance	Bedeutung über eine einzelne Region/einen Wirtschaftsraum/ein Gewässersystem hinweg [z.B. Haithabu, Lyon, Regensburg] <i>Significance is greater than a specific region / an economic area / a water system [e.g. Haithabu, Lyon, Regensburg].</i>	
Regionale Bedeutung	Regional importance	Bedeutung innerhalb einer größeren Region/eines Wirtschaftsraumes/eines Gewässersystems [z.B. Aschaffenburg, Ingelheim] <i>Important within a larger region / a water system [e.g. Aschaffenburg, Ingelheim].</i>	
Lokale Bedeutung	Local importance	Auf einen Kleinraum oder ein Einzelgewässer beschränkte Bedeutung [z.B. kleiner Landeplatz für Fischer] <i>Valuable only for a small area or a single body of water [e.g. a small fisherman's quay].</i>	
Saisonale/Periodische Nutzung	Seasonal/periodical use		
Permanente Nutzung	Permanent use		
Peripherie Lage	Peripheral location		
Zentraler Knotenpunkt	Central node		
Kurzzeitige Nutzung	Short-term use		
Langfristige Nutzung	Long-term use		
Kein Beleg für tatsächliche Nutzung	No proof for actual use		
Aufwändige Hafeninfrastruktur/ Baulichkeiten	Substantial harbour infrastructure/buildings		
Keine aufwändige Hafeninfrastruktur/ Baulichkeiten	No substantial harbour infrastructure/buildings		
Verbindung mit wichtiger Straße/ Landweg	Connected to important terrestrial route/road		
Direkte Verbindung zu wichtigem Produktionsort	Connected to an important productive site		
Direkte Verbindung zu wichtigem Konsumort	Connected to an important consumer site		
Direkte Verbindung zu wichtigem Verwaltungs-/Herrschaftszentrum	Connected to an important center of administration or power		
Direkte Verbindung zu wichtigem religiösem Zentrum	Connected to an important religious center		
Direkte Verbindung zu wichtigem Truppenstandort	Connected to an important military base		

European Harbour Data Repository

Project Harbours and landing places on the Balkan coasts of the Byzantine Empire (4th to 12th centuries)

References

BIBLIOGRAPHY

AIP I: The archaeological heritage of Hvar, Croatia. The Adriatic Islands Project 1 = Bar International Series 660 (Oxford 1997).

AIP II: Z. Stančić et al., The Archaeological Heritage of the Island of Brač, Croatia. The Adriatic Islands Project 2 = BAR International Series 803 (Oxford 1999).

AIP III: B. Kirigin et al, The Archaeological Heritage of Vis, Biševo, Svetac, Palagruža and Šolta. The Adriatic Islands Project 3 = BAR International Series 1492 (Oxford 2006).

Akra I: I. Hristov (Hrsg.), Akra. Exploring the Early Byzantine Fortress on St. Nikola Peninsula near the Town of Chernomorets, I (Sofia 2013).

Alexandrescu/Schuller 1990: P. Alexandrescu / W. Schuller (Hrsg.), Histria. Eine Griechenstadt an der rumänischen Schwarzmeerküste. Xenia 25 (Konstanz 1990).

Antoljak 1973: St. Antoljak, Zadar unter ostgotischer Herrschaft. Diadora 6, 1973, 207–220.

Antoljak, Zadar (1973) 215: St. Antoljak, Zadar unter ostgotischer Herrschaft. Diadora 6, 1973, 207–220.

Aydingün 2017: Ş. Aydingün (ed.), İstanbul Küçükçekmece Göl Havzası Kazıları / Excavations of Küçükçekmece Lake Basin (Bathonea) (İstanbul 2017).

Aydingün 2018: Ş. Aydingün (ed.), Bütün Yollar Avcılar'dan Gecer / All Roads pass through Avcilar (İstanbul 2018).

Babić 1995: I. Babić, Crkva Sv. Andrije na Čiovu. Prilozi povijesti umjetnosti u Dalmaciji 35/1, 1997, 203-222.

Babić 2015: D. Babić, Trogirsko predgrađe na Čiovu u kontekstu izgradnje otoka do XIX. Stoljeća. Doktorski rad (PhD-Thesis) (Zagreb 2015).

Badurina 1982: A. Badurina, Bizantska utvrda na otočiću Palacol. Arheološka istraživanja na otocima Cresu i Lošinju. Izdanja Hrvatskog arheološkog društva 7 (1982) 171-178.

Balabanov/Petrova 2002: P. Balabanov / S. Petrova, Добелт – Деултум – Дебелт. In: R. Ivanov (Hrsg.), Roman and Early Byzantine Cities in Bulgaria. Studies in Memory of Prof. Teofil Ivanov, I (Sofia 2002) 237-250.

Baraschi 1981: S. Baraschi, Les sources byzantines et la localization de la cité de Kilia (XII-XIII^e siècles). Revue des études sud-est européennes 19/3, 1981, 473-484.

Basić 2009: I. Basić, Ecclesia Scardonitana. Stato della ricerca e problemi aperti della chiesa paleocristiana di Scardona. In: B. Kuntić-Makvić (ed.), Studia Varvarina I. Dissertationes et Monographiae 4 (Zagreb/Motovun 2009) 43-89.

Bašić 2010: D. Bašić, Otok Mljet u svjetlu (hidro)arheoloških nalaza i povijesti (pomorstva) na plovnom putu istočnojadranske obale (U povodu 50-godišnjice Nacionalnog parka Mljet). Pomorski zbornik 46, 2010, 139-196.

Begović/Schrunk 2002: V. Begović/I. Schrunk, Rimske vile Istre i Dalmacije, I. dio: pregled lokaliteta. Prilozi Instituta za arheologiju u Zagrebu 19, 2002, 113–130.

Begović/Schrunk 2003: V. Begović/I. Schrunk, Rimske vile Istre i Dalmacije, II. dio: tipologija vila. Prilozi Instituta za arheologiju u Zagrebu 20, 2003, 95–112.

Begović/Schrunk 2004: V. Begović Dvoržak/I. Dvoržak Schrunz, Roman Villas in Dalmatia and Istria, Part III: Maritime Villas. Prilozi Instituta za arheologiju u Zagrebu 21 (2004) 65–90.

Begović/Schrunk 2012: V. Begović/I. Schrunk, The Role of Maritime Villas in Seafaring in the Adriatic. Histria Antiqua 21, 2012, 327-344.

Begović/Schrunk/Ugarković 2012: V. Begović/I. Schrunk/M. Ugarković, Roman villa in the Soline cove on the island of St. Clement near Hvar: Preliminary analysis of the architecture according to geophysical investigations and sondages. Prilozi Instituta za arheologiju 29, 2012, 143-166.

Belke 2019: K. Belke, Bithynien und Hellespontos. Tabula Imperii Byzantini 13. ÖAW, phil.-hist. Klasse, Denkschriften X (Wien 2019, erwartet).

Belke/Soustal 1995: K. Belke/P. Soustal: Die Byzantiner und ihre Nachbarn. Die De Administrando Imperio genannte Lehrschrift des Kaisers Konstantinos Porphyrogennetos. Übersetzt, eingeleitet und erklärt. Byzantinische Geschichtsschreiber 19 (Wien 1995).

Bereti et al. 2013: V. Bereti/G. Consagra/J.-P. Descoeuilles/S. Shpuza/Ch. Zindel, Orikos – Oricum. Final Report on the Albano-Swiss Excavations 2007-2010. Mediterranean Archaeology. Australian and New Zealand Journal for the Archaeology of the Mediterranean World 26, 2013, 95-186.

Beševliev 1985: V. Beševliev, Мундрага и Тича-Вичина. Известия на Народния музей – Варна 21 (36), 1985, 17-23.

Boetto et al. 2012: G. Boetto/I. Radić Rossi/S. Marlier/Z. Brusić, L'épave de Pakoštane, Croatie (fin IV^e-début V^e siècle apr. J.-C. Résultats d'un projet de recherche franco-croate. Archaeonautica 17, 2012, 105-151.

Bonačić Mandinić 2001: M. Bonačić Mandinić, Nalazi novca s arheoloških iskopavanja u Ublima na Lastovu. In B. Čečuk (ed.), Arheološka istraživanja na području otoka Korčule i Lastova. Hrvatsko Arheološko Drustvo (Zagreb 2001) 221-225.

