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# Kitap Eleştirisi / Book Review 

Baldassarre Giardina, Navigare necesse est. Lighthouses from Antiquity into the Middle Ages, History, architecture, iconography and archaeological remains, Oxford 2010: Archaeopress, BAR Int. Series 2096, vi +348 pages; supplied with maps, plans, figures, drawings and photographs, 2 colour maps. Bilingual: English and Italian. ISBN 9781407305721.

This volume is described by its publisher as follows: "Baldassarre Giardina's book is the fruit of many years of research. Since the late nineteenth and the early twentieth century and the historical and archaeological studies of E. Allard, L. A. Veitmeyer and He. Thiersch, little work has been done on the subject of lighthouses. No up-to-date or systematic scholarly research has been produced until now. Drawing on the rich accumulation of existing research, the author has in addition brought together evidence from historical and literary sources from the ancient, medieval and modern periods. Together with this, he has researched new evidence, data and scientific discoveries, and from these he has assembled a framework that sheds light on bitherto unpublished aspects of these structures, identifying their archaeological and typological characteristics. With this book, the author has given us a systematic exploration of the subject, its results arranged in such a way as to demonstrate the earliest form of these structures and their evolution in time."
The aim of this British Archaeological Report, International Series publication, a bilingual volume of vi+348 pages in both English (translation by C. Higget) and Italian, is further articulated by its author on p. 22, "Illustrated with photographs, often taken in situ, the present book, Navigare necesse est. Il faro tra mondo antico e Medioevo: storia, architettura, iconografia ed evidenze archeologiche was born as a result of research initiated for my doctoral thesis. It aspires to be the most definitive and complete corpus of the lighthouses of the ancient world known to us from literary documents, iconographic images and archaeological evidence."

The book opens with a 49 page introduction to the subject, divided into 8 chapters entitled: Navigational aids before the construction of the Alexandria Lighthouse (Pharos); The Pharos at Alexandria and other lighthouses: the sources; Devolpment (sic) of the lighthouse: architecture, materials and construction techniques; Iconography, iconology and reliability of the images; Illumination systems and visibility distances: Late lighthouses and the development of Coastal Towers; The first medieval lighthouses: Genua, Portus Pisanus, Coruan, then a two page series of conclusions. This is followed by the 76 catalogue entries, a 17 page bibliography usefully providing a preponderance of Italian scholarship, 114 Plates, 52 Figs. and two Map Plates.
The English translated text of this BAR publication by C. Higget seems to be entirely unedited, in addition to numerous typos, it should be: Development rather than Devlopment; Constantinople rather than Costantinople, fn. 351; confirms, rather than conferms etc.; it is surely Attalos or Attalus rather than Attalo, p.70, Al-Idrisi, not Edrisi p. 58 fn. 316, Abu Hajjaj al-Andalusi, not Abu al-Haggag, p. 59 fn. 321; Abu'l-Feda rather than abdul Feddal p. 58 fn. 316; while for example fn. 323 and fn. 324 seem to have been misplaced. However, and of greater importance, this "most definitive and complete corpus," most regrettably for a work of scholarly reference, lacks any proper indices, including the indexing of at least the personal and proper names mentioned in the text. Readers of books, rather than todays' scanners of electronic texts, do tend to find a proper index a rather valuable resource, while the misspelling of proper names, a problem usually solved when indexing is carried out, tends to mislead those electronically searching the text for a correctly spelt proper name. However, when a name appears in the sources written in a variety of different ways, as in the 49 recorded, and there are probably more different ways of spelling the name given to the city of Antalya, from Attaleia and Catalea to SSatallea, which were employed in the Middle Ages by a variety peoples recording the name of the city in a varie-
ty of languages in surviving documents and texts, this historical richness should, I think, be preserved rather than standardised into a single form.
Further and unfortunately, the map on page V of Roman Imperial period lighthouse distribution surprisingly indicates Side in Pamphylia, No. 71, as being situated instead in Rough Cilicia on Cape Anamur, a couple of hundred kilometres to the East of Side's location or, as it is also given in another location and another number, as No. 73 and lying to the west of No. 72 Perga (Perge) rather than to its east. To further the reader's confusion the catalogue numbering does not match the numbering on the map, in the catalogue No. 71 is Portus Gaditanus-Gades and No. 73 is Flavium Brigantium both in Spain, while Side is Cat. No. 17 and Perga Cat. No.16. Even more strange is the fact that this map records Lycia as extending east from Patara to Alanya and inland to Beyşehir, presenting the reader with a map of the Roman province of Lycia quite unknown to the Romans. However the map does mark an advance of 67 upon the 18 antique lighthouses marked on the map in D. Alan Stevenson's, The World's Lighthouses from Ancient Times to 1820, Oxford University Press, 1959.