Borzić 2009: I. Borzić, Uvala Gradina na otoku Korčuli u svjetlu podmorskih arheoloških nalaza. In: L. Bekić (ed.), Jurišićev zbornik. Zbornik radova posvećenih uspomeni na Marija Jurišića (Zagreb 2009) 82-97.

Bounegru/Zahariade 1996: O. Bounegru / M. Zahariade, Les Forces Navales du Bas Danube et de la Mer Noire aux I^{er}-VI^e Siècles. Colloquia Pontica 2 (Oxford / Oakville 1996).

Bounegru 2011: O. Bounegru: Ploia platypgia. Militärischer Nachschub zu Wasser in spätromischer Zeit. Skyllis 11/1, 2011, 21-24

Bowden 2011: W. Bowden, Urban Change and the Triconch Palace Site in the 5th to 7th Centuries, in: Butrint 3. in: Butrint 3. Excavations at the Triconch-Palace, ed. W. Bowden – R. Hodges (Butrint Archaeological Monographs 3). Oxford 2011, 303–318.

Bowden/Hodges 2012: W. Bowden/R. Hodges, An ‘Ice Age Settling on the Roman Empire’: Post-Roman Butrint between Strategy and Serendipity. In: N. Christie/A. Augenti (ed.), Vrbes Extinctae (Ashgate 2012) 207–241.

Božilov/Dimitrov 1990: I. Božilov / M. Dimitrov (Hrsg.), Балчик. Древност и съвремие (Balčik 1980).

Brusić 1969: Z. Brusić, Podmorska arheološka istraživanja starohrvatskih brodova na ulazu u ninsku luku. Radovi Instituta JAZU u Zadru 16-17 (1969) 443-448.

Brusić 1969b: Z. Brusić, Rezultati podvodnih istraživanja u Ninu. Mornarički glasnik, 22, 1969, 218-222.

Brusić 1974: Z. Brusić, Rezultati podmorskih istraživanja u Zadarskom arhipelagu. Zbornik Zadarsko otočje 1 (1974) 65-69.

Brusić 1974b: Z. Brusić, Podmorska arheološka istraživanja starohrvatskih brodova na ulazu u ninsku luku (Ždrijac). Arhivsko izviješće 1974.

Brusić 1978: Z. Brusić, Rezultati najnovijih istraživanja i vađenje starohrvatskih brodova na ulazu u ninsku luku. Adriatica Maritima 2, 1978, 5-14.

Brusić 1980: Z. Brusić, Neki problemi plovidbe Kvarnerićem. In: Pomorstvo Lošinja i Cresa u povodu sto dvadeset pete obljetnice uspostavljanja Pomorske škole u Malom Lošinju. Otočki ljetopis Cres-Lošinj 3 (Mali Lošinj 1980) 151-171.

Brusić 1988: Z. Brusić, Antička luka u Polačama na otoku Mljetu (Der antike Hafen in Polače auf der Insel Mljet). Izdanja Hrvatskog arheološkog društva 12, 1988, 139-151.

Brusić 1989: Z. Brusić, Kasnoantička utvrđenja na otocima Rabu i Krku / Late antique fortifications on the islands of Rab and Krk. Izdanja Hrvatskog arheološkog društva 13, 1989, 111-119.

Brusić 1991: Z. Brusić, Nalaz posuda od niskometamorfne stijene na otočiću Frmiću kod Biograda i značenje ovog otočića u režimu plovidbe Pašmanskim kanalom. Diadora, 13, 1991, 225-240.

Brusić 2007: Z. Brusić, Pakoštanska luka i druga priobalna liburnska naselja u Pašmanskom kanalu u odnosu na gradinska naselja u zaleđu i Aseriju / The Port of Pakoštane and other coastal Liburnian settlements in the Pašman Channel in Relation to Hill-Fort Settlements in the Hinterland and Asse-ria. Asseria 5, 2007, 11-38.

Brusić 2010: Z. Brusić, Ranosrednjovjekovni nalazi iz hrvatskog podmorja. Archaeologia Adriatica 4, 2010, 243-255.

Bucovală/Papuc 1981: M. Bucovală / Gh. Papuc, Date noi despre fortificația dela Ovidiu – municipiul Constanța. Pontica 14, 1981, 211-216.

Bucovală/Papuc 1984: M. Bucovală / Gh. Papuc, Date noi privind cercetările arheologice de la Ovidiu. Pontica 17, 1984, 153-156.

Budak 2006: N. Budak, Urban Development of Rab – A Hypothesis. *Hortus Artium Medievalium* 12, 2006, 123–135.

Bully/Čaušević-Bully 2012: S. Bully/M. Čaušević-Bully, Saint-Pierre d'Ilovik. Une station maritime majeure du nord de l'Adriatique, de l'antiquité au Moyen Âge. *Histria Antiqua*, 21, 2012, 413-426.

Buzoianu/Bărbulescu 2012: L. Buzoianu / M. Bărbulescu, Tomis. Historical and archaeological Commentary. *Bibliotheca Tomitana* 9 (Constanța 2012).

Canarache 1961: V. Canarache. *Tomis* (Bukarest 1961).

Čaušević-Bully 2015: M. Čaušević-Bully, *Municipium Flavium Fulfinum. Dijakronijska studija gradske strukture s posebnim osvrtom na forumski prostor / Municipium Flavium Fulfinum. Diachronic study of the city structure with a special attention to the forum.* Prilozi Instituta za arheologiju u Zagrebu 32, 2015, 111-145.

Čaušević-Bully et al. 2011: M. Čaušević-Bully/S. Bully/L. Fiocchi/M.-L.e Bassi, Sveti Petar kod Ilovika. Obavijesti Hrvatskog arheološkog društva (Zagreb 2011) 37-44.

Čaušević-Bully et al. 2017: M. Čaušević-Bully/I. Marić/S. Bully/M. Jurković, Le monastère Saint-Pierre d'Osor (Île de Cres): dixième et onzième campagne d'études archéologiques, avec une contribution de L. Dugorepec et M. Blečić Kavur. *Hortus Artium Medievalium* 23/2, 2017, 797-808.

Čaušević-Bully/Bully 2013: M. Čaušević-Bully/S. Bully, Esquisse d'un paysage monastique insulaire dans le Nord de l'Adriatique. L'Archipel du Kvarner (Croatie). *Hortus Artium Mediaevalium* 19, 2013, 167-182.

Ceka/Zeqo 1984: N. Ceka/M. Zeqo, Kërkime nënurore në vijën bregdetare dhe ujrat e brendshme të vendit tonë (Underwater research in the coastal line and the inner waters of our country). *Monumentet* 28/2, 1984, 127–140.

Čelhar 2008: M. Čelhar, The underwater interdisciplinary project in Caska Bay, Pag island. In: Proceedings of the 13th Annual Meeting of the European Association of Archaeologists (Zadar, Croatia, 18-23 September 2007) Session: Underwater Archaeology, ed. I. Radić Rossi/A. Gaspari/A. Pydyn. Hrvatsko Arheološko Društvo (Zagreb 2008) 176-186.

Chevalier 1995: P. Chevalier, Salona II. Ecclesiae Dalmatia, I-II (Roma/Split 1995).

Chevalier 1995: P. Chevalier, Salona II. Ecclesiae Dalmatia, I-II. (Rome/Split 1995).

Ciglenečki 2011: S. Ciglenečki, Problem odsotnosti cerkva v nekaterih poznoantičnih kastelih ilirika. In: H.G. Jurisić (ed.), Zbornik u čast Emilia Marina za 60. rođendan (Split 2011) 673-688.

Cosma 1973: V. Cosma, Prospectări arheologice submarine. *Buletinul monumentelor istorice* 42/1, 1973, 31-38.

Crnčević 2013: D. Crnčević, The Architecture of Cathedral Churches on the Eastern Adriatic Coast at the Time of the First Principalities of South Slavs (9th-11th Centuries). In: S. Rudić (ed.), The World of the Slavs. Studies on the East, West and South Slavs: Civitas, Oppias, Villas and Archeological Evidence (7th to 11th Centuries AD). The Institute of History Monographs 64 (Belgrad 2013) 37-136.

Daim 2016: F. Daim (ed.), Die byzantinischen Häfen Konstantinopels. BOO 4 (Mainz 2016).

Della Casa et al. 2009: P. Della Casa/B. Bass/T. Katunarić/B. Kirigin; D. Radić, An overview of prehistoric and early historic settlement, topography, and maritime connections on Lastovo Island, Croatia. In: S. Forenbaher (ed.), A connecting sea: maritime interaction in Adriatic prehistory (Oxford 2009) 113-136.

Dimitrov 1981: B. Dimitrov, Малки пристанищни крепости, in: A. Kuzev / V. Gjuzelev (Hrsg.), Български средновековни градове и крепости, I (Varna 1981) 427-438.

Dimitrov 2009: B. Dimitrov, Созопол (Sozopol 2009).

Domjan 1983: M. Domjan, Crkva sv. Andrije na Vrgadi nakon posljednjih istraživanja i konzervatorskih radova. Starohrvatska prosvjeta, ser. 3, 13, 1983, 123-129.

Doneus 2017: N. Doneus/M. Doneus/Z. Ettinger-Starčić, The ancient city of Osor, northern Adriatic, in integrated archaeological prospection. Hortus Artium Medievalium 23/2, 2017, 761-775.

Dubolnić 2007: M. Dubolnić, Argyruntum and Its Territory in Antiquity. Radovi Zavoda za povijesne znanosti HAZU u Zadru 9, 2007, 1-58.

Ducellier 1977: A. Ducellier, Note sur l'île de Sazan (Saseno) du XIII^e au XV^e siècle. Byzantinische Forschungen 5, 1977, 17–25 = A. Ducellier, L'Albanie entre Byzance et Venise, X^e–XV^e siècles (London 1987) XIII.

Ducellier 1981: A. Ducellier, La Façade Maritime de l'Albanie au Moyen Age. Durazzo et Valona du XI^e au XV^e siècle. École Pratique des Hautes Études, VI^e section. Documents et Recherches 13 (Thessalonike 1981).

Dukat/Mirnik/Neralić 1984: Z. Dukat/I. Mirnik/J. Neralić, Numizmatičke vijesti iz Senja i okolice II. Senjski zbornik 10-11, 1984, 41-53.

Durankulak I-III: H. Todorova (Hrsg.), Durankulak, I-III (Sofia 1989-2016).

Džingov et al. 1990: G. Džingov / A. Balkanska / M. Josifova, Калиакра, I: Крепостно строителство (Sofia 1990).

Faber 1981: A. Faber, Luka antičkog Fulfinia na otoku Krku, Pomorski zbornik 19, 1981, 293–314.

Faber 1982: A. Faber, Omišalj – antički grad Fulfinum i prethistorijska gradina, Arheološki pregledi, 23, 1982, 66–68.

Faber 1983: A. Faber, Bedemi Epetiona-Stobreč kod Splita / The walls of Epetion-Stobreč near Split. Prinosi Odjela za arheologiju 1, 1983, 17-32.

Faber 1986/87: A. Faber, Osvrt na neka utvrđenja otoka Krka od vremena preistorije do antike i srednjeg vijeka. Prilozi Instituta za arheologiju u Zagrebu 3/4 (1986-1987) 113-131.

Faber 1998: A. Faber, Rimsko naselje u Murteru. Izdanja Hrvatskog arheološkog društva 19, 1998, 97-108.

Faber 2003: A. Faber, Sveti Juraj - Lopsica i Lopci. Senjski zbornik 30/1, 2003, 629-647.

Felice/Disantarosa 2010: E. Felice/G. Disantarosa, Progetto Liburna. Archeologia subacquea in Albania. Campagna 2009. L'archeologo subacqueo 47 (16/2), 2010, 5–11.

Ferluga 1977: J. Ferluga, Bisanzio e Zara. Zadarska Revija 2–3, 1967, 129–143, reprinted in: J. Ferluga, Byzantium on the Balkans. Studies on the Byzantine Administration and the Southern Slavs from the VIIth to the XIIth Centuries (Amsterdam 1976) 173–192.

Filipi 2001: A. R. Filipi, Otok Lavdara. Prilog povjesno-geografskim istraživanjima zadarskih otoka. Geoadria 6, 2001, 113 - 152.

Fisković 1971: I. Fisković, Bilješke o starokršćanskim i ranosrednjovjekovnim spomenicima na otoku Šipanu / Contributions to the History of Art in Dalmatia 18/1, 1971, 5-29.

Fisković 1980: C. Fisković, Spomenici otoka Mljet. In: Otok Mljet – naš novi nacionalni park (Goveđari 1980) 39-40.

Fisković 1998: I. Fisković, Late antique buildings in Polace on the island of Mljet. In: N. Cambi/E. Marin (ed.), *Acta XIII Congressus Internationalis Archaeologia Christianae. Studi di Antichità Cristiana* 41 (Città del Vaticano – Split 1998), III, 273-286.

Fisković 2013: I. Fisković, Stazione monastica sull'isolotto Maisan in Dalmatia meridionale. *Hortus Artium Medievalium* 19, 2003, 121-132.

Gelichi 2006: S. Gelichi, Introduction. The Project and the Strategy. In: S. Gelichi (ed.), *The Archaeology of an Abandoned Town. The 2005 Project in Stari Bar* (Firenze 2006) 9–17.

Gilkes 2013: O. Gilkes, *Albania: an archaeological guide* (London 2013).

Ginalis 2014: A. Ginalis, *Byzantine Ports. Central Greece as a link between the Mediterranean and the Black Sea* (Dissertation, Univ. Oxford 2014).

Glavičić 1994: M. Glavičić, Značenje Senije tijekom antike. *Senjski zbornik* 21, 1994, 41-58.

Glavičić 2003: A. Glavičić, Starokršćanska i ranosrednjovjekovna baština Like, Podgorja i grada Senja, *Senjski zbornik* 30, 2003, 21-82.

Glavičić/Miletić 2011: M. Glavičić/Ž. Miletić, Several new Antique monuments from Skradin. *Vjesnik za Arheologiju i Povijest Dalmatinsku* 104, 2011, 113-150.

Gluščević 2001: S. Gluščević, Hidroarheološke i arheološke aktivnosti na zadarskom području. *Obavijesti Hrvatskog arheološkog društva* 33/1, 2001, 43-47.

Gluščević 2011: S. Gluščević, Antička luka u Zatonu / Ancient Harbour in Zadar (Zadar 2011).

Gluščević 2017: S. Gluščević, Arheologija Silbe i silbenskih Grebena. *Archaeologia Adriatica* 9/1, 2017, 187-249.

Goldstein 1992: I. Goldstein, Bizant na Jadranu. *Latina et Graeca* (Zagreb 1992).

Goldstein 1999/2000: I. Goldstein, How the Byzantines made Use of the Adriatic Sea in the War against the Ostrogoths in 535-555. *Zbornik radova Vizantološkog instituta* 38, 1999/2000, 49-59.

Goldstein 2005: I. Goldstein, Byzantine Cities and Slavic Villages: The Case of the Eastern Adriatic in the Early Middle Ages. In: L.M. Hoffmann (ed.), *Zwischen Polis, Provinz und Peripherie. Beiträge zur byzantinischen Geschichte und Kultur. Mainzer Veröffentlichungen zur Byzantinistik* 7 (Wiesbaden 2005) 203–213.

Grubišić 1976: S. Grubišić, Šibenik: spomen zbornik o 900. Obljetnici. Muzej grada Šibenika (Šibenik 1976).

Gunjača 1980: Z. Gunjača, Gradina, Žirje, Šibenik - kasnoantička utvrda. *Arheološki pregled* 21, 1980, 133-134.

Gunjača 1985: Z. Gunjača, Otok Žirje / Gradina. Kasnoantička utvrda. *Arheološki pregled* 26, 1985, 158.

Gunjača 1986: Z. Gunjača, Kasnoantička fortifikacijska arhitektura na istočnojadranskom priobalju i otocima, in: *Odbrambeni sistemi u praistoriji i antici na tlu Jugoslavije. Referati XII. Kongresa Arheologa Jugoslavije = Materijali* 22 (Novi Sad 1986) 124-136.

Gunjača 1986: Z. Gunjača, Kasnoantička fortifikacijska arhitektura na istočnojadranskom priobalju i otocima. In: *Odbrambeni sistemi u praistoriji i antici na tlu Jugoslavije. Referati XII. Kongresa Arheologa Jugoslavije = Materijali* 22 (Novi Sad 1986) 124-136.

Gunjača 2005: Z. Gunjača, Srima - Prižba: ostaci arhitekture i analiza građevinskih faza (Šibenik 2005).

Hajdari et al. 2007: A. Hajdari/J. Reboton/S. Shpuza/P. Cabanes, Les Inscriptions de Grammata. Revue des Études Grecques 120, 2007, 353–394.

Halmyris I: A. Suceveanu / M. Zahariade / F. Topoleanu, Halmyris I. Monografie Arheologică (Cluj-Napoca 2003).