This work incorrectly lists in both the Italian and English texts, the entry for Cat. No. 14, Seleucia Pieria, as being modern Silifke, which it is not. Seleucia Pieria was rather the port for the city of Anti-ochia-Antioch-Antakya lying likewise a considerable distance to the East of Silifke. The entry for Cat. No. 18, Attaleia, records it as being in the province of Galatia, rather than being, as commonly known for the past couple of thousand years, due in part to the peregrinations of the Apostle Paul recorded in the Holy Bible and the commentaries written upon it, as being in the province of Pamphylia, it was only briefly in Galatia, being formerly in the province of Cilicia until 36 B.C. (from 36 B.C. under Amyntas until 25 B.C., and then as a part of the Roman Province of Galatia only until Vespasian's rule), and then a separate province with Lycia from the $7^{\text {th }}$ decade of the $\mathrm{I}^{\mathrm{It}}$ c. A.D.; while the entry for Cat. No. 25, records Heraclea Pontica as being Eregli, Syria (sic) in the Province of Bithinia (sic), etc.
In respect to the origin of the lighthouse and although the title of this work reads, Navigare necesse est. Lighthouses from Antiquity into the Middle Ages, the author states that, "Although architecturally speaking, the lighthouse of Alexandria can be described as the first genuine lighthouse, it is difficult contrary to the generally held view - to pinpoint an exact date for the birth of such structures." p. 23. However, it can surely be understood that with the practice of sailing at night, a commonplace from the practice of Phoenician nocturnal navigation onwards, and, as is clearly indicated in the title of this volume, 'Navigare necesse est', lighthouses are necessary for navigation, that the physical entrance to harbours and some islands and important coastal promontories and straits would have been marked at night with lights, such as the hill Jebel el-Manar, "Mountain of the light," so called because fires were built there in Phoenician times to guide sailors into the Bay of Carthage, and so it seems most reasonable to think that in all probability the Phoenicians and the Egyptians were responsible for the first functional lighthouses, of harbour and marker lights.
It should also have been noted in this corpus, but regrettably it is not, that Homer and other preHellenistic authors including Euripides, amongst others, do in fact refer to Фápoc, that is to a pharos, this being some several centuries prior to the construction of the Hellenistic Pharos in the $3^{\text {rd }}$ c. B.C., indicating that one of the words meaning a lighthouse, of the larger type of structure, and that very word which is specifically associated with lighthouses in a wide range of languages today, Pharos/Pharology, Pharo, Faro, Phanar, Fener, had been employed for some number of centuries prior to the construction of the Hellenistic Pharos of Alexandria and, given the location of these earlier pharos, including the name given to the Pharos Island itself, and also the word Pharos (Фápos) given to another, located in the Gulf of Manios, on the island of Phara (Níooc Фápa), Nestia-Acarnania recorded by Pseudo-Scylax, there can be little doubt that there were pre-Hellenistic but pharos type-lighthouses
standing in these, and in other locations, including for example at Pharsalos. ${ }^{1}$ This being the earlier name of Phaselis (usually independent or within Pamphylia but briefly within Lycia); with the word Фá $\rho \sigma \alpha \lambda o \varsigma-$ Pharsalos, seemingly formed through the combination of $\varphi \alpha ́ \rho o \varsigma+\sigma \alpha ́ \lambda o \varsigma$, that is the word pharos-large marker beacon, combined with the word salos, meaning an open roadstead outside a port for ships to anchor in, ${ }^{2}$ with the word pharos shortened to $\varphi \dot{\alpha} \rho^{3}+\sigma \alpha ́ \lambda o \varsigma=\Phi \alpha ́ \rho \sigma \alpha \lambda o \varsigma$, and with the name Pharsalos to be understood therefore as providing a clear description of the place itself, that is a harbour with an open roadstead marked by a Pharos, a large marker beacon and light. And it is evident therefore that the first lighthouse-pharos certainly did not originate as any $3^{\text {rd }} c$. B.C. Hellenistic invention, 'architecturally' or otherwise, as has been stated in this volume, p. 23, nor is it at all correct to state: "Chronologically speaking, the first mention of a lighthouse in the sources refers to the tower at Alexandria constructed in 280 BC on the island of Pharus in Egypt" p. 12.