Haynes/Bogdan/Topoleanu 2007: I. Haynes / D. Bogdan / F. Topoleanu, Salsovia: A Roman Fort and Town on the Lower Danube. In: L. Vagalinski (Hrsg.), The Lower Danube in Antiquity (VI c. BC – VI c. AD). International Archaeological Conference Bulgaria – Tutrakan, 6.-7.10.2005 (Sofia 2007) 131-140.

Heher/Preiser-Kapeller/Simeonov 2015: D. Heher / J. Preiser-Kapeller / G. Simeonov, Staatliche und maritime Strukturen an den byzantinischen Balkanküsten. In: Th. Schmidts / M. M. Vučetić (Hrsg.), Häfen im 1. Millennium AD: Bauliche Konzepte, herrschaftliche und religiöse Einflüsse. Plenartreffen im Rahmen des DFG-Schwerpunktprogramms 1630 »Häfen von der Römischen Kaiserzeit bis zum Mittelalter« im Römisch-Germanischen Zentralmuseum Mainz, 13.-15. Januar 2014. RGZM-Tagungen 22 = Interdisziplinäre Forschungen zu den Häfen von der Römischen Kaiserzeit bis zum Mittelalter in Europa 1 (Mainz 2015) 93-116.

Heher/Preiser-Kapeller/Simeonov 2017: D. Heher / J. Preiser-Kapeller / G. Simeonov, Vom Lokalen zum Globalen. Maritime Netzwerke des Austauschs, der Versorgung und Mobilität an den byzantinischen Balkanküsten und in der frühmittelalterlichen Welt. In: S. Kalmring/ L. Werther (Hrsg.), Häfen im 1. Millennium A.D.: Standortbedingungen, Entwicklungsmodelle und ökonomischen Vernetzung. Plenartreffen im Rahmen des DFG-Schwerpunktprogramms 1630 «Häfen von der Römischen Kaiserzeit bis zum Mittelalter» an der Friedrich-Schiller-Universität Jena, 19.-21. Januar 2015. RGZM-Tagungen 31 = Interdisziplinäre Forschungen zu den Häfen von der Römischen Kaiserzeit bis zum Mittelalter in Europa 4 (Mainz 2017) 191-222.

Heher 2018: D. Heher, Dyrrhachion / Durrës – an Adriatic Sea Gateway between East and West. In: F. Daim/Ch. Gastgeber/D. Heher/C. Rapp (ed.), Menschen, Bilder, Sprache, Dinge. Wege der Kommunikation zwischen Byzanz und dem Westen, II: Menschen und Worte. Studien zur Ausstellung ‘Byzanz & der Westen. 1000 vergessene Jahre’. Byzanz zwischen Orient und Okzident 9,2 (Mainz 2018) 171-193.

Histria I-XV: Histria: Results of the excavations, ed. Institutul de arheologie Vasile Pârvan (Bucarest, Roumanie). Bucharest 1978-2012.

Höckmann 1999: O. Höckman, Der antike Hafen von Histria. Unterwasserprospektion zur Suche nach dem antiken Hafen von Histria (Rumänien) im Jahre 1998. *Skyllis* 2/1, 1999, 37-45.

Hodges 2006: R. Hodges, Sarandë, ancient Onchesmos, and ‘the corrupting sea’. In: New Directions in Albanian Archaeology. Studies presented to Muzafer Korkuti. International Centre for Albanian Archaeology Monograph Series 1 (Tirana 2006) 223–241.

Horn/Hoop 1989: A. Horn / W. Hoop, Durch die Nordägäis nach Istanbul. Izmir – Marmarameer – Istanbul. Nautischer Reiseführer (Hamburg 1989).

Hoxha 1993: G. Hoxha, Shkodra – chef-lieu de la province Prevalitane. In: XL Corso di cultura sull’arte ravennate e bizantina. Seminario Internazionale di Studi su: L’Albania dal Tardoantico al Medioevo, aspetti e problemi di Archeologia e Storia dell’Arte, Ravenna, 29 aprile – 5 maggio 1993 (Ravenna 1993) 551–567.

Hoxha 2003: G. Hoxha, Scodra dhe Prevalis në Antikitetin e Vonë (Shkodër 2003).

Hoxha 2014: G. Hoxha, Die Transformationsprozesse in der Stadt Lissus während der Spätantike. In: Proceedings of the International Congress of Albanian Archaeological Studies. 65th Anniversary of Albanian Archaeology, Tirana, 21-22 November 2013 (Tirana 2014) 511-526.

Hristov/Nikolov 2018: I. Hristov / M. Nikolov, Бележки върху историята и археологията на крепостта при нос Емине до с. Емона, Община Несебър. Известия на Националния исторически музей 30, 2018, 49-71.

Hristov 2015: I. Hristov, Chrysosotera. An Early Byzantine Fortress on the Peninsula of Hrisosotira at the Town of Chernomorets 5th-7th Century, 1 (Sofia 2015).

Hristov 2018: I. Hristov, Антично селище и крепост на полуостров Атия в Бургаския залив. Известия на Националния исторически музей 30, 2018, 31-48.

Ilkić 2012: M. Ilkić, Prilog poznavanju rimske luke na položaju Bošana nedaleko od Biograda na moru. *Histria Antiqua* 21, 2012, 639-647.

Ilkić/Parica 2009: M. Ilkić/M. Parica, Novalja (Navalia) - luka iz razdoblja Rimskog Carstva. *Histria antiqua* 17, 2009, 113-122.

Ilkić/Parica/Meštrov 2008: M. Ilkić - M. Parica - M. Meštrov, Ancient port complex in Pakoštane near Zadar. In: Proceedings of the 13th Annual Meeting of the European Association of Archaeologists (Zadar, Croatia, 18-23 September 2007) Session: Underwater Archaeology, ed. I. Radić Rossi/A. Gaspari/A. Pydyn. Hrvatsko Arheološko Društvo (Zagreb 2008) 212-221.

Ilkić/Pešić 2012: M. Ilkić/M. Pešić, Prilog poznavanju rimske luke na položaju Bošana nedaleko od Biograda na moru. *Histria Antiqua* 21, 2012, 639-647.

Janeš/Pleština 2015: A. Janeš/I. Pleština, Utvrda Lopar u Novom Vinodolskom - antička i srednjovjekovna utvrda: istraživanja 2011. i 2012. godine. Istraživanja na otocima / The island research project. Conference Veli Lošinj 2012. Izdanja Hrvatskog arheološkog društva 30 (Zagreb 2015) 67-75.

Jeličić Radonić 2001: J. Jeličić Radonić, Rimsko naselje u Ublima na Lastovu. Izdanja Hrvatskog arheološkog društva 20, 2001, 197-220.

Jeličić Radonić 1997: J. Jeličić Radonić, Skulptura ranokršćanske crkve iz castelluma na otočicu Osinju na uscu Neretve. Prilozi povijesti umjetnosti u Dalmaciji, Vol.35/1, 1997, 147-161.

Jelinčić/Perinić Muratović 2010: K. Jelinčić - L. Perinić Muratović, New archaeological finds from Postira on the island of Brač. Prilozi Instituta za arheologiju u Zagrebu 27, 2010, 177-216.

Jenkins 1962: R. Jenkins (ed.), Constantinus Porphyrogenitus, De administrando imperio. Vol. II. Commentary (London 1962).

Jireček 1916: K. Jireček, Skutari und sein Gebiet im Mittelalter. In: L. von Thallóczy (ed.), Illyrisch-albanische Forschungen I-II (München/Leipzig 1916), I, 94–124.

Jireček 1916b: Konstantin Jireček, Valona im Mittelalter, in: Illyrisch-albanische Forschungen I-II, ed. L. v. Thallóczy. München – Leipzig 1916, I, 168–187.

Josifova 2008: M. Josifova, Античният Тиризис и ранновизантийският Акре (селището на нос Калиакра). In: R. Ivanov (Hrsg.), Roman and Early Byzantine Settlements in Bulgaria, III (Sofia 2008) 136-161.

Jotov/Minčev 2013: V. Jotov / A. Minčev, Късноантична крепост на нос Св. Атанас (Varna 2013).

Jotov 2014: V. Jotov, Бяла и морето. От Древността до средата на XX век (Varna 2014).

Jović Gazić 2012: V. Jović Gazić, Urban Development from Late Antiquity to the Middle Ages: Dubrovnik, Split, Trogir, Zadar – the State of Research. *Archaeologica Adriatica* 5/1, 2012, 151–196.

Jurić 1992: R. Jurić, Archaeological Excavation of the Church of St Nicholas in Povljana on the Island of Pag. *Diadora* 14, 1992, 357–374.

Jurić/Škoro 2017: R. Jurić/I. Škoro, Srednjovjekovna arheološka nalazišta u Podgorju. Senjski zbornik 44, 2017, 129-148.

Jurković et al. 2008: M. Jurković/G. P. Brogiolo/J. Arce/I. Marić/A. Chavarría Arnau, Ricerche archeologiche a Kaštela (Isola di Rab). Campagne 2005–2007. Hortus Artium Medievalium 14, 2008, 283–292.

Jurković et al. 2013: M. Jurković/G. P. Brogiolo/T. Turković/A. Chavarría Arnau/I. Marić, Kaštela na otoku Rabu – od Rimske vile do ranobizantske utvrde. Rapski Zbornik 2 (2013) 1–13.

Jurković/Turković 2014: M. Jurković/T. Turković, Utvrda Sv. Kuzme i Damjana u Barbatu na otoku Rabu – Revizijska istraživanja. Rapska Sbornik 2, 2014, 15–36.

Karač 1998: Z. Karač, The Problem of the Exploration of 6th and 7th C. Urban Planning on Croatian Soil Within the Context of General Byzantine Urban Studies. In: N. Cambi/E. Marin (ed.), Acta XIII Congressus Internationalis Archaeologia Christianae. Studi di Antichità Cristiana 41 (Città del Vaticano – Split 1998), II, 959-974.

Karajotov/Rajčevski/Ivanov 2011: I. Karajotov / S. Rajčevski / M. Ivanov, История на Бургас. От Древността до средата на ХХ век (Burgas 2011).

Karajotov 1990: I. Karajotov, Подводни археологически проучвания в залива пред устието на река Ропотамо. In: АОР през 1989 г. (о. О. 1990) 178-179.

Karajotov 2004: I. Karajotov, Остров Света Анастасия (Burgas 2004).

Karayotov 2015: I. Karayotov, Anchialos / Anchialus during Antiquity (Burgas 2015)

Katić 1999/2000: M. Katić, Kasnoantički grad na Jadranu - primjer grada Hvara. Prilozi za povijest umjetnosti u Dalmaciji 38 (1999/2000) 19-49.

Kirigin 1998: B. Kirigin, Late Roman period on the island of Vis and its archipelago. The archaeological evidence. In: N. Cambi/E. Marin (ed.), Acta XIII Congressus Internationalis Archaeologia Christianae. Studi di Antichità Cristiana 41 (Città del Vaticano – Split 1998), III, 429-440.

Kirigin 2010: B. Kirigin, Salona i more - neke napomene. In: M. Jurković/A. Milošević (ed.), Munuscula in honorem Željko Rapanić. Zbornik povodom osamdesetog rođendana. Festschrift on the occasion of his 80th birthday. Dissertationes et Monographiae 5 (Zagreb, Motovun, Split 2012) 59–85.

Kirigin 2012: B. Kirigin, Salona i more - neke napomene. In: M. Jurković/A. Milošević (ed.), Munuscula in honorem Željko Rapanić. Zbornik povodom osamdesetog rođendana. Festschrift on the occasion of his 80th birthday. Dissertationes et Monographiae 5 (Zagreb, Motovun, Split 2012) 59–85.

Kirigin et al. 2011: B. Kirigin/I. Schrunk/V. Begović/M. Petrić/M. Ugarković, Hvar, otok Sv. Klement, uvala Soline, arheološka istraživanja 2010. Annales Instituti Archaeologici 7/1, 2011, 57-60.

Klaić/Petricioli 1976: N. Klaić/I. Petricioli, Zadar u srednjem vijeku do 1409. godine (Zadar 1976).

Koder/Hild 1976: J. Koder/F. Hild, Hellas und Thessalia (Tabula Imperii Byzantini 1) (Wien 1976).

Koder 1998: J. Koder, Aigaion Pelagos (Die nördliche Ägäis) (Tabula Imperii Byzantini 10) (Wien 1998)

Kovačić 1993: V. Kovačić, Prilozi za ranokršćansku topografiju Trogira. Diadora 15, 1993, 291–310.

Kovačić 2002: J. Kovačić, Kasnoantički natpis s Galičnika kod Jelse. Prilozi povijesti otoka Hvara 11/1, 2002, 81-90.

Kovačić 2010: V. Kovačić, Kasnoantička vila s portikom na Mirju kod Postira. Klesarstvo i graditeljstvo 3-4, 2010, 25-37.

Kozličić/Faričić 2004: M. Kozličić/J. Faričić, The Significance of Sv. Andrija Island (Svetac) on a Sailing Route Across the Adriatic Presented on Old Geographical Maps. *Geoadria* 9/1, 2004, 33-94.

Külzer 2008: A. Külzer, Ostthrakien (Eurōpē) (*Tabula Imperii Byzantini* 12) (Wien 2008).

Kunčević 2004: L. Kunčević, The oldest foundation myth of Ragusa: the Epidaurian Tradition. *Annual of Medieval Studies at CEU* 10, 2004, 21–31.

Lako et al. 2014: K. Lako/S. Muçaj/S. Bushi/S. Xhyheri, Anchiasmos (Onchesmos) in the 5th-7th centuries: city, pilgrimage centre and port, in: Proceedings of the International Congress of Albanian Archaeological Studies. 65th Anniversary of Albanian Archaeology, Tirana, 21-22 November 2013 (Tirana 2014) 613-624.

Lampropoulou et al. 2019: A. Lampropoulou et al., Ιστορική Γεωγραφία της Βυζαντινής Πελοποννήσου, 300-1204 (Athen 2019, in Vorbereitung)

Lampros 1914: Sp. Lampros, Ἡ νῆσος Σάσων. *Neos Hellenomnemon* 11 (1914), 57-93.

Lazarov 2009: M. Lazarov, Древното корабоплаване по Западното Черноморие (до завладяването му от римляните) (Varna 2009).

Lindhagen 2016: A. Lindhagen, Narona in Dalmatia — the Rise and Fall of a ‘Gateway Settlement’. In: K. Höghammar/B. Alroth/A. Lindhagen (ed.), *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. Boreas. Uppsala Studies in Ancient Mediterranean and Near Eastern Civilizations* 34 (Uppsala 2016) 225-251.

Lipovac Vrkljan et al. 2016: G. Lipovac Vrkljan/I. Valent/A. Konestra/I. Ožanić Roguljić, Antički proizvodni keramičarski kompleks u Crikvenici – zaključna istraživanja 2015. godine / Roman pottery production complex in Crikvenica – conclusive research in 2015. *Annales Instituti Archaeologici* 12/1, 2016, 144-151.

Litavrin/Novocel'cev 1989: G. Litavrin / A. Novocel'cev (Hrsg.), Об управлении империей. Текст, перевод, комментарий (Moskau 1989).

MacDonald/McAlister/Holland 1976: The Princeton encyclopedia of classical sites. Stillwell, Richard. MacDonald, William L. McAlister, Marian Holland. Princeton, N.J. Princeton University Press. 1976.

Madgearu 2013: A. Madgearu, Byzantine Military Organization on the Danube, 10th-12th Centuries. East Central and Eastern Europe in the Middle Ages, 450-1450, Vol. 22 (Leiden / Boston 2013).

Madgearu 2016: A. Madgearu, The Location of Vicina Revisited. Is There any Final Solution? *Études byzantines et post-byzantines* 7, 2016, 61-75.

Mănuțu-Adameșteanu 2006: M. Mănuțu-Adameșteanu (Hrsg.), Orgame/Argamum, Supplementa I: À la recherche d'une colonie. Actes du Colloque International 40 ans de recherche archéologique à Orgame/Argamum: Bucarest – Tulcea – Jurilovca, 3-5 octobre 2005 (Bukarest 2006).

Mănuțu-Adameșteanu 2010a: Gh. Mănuțu-Adameșteanu, Contribuții la cunoașterea locurii medio-bizantine de la Mahmudia – cetatea Salsovia (secolele X-XI). *Peuce N.S.* 8, 2010, 223-236.

Mănuțu-Adameșteanu 2010b: Gh. Mănuțu-Adameșteanu, Locuirea de epocă medie-bizantină pe teritoriul orașului Tulcea (sec. X-XIII). *Studii și cercetări de istorie veche și arheologie* 61/2-4, 2010, 219-250.

Marasović 2002: T. Marasović, La Spalato dell'epoca precarolingia e carolingia. *Hortus Artium Medievalium* 8, 2002, 223-234.

Marasović/Marasović 2012: K. Marasović/T. Marasović, Naseljavanje Dioklecijanove palače, in: M. Jurković/A. Milošević (ed.), *Munuscula in honorem Željko Rapanić*. Zbornik povodom osamdesetog rođendana. Festschrift on the occasion of his 80th birthday. Dissertationes et Monographiae 5 (Zagreb, Motovun, Split 2012) 93–114.

Marin 1998: E. Marin, Narona vom 6. bis zum 9. Jahrhundert. In: F. Guidobaldi (ed.), *Domum tuam dilexi. Miscellanea in onore di A. Nestori* (Città del Vaticano 1998) 543–560.

Martinović 1990: J. Martinović, Prolegomena za probelm prvo bitne crkve sv. Tripuna u Kotoru. Prilozi povijesti umjetnosti u Dalmaciji 30 (Split 1990) 5-27.

Mijović 1962/63: P. Mijović, *Acruvium - Decatera - Kotor u svetu novih arheoloških otkrića*. Starinar 13-14, 1962-1963, 27-48.

Mijović 1973: P. Mijović, M. Kovačević, *Gradovi i utvrđenja u Crnoj Gori* (Beograd-Cetinje 1975)

Mijović 1987: P. Mijović, *Kulture Crne Gore* (Titograd 1987).

Milinković 1999: M. Milinković, Rezultati arheoloških iskopavanja višeslojnog nalazišta u luci Rose 1998. godine sa posebnim osvrtom na nalaz okova kopče tipa 'Korint', Muzejske Sveske 4/5, 1999, 26-42.

Milinković 2005: M. Milinković, Einige Bemerkungen zu spätromanischen Funden in Süddalmatien und Montenegro, in: *Reliquiae Gentium. Festschrift für Horst Wolfgang Böhme zum 65. Geburtstag*, Teil I, ed. C. Dobiat. Internationale Archäologie. Studia honoraria 23 = Veröffentlichung des Vorgeschichtlichen Seminars Marburg 14 (Rahden 2005) 303–317.

Mirnik 1982: I. Mirnik, Ostava bizantskog novca sa Majsana. Numizmatičar 5, 1982, 137-163.

Mirnik 1985: I. Mirnik, Nalazi novca s Majsana. Vjesnik Arheološkog muzeja u Zagrebu, 18/1, 1985, 87-95.

Mirnik 1997: I. Mirnik, Nalazi antičkog novca u Dubrovniku. Dubrovnik, N.S. 8/4, 1997, 248-258.

Mohorovičić 1988: A. Mohorovičić, Prilog poznavanju antičkog urbanog sloja grada Krka / A contribution to the knowledge of the antique urban layer of the city of Krk. Izdanja Hrvatskog arheološkog društva 13, 1988, 17-21.

Molla/Paris/Venturini 2013: N. Molla/M. F. Paris/F. Venturini, Material Boundaries: the City Walls at Butrint In: L. Hansen/R. Hodges/S. Leppard (ed.), *Butrint 4. The archaeology and histories of an Ionian town*. Butrint Archaeological Monographs 4 (Oxford 2013) 260–279.

Nessebre I-III: Nessebre, I-III (Sofia / Burgas 1969-2005).

Nikolov 2015: M. Nikolov, Археологическите обекти край кв. Крайморие, гр. Бургас: Порос / Поро / Форос (предварително съобщение). Известия на Народния музей Бургас 5, 2015, 119-130.

Novak/Brožić 1995: N. Novak/A. Brožić, Starokršćanski kompleks na Mirinama u uvali Sapan kraj Omišlja na otoku Krku. Starohrvatska prosvjeta 21, 1991 (1995) 29-54.

Oikonomides 1983: N. Oikonomides, Presthlavitzza, the Little Preslav. Südost-Forschungen 42, 1983, 1-9.

Opaić 1977: A. Opaić, Aegyssus'76 – Raport preliminar. Pontica 10, 1977, 307-311.

Oračev 2012: A. Oračev, Блаженият град Ахтопол / Agatopolis (2012).

Ostojić 1964: I. Ostojić, Benediktinci u. Hrvatskoj I (Split 1964).

Päffgen et al. 2017: B. Päffgen et al., Neue Prospektionsmethoden im antiken Aegyssus. In: G. Nuțu / S.-C. Ailincăi / C. Micu (Hrsg.), *The Man, the River, the Sea. Studies in Archaeology and History in Honour of Florin Topoleanu on his 65th Anniversary*. Biblioteca Istro-Pontica, Seria Arheologie 13 (Cluj-Napoca 2017) 275-286.

Panajotova/Draževa 2003: K. Panajotova / C. Draževa, Аполония Понтика – Созополис. In: Римски и ранновизантийски селища в България, II (Sofia 2003) 215-234.

Parica 2008: M. Parica, Istočnomediterska keramika iz antičke luke u Pakoštanima. Prilozi Instituta za arheologiju u Zagrebu 25, 2008, 81-96.

Parica 2012: M. Parica, Nekoliko primjera lučkih instalacija antičkih kamenoloma na dalmatinskim otocima. *Histria Antiqua* 21, 2012, 345-353.

Peev 2014: P. Peev, Ancient Harbours in the Gulf of Varna. In: I. Pâslaru / S. M. Colesniuc / T. Dimov (Hrsg.), *Kallatida* (Mangalia 2014).

Peković 1996: Ž. Peković, Crkva Sigurata na Prijekom. Prilozi povijesti umjetnosti u Dalmaciji 35, 1996, 253-270.

Peković 1998: Ž. Peković, Dubrovnik. Nastanak i razvoj srednjovjekovnoga grada / La fondation et le développement de la ville médiévale. Musée des Monuments Archeologiques Croates, Catalogues et monographies 5 (Split 1998).

Peković/Babić 2016: Ž. Peković/K. Babić, Kasnoantička sakralna arhitektura u doba Istočnih Gota u Dalmaciji. Prostor 24, 2016, 2 (52) 157-171.

Pešić 2017: M. Pešić, Excavations at the Antiquity Period Harbour at the Barbir Site in Sukošan / Istraživanja antičke luka Barbir u Sukošanu. Submerged Heritage / Potopljena Baština 7, 2017, 11-16.

Petricioli 1954: I. Petricioli, Spomenici iz ranog srednjeg vijeka na Dugom otoku. Starohrvatska prosvjeta, ser. 3, 3, 1954), 53-65.

Pletnjov/Peev 2010: V. Pletnjov / P. Peev, За средновековния варненски пристан Роко / Росито / Росико. In: Великотърновският университет „Св. св. Кирил и Методий“ и българската археология, I (Veliko Tărnovo 2010) 505-524.

Pletnjov/Rusev 2011: V. Pletnjov / I. Rusev, История на Варна, II: Средновековие и Възраждане (VII в.-1878 г.) (Varna 2012).

Pletnjov 2006: V. Pletnjov, Крепостта Кастроци (предварително съобщение). In: M. Kajmaka-mova et al. (Hrsg.), Тангра. Сборник в чест на 70-годишнината на акад. Васил Гюзелев (Sofia 2006) 451-464.

Pletnjov 2008: V. Pletnjov, Варна през Средновековието, част първа: от VII до края на X век. С едно приложение Пр. Пеев (Varna 2008).

Pochmarski/Hoxha 2005: E. Pochmarski – G. Hoxha, Lissos: Quellen und Stadtgeschichte. Römisches Österreich 28, 2005, 243-251.

Pomorie I: A. Oračev / S. Pejkov (Hrsg.), Поморие. Древност и съвремие, I (Burgas 2011).

Popkonstantinov/Draževa/Kostova 2015: K. Popkonstantinov / C. Draževa / R. Kostova, Манастирът „Св. Йоан Продром“ на остров Св. Иван в светлината на новите археологически проучвания (2008-2013). Известия на Народния музей Бургас 5, 2015, 209-217.

Potrebica/Hančević/Ožanić Roguljić, forthcoming: H. Potrebica/ S. Hančević/ I. Ožanić Roguljić, The Late Roman site at Lumbarda, Island of Korčula (Croatia) (forthcoming).

Preshlenov 2012: H. Preshlenov, Mesambria Pontica in orbis Romanus. In: R. Ivanov (Hrsg.), Roman Cities in Bulgaria. Corpus of Ancient and Medieval Settlements in Modern Bulgaria 1 (Sofia 2012) 493-535.

Pušić 1977: I. Pušić, Rose in the Early Middle Ages. *Balcanoslavica* 6, 1977, 117-130.

Radić 2001: F. Radić, Topografija otoka Korčule. Izdanja Hrvatskog arheološkog društva 20 (2001) 25-50.

Radić Rossi 2004: I. Radić Rossi, Zaštitno podmorsko istraživanje stare dubrovačke gradske luke. Obavijesti Hrvatskog arheološkog društva 36/1 (Zagreb 2004) 109-117.

Radić Rossi/Fabijanić 2013: I. Radić Rossi/T. Fabijanić, Arheološka baština Kornata. In: V. Skračić (ed.), Toponimija kornatskog otočja. *Biblioteka Onomastica Adriatica* 6, 2013, 67-98.

Radić Rossi/Lipshitz 2010: I. Radić Rossi/N. Lipshitz, Analiza drvene građe srednjovjekovnih brodica iz Nina. *Archaeologia Adriatica* 4, 2010, 257-270.

Radić/Šiljeg 2002: D. Radić/B. Šiljeg, Preliminarni rezultati istraživanja antičko-srednjevjekovnog kompleksa u uvali Portić na otočiću Sušac. Obavijesti HAD 34 (2002) 3, 116-118.

Rapanić 2007: Ž. Rapanić, Od carske palače do srednjovjekovne općine (Split 2007).

Regan 2002: K. Regan, Utvrda Sv. Jurja u Caskoj na otoku Pagu (Die Festung des Heiligen Georg in Caska auf der Insel Pag). Prilozi Instituta za arheologiju u Zagrebu 19, 2002, 141-148.

Regan/Nadilo 2006: K. Regan/B. Nadilo, Ranoromaničke sakralne građevine dubrovačkog područja (I.) (Early Romanesque Sacral Buildings in Dubrovnik Area I). Građevinar 58/2, 2006, 143-153.

Regan/Nadilo 2006b: K. Regan/B. Nadilo, Ranoromaničke i predromaničke crkve na Koločepu (I.). Građevinar 58/4, 2006, 317-323.

Regan/Nadilo 2006c: K. Regan/B. Nadilo, Ranoromaničke i predromaničke crkve na Koločepu (II.). Građevinar 58/5, 2006, 405-412.

Romanescu et al. 2015: Gh. Romanescu et al., The Ancient Legendary Island of Peuce – Myth or Reality. *Journal of Archaeological Science* 53, 2015, 521-535.

Rusyaeva 2003: A. Rusyaeva, The Temple of Achilles on the Island of Leuke in the Black Sea. *Ancient Civilizations from Scythia to Siberia* 9/1-2, 2003, 1-16.

Salkin/Toptanov 1990: A. Salkin / D. Toptanov, Проучвания в Археологически резерват „Яйла“. In: Археологически проучвания и разкопки през 1989 (Kjustendil 1990) 189.

Santoro/Sassi 2010: S. Santoro/B. Sassi, Fra terra, mare, colline e lagune: le aree suburbane di Dyrrachium (Durrës, Albania). In: Las Áreas Suburbanas en la ciudad histórica. Topografía, usos, función. *Monografías de Arqueología Cordobesa* 18 (Córdoba 2010) 35-52.

Santoro/Sassi/Hoti 2009: S. Santoro/B. Sassi/A. Hoti, ... Ex Continente Visi ... Un probabile faro nel porto antico di Durazzo (Albania). In: *Torre de Hércules: Finis Terrae Lux. Simposio sobre los faros romanos e a navegación occidental en la antigüedad*, Coruña 2008 = Brigantium 20, 2009, 68-83.

Sayar 1998: M. H. Sayar, Perinthos-Herakleia (Marmara-Ereglisi) und Umgebung. *ÖAW-Phil.-hist. Klasse, Denkschriften* 269 (Wien 1998).

Saveljić Bulatović 2011: L. Saveljić Bulatović, Roman Villa in Petrovac. *Heritage of an Ancient Civilisation* (Podgorica 2011).

Scarlat 1973: C. Scarlat, Portul antic Callatis – Carcetări de arheologie submarină. Acta Musei Napocensis 10, 1973, 529-540.

Šeparović 2003: T. Šeparović, Nove spoznaje o nalazima ranosrednjovjekovnog novca u južnoj Hrvatskoj. Starohrvatska prosjela, ser. 3, 30, 2003, 127-137.

Serventi 2012: Z. Serventi, Važnost otoka Ilovika i Sv. Petra za plovidbenu rutu duž istočne obale Jadrana u svjetlu novijih istraživanja / The Importance of the Islands of Ilovik and St. Peter (Sv. Petar) on the Seafaring Route along the Eastern Adriatic Coast in the Light of Recent Research. *Histria antiqua* 21, 2012, 401-412.

Šiljeg 2008: B. Šiljeg, Arheološko istraživanje lokaliteta Mala luka i Baška na Krku 2007 / Archaeological Exploration of the Mala Luka and Baška Sites on the Island of Krk in 2007. *Annales Instituti Archaeologici* 4/1 (2009) 84-87.

Škegro 1999: A. Škegro, Gospodarstvo rimske provincije Dalmacije (Zagreb 1999).

Škegro 2008: A. Škegro, The Diocese of Muccurum (Ecclesia Muccuritana) in Dalmatia. In: Arheološki vestnik 59, 2008, 291–303.

Soustal/Koder 1981: P. Soustal/J. Koder, Nikopolis und Kephallēnia (Tabula Imperii Byzantini 3) (Wien 1981).

Soustal 1991: P. Soustal, Thrakien (Thrakē, Rodopē und Haimimontos) (Tabula Imperii Byzantini 6) (Wien 1991).

Soustal 2019: P. Soustal, Makedonien, südlicher Teil (Tabula Imperii Byzantini 11) (Wien 2019, in Vorbereitung).

Stănică 2015: A.-D. Stănică, Viața economică din nordul Dobrogei în secolele X-XIV (Tulcea 2015).

Ştefan 1977: A.-S. Ştefan, Cetățile romane de la Enisala. Studiu aerofotografic. Revista muzeelor și monumentelor. Monumente istorice și de artă 46/2, 1977, 15-25.

Stošić 1986: J. Stošić, Sažeti prikaz istraživanja, nalaza i problema prezentacije pod katedralom i Bunićevom poljanom u Dubrovniku. Godišnjak zaštite spomenika kulture Hrvatske 12, 1986, 241-248.

Stošić 1988: J. Stošić, Prikaz nalaza ispod katedrale i buničeve poljane u Dubrovniku. Izdanja Hrvatskog arheološkog društva 12, 1988, 15-38.

Strčić 1985-1987: P. Strčić, Senj u XIII-XIV stoljeću. Senjski zbornik 12, 1985-1987, 1-18.

Suceveanu 1992: A. Suceveanu, Die römischen Verteidigungsanlagen an der Küste der Dobrudscha. Bonner Jahrbücher 192, 1992, 195-223.

Suić 1955: M. Suić, Pizuch na Dugom otoku. Starohrvatska prosjela, ser. 3, 4, 1955, 135–140.

Suić 1976: M. Suić, Antički grad na istočnom Jadranu (Zagreb 1976).

Suić 1981: M. Suić, Zadar u starom vijeku (Zadar 1981).

Suić 2001: M. Suić, Grad Pag - Tipološka osobitost uz našu obalu. Radovi Zavoda za povijesne znanosti HAZU u Zadru 43, 2001, 13-28.

Teichner/Ugarković 2012: F. Teichner/M. Ugarković, Zeugnisse einer römischen Villa maritima auf der Insel des Heiligen Clemens (Dalmatien), Germania 90/2012, 97-127.

Theoklieva-Stoitseva 2009: E. Theoklieva-Stoitseva, Η τοπογραφία της Μεσημβρίας του Ευξείνου Πόντου από τον 4ο εως τις αρχές του 7ου αιώνα (Alexandroupoli 2009).

Todorova 1981: E. Todorova, Gli insediamenti genovesi alle foci del Danubio: Vicina, Chilia, Licos-tomo. In: G. Pistarino (Hrsg.), Genova e la Bulgaria nel Medioevo. Collana storica di fonti e studi 42 (Genua 1984) 427-459.

Tolja/Radić 2010: Z. Tolja/D. Radić, Istraživanje antičko-srednjevjekovnog sklopa u uvali Portić na otoku Sušcu. In: Arheološka istraživanja u Dubrovačko-neretvanskoj županiji: znanstveni skup, Dubrovnik, 18.-21. listopada 2005. Izdanja Hrvatskog arheološkog društva 24, 2010, 157-180.

Tomasović 2004: M. Tomasović, 8000 godina života na prostoru Makarske (Makarska 2004).

Tomasović 2009: M. Tomasović, Arheološke sugestije za ubikaciju gradova iz 36. poglavlja Porfirogenetova De administrando imperio. Starohrvatska prosvjeta, ser. 3, 36, 2009, 293-319.

Tomičić 1990: Ž. Tomičić, Materijalni tragovi ranobizantskog vojnog graditeljstva u velebitskom podgorju / Traces of Early Byzantine Military Buildings below Velebit. Vjesnik Arheološkog muzeja u Zagrebu, ser. 3, 23, 1990, 139-162.

Tomičić 1993: Ž. Tomičić, Tragovi ranobizantskog vojnog graditeljstva na sjevernom hrvatskom primorju. In: Umjetnost na istočnoj obali Jadrana u kontekstu europske tradicije (Rijeka 1993) 91-96.

Tomičić 1998: Z. Tomičić, Le tracce della riconquista giustinianea sulla costa dell'Adriatico orientale. In: N. Cambi/E. Marin (ed.), Acta XIII Congressus Internationalis Archaeologia Christianae. Studi di Antichità Cristiana 41 (Città del Vaticano – Split 1998), II, 1075-1090.

Tonc 2011: A. Tonc, Terenski pregled područja izgradnje plovнog kanala ‘Grad Pag–Košljun’ i područja sanacije kamenoloma Vranja / Field Survey of the Planned Construction Area of the Town of Pag-Košljun Channel and the Restoration Area of Vranja Quarry. Annales Instituti Archaeologici, 7/1, 2011, 118-121.

Tonc/Radman-Livaja 2017: A. Tonc/A. Radman-Livaja, Il materiale ceramico da Gradina Sv. Trojica: analisi preliminare. In: G. Lipovac Vrkljan et al. (ed.), Atti del III colloquio archeologico internazionale. Officine per la produzione di ceramica e vetro in epoca romana. Produzione e commercio nella regione adriatica (Crikvenica 2017) 365-385.

Topoleanu et al. 2012: Fl. Topoleanu / D. Bogdan / I. Haynes, Salsovia: Chronological Remarks. Peuce N.S. 10, 2012, 101-144.

Torbatov 2002: S. Torbatov, The Defence System of the Late Roman Province of Scythia (the End of the 3rd – the 7th century A.D.) (Sofia 2002).

Totešev 1992: A. Totešev, Нови сведения за миналото на с. Емона, Бургаска област. Годишник на Националния археологически музей 8, 1992, 331-340.

Ugarković et al. 2015: M. Ugarković/I. Schrunk/V. Begović/M. Petrić, Arheološka istraživanja rimske vile u uvali Soline na otoku Sveti Klement (Pakleni otoci, Hvar), lipanj 2014. godine. Annales Instituti Archaeologici, 11/1, 2015, 87-91.

Uncu 2011: L. Uncu, Holocene landscape changes of the Lezha region. A contribution to the palaeogeographies of coastal Albania and the geoarchaeology of ancient Lissos. Dissertation (PhD-Thesis) (Marburg/Lahn 2011).

Vasilev/Genov/Kisjov 1984: V. Vasilev / C. Genov / D. Kisjov, Каварна. От Древността до Освобождението (Sofia 1984).

Veikou 2012: M. Veikou, Byzantine Epirus. A Topography of Transformation. Settlements of the Seventh-Twelfth Centuries in Southern Epirus and Aetoloacarnania, Greece (The Medieval Mediterranean 95) (Leiden – Boston 2012).

Volpe et al. 2008: G. Volpe et al., Progetto Liburna. Archeologia subacquea in Albania. Campagne 2007/2008. L'archeologo subacqueo 14/2-3, 2008, 2-16.

Volpe/Leone/Turchiano 2011: G. Volpe/D. Leone/M. Turchiano, Il progetto Liburna: ricerche archeologiche subacquee in Albania (Campagne 2007-2010). Annuario della Scuola Archeologica Italiana di Atene 89, ser. III, 11/1, 2011, 251-286.

Volpe/Leone/Turchiano 2011b: G. Volpe/D. Leone/M. Turchiano, Progetto Liburna. Archeologia subacquea in Albania (campagna 2010), Parte I. L'archeologo subacqueo 51 (17/3), 2011, 14-19.

Vrsalović 1974: D. Vrsalović, Istraživanja i zaštita podmorskih arheoloških spomenika u SR Hrvatskoj (Zagreb 1974).

Vrsalović 1979: D. Vrsalović, Arheološka istraživanja u podmorju istočnog Jadrana (Zagreb 1979).

Wawrzinek 2014: C. Wawrzinek, In portum navigare. Römische Häfen an Flüssen und Seen (Berlin 2014).

Wilkes 1969: J. J. Wilkes, Dalmatia. History of the Provinces of the Roman Empire 2 (Cambridge 1969).

Zagarčanin 2013: M. Zagarčanin, Bar e il suo territorio in epoca romana, tardoantica e bizantina. In: S. Gelichi/M. Zagarčanin (ed.), Storie di una città: Stari Bar tra antichità ed epoca moderna attraverso le ricerche archeologiche (Firenze 2013) 27-42.

Zagarčanin 2014: M. Zagarčanin, Nova istraživanja rimske i ranovizantijske vile nalokalitetu Mirišta u Petrovcu, Nova antička Duklja 5, 2014, 19-60.

Zagarčanin 2015: M. Zagarčanin, Antička i ranovizantijska arheološka svjedočanstva na svetomiholjskoj Prevlaci kod Tivta. Preliminarni rezultati istraživanja od 1997. do 2011. godine / Roman and early Byzantine archaeological testimony on svetomiholjska Prevlaka near Tiva. Preliminary research results from 1997. to 2011. Nova antička Duklja 6, 2015, 109-156.

Zahariade/Alexandrescu 2011: M. Zahariade / C.-G. Alexandrescu, Greek and Latin Inscriptions from Halmyris. Inscriptions on Stone, Signa, and Instrumenta found between 1981 and 2010. BAR International Studies 2261 (Oxford 2011).

Zaninović 1988: M. Zaninović, Villae rusticae na području Epidaura. Izdanja Hrvatskog arheološkog društva 13, 1988, 89-100.

Zaninović 1995: M. Zaninović, Villae rusticae u pejsažu otoka i obale antičke Dalmacije, Histria Antiqua 1, 1995, 86-96.

Zaninović 2008: M. Zaninović, Još o hvarskoj Herakleji / A little more on Hvar's Herakleia. Vjesnik za arheologiju i povijest dalmatinsku 101/1, 2008, 143-156.

Zelić 1993: D. Zelić, Nastanak urbanih naselja na otoku Krku. Radovi Instituta za povijest umjetnosti 17, 1993, 7-17.

Zeço 1987: M. Zeço, Rezultate të kërkimeve arkeologjike në Karaburun e në Rrëzen e kanalit. Monumentet 34/2, 1987, 153-176.

Žile 1997: I. Žile, Naselje prije grada. Dubrovnik 4, 1997, 97-123.

Žile 2000: I. Žile, Arheološki nalazi unutar perimetra povjesne jezgre grada Dubrovnika. Opuscula archaeologica 23-24, 2000, 337-346.

Žile 2009: I. Žile, Crkva Sv. Pavla na lokalitetu Crkvine poviše Korita na otoku Mljetu. Zbornik radova znanstvenog skupa 'Ignjat Đurđević i dubrovačka tradicija svetopavlovskog brodoloma u vodama hrvatskog otoka Mljeta' (Zagreb 2009) 267-276.

Zmaić 2012: V. Zmaić, Bizantski srednjovjekovni brodolomi u podmorju istočnog jadrana. *Histria Antiqua* 21, 2012, 471–482.

Zorić 1991: M. Zorić, Ivinj, ranokršćanska bazilika s krstionicom. *Obavijesti Hrvatskog arheološkog društva* 31 (1991) 103-108.

Zornija/Mendušić 2015: M. Zornija/M. Mendušić, Ranokršćanski sakralni kompleks u uvali Tarac na Kornatu (Istraživanja 2006.-2011.). *Izdanja Hrvatskog arheološkog društva* 30, 2012, 39-56.

European Harbour Data Repository

**Vol.4. Harbours and landing places on the Balkan coasts of the
Byzantine Empire (4th to 12th centuries)
Database**