Was it rather the case that the Greek word $\varphi$ ápos (pharos) which was employed by Homer, stems from the Egyptian P-ra or Ph-ra recorded in Egyptian hieroglyphics, meaning "the great house" related to the sun-Ra, hence pharaoh, in Greek $\varphi a \rho \alpha ́ \omega v$ (pharaōn), being taken into ancient Greek; $\varphi \alpha{ }^{\alpha} \omega$ in Greek means "I shine" ${ }^{4}$ from which $\varphi$ áo $\varsigma / \varphi \tilde{\omega} \varsigma$ derives; as likewise, $\varphi \alpha$ - forming the initial letters of the name, Phaethon ( $\Phi a \varepsilon \theta \omega v$ ), the son of Apollo-Helios; and which was also the name Homer gives of one of the horses that pull the sun, Phaethon ( $\Phi a \varepsilon ́ \theta \omega v$ ), the other being Lampos ( $\Lambda \alpha ́ \mu \pi o \varsigma<-\lambda \alpha ́ \mu \pi \omega$ "I give light, shine"; $\lambda \alpha \mu \pi \alpha ́ \varsigma ~ " b e a c o n-l i g h t ; ~ t o r c h " ~ "), ~ a s ~ a l s o ~ f o r ~ e x a m p l e ~ p h a n e r o s ~(~ \varphi a v \varepsilon \rho o ́ c ~ m e a n i n g ~ " s h i n i n g ; ~ m a n i-~$ fest" from $\varphi$ aív $\omega$ "I bring to light, cause to appear") and perhaps therefore, suggesting that the earlier pharos upon Pharos Island, off the Pharonic harbour city of Rhacotes founded c. 1500 B.C., the precursor of Alexander the Great's Alexandria, the port of Rhacotes being known to Homer and to others - was it rather perhaps this presumably large Pharonic structure that stood upon Pharos Island, and which gave to the island its name, this Фápos marker on the Pharos Island, which was the source of the Greek word employed for a large lighthouse marker - this original Фá $\rho o \varsigma$ being a noteworthy and most considerable Pharonic structure, dating perhaps to before 1400 B.C., and quite possibly being a very tall marker, perhaps obelisk-like, with a light and sunlight reflectors on its summit?
The derivation of pharos from the Pharos Island is given in Philoxenus Grammaticus, as being from the root: Pha-w, probably of Egyptian derivation and meaning, to shine, like nara meaning to shine in Arabic, hence manār/a for beacon/lighthouse. Well, there is regrettably neither any suggestion nor any investigation made into these matters in this work aspiring to be the "most definitive and complete corpus," which it remains.
Nor can this corpus be said, as the publishers have stated it to be: "a systematic exploration of the subject, its results arranged in such a way as to demonstrate the earliest form of these structures and their evolution in time.", as Homer, Euripides and others such as Pseudo-Scylax's use of the word pharos for a number of places in the Mediterranean seems to be unknown to the author; as also that the word

[^0]Фápov itself has particular associations with Pharonic Egypt and with the word Pharaoh, and thereby implying a considerable difference in scale for a Pharos, from the more usual structure termed $\pi \cup \rho \pi о \lambda \eta \dot{\mu} \tau \tau \alpha$, a marker beacon. A difference in scale which was then continued by its subsequent Hellenistic $4^{\text {rd }}$ c. B.C. or earlier Pharonic replacement, as is indicated by Arrian who recorded a subsequent replacement of the original Pharonic marker as, the tower on Pharos island, in his Anabasis, when Alexander ordered the construction of a heroon to the deceased Hephaistion in 324 on the Pharos island, "where the tower is situated". "For the letter (from Alexander) commanded Cleomenes to prepare heroon for the hero Hephaestion in Egyptian Alexandria, one in the city itself and another on the island of Pharos, where the tower is situated." ${ }^{"}$ Arrian's record of the text of Alexander's letter clearly indicating there was already a tower standing on the Pharos Island when Hephaistion died, decades before construction of the $3^{\text {rd }} \mathrm{c}$. Hellenistic lighthouse, its replacement, was begun, and therefore Alexander was clearly referring in his letter to an earlier Pharonic tower, a Pharos structure on the Pharos Island, which he termed a tower. ${ }^{7}$ This was certainly not the original Pharos, given the passage of perhaps a millennium between the construction of the first Pharos and the tower which was standing there in the $4^{\text {th }}$ century B.C. in a region of considerable recorded seismic activity, but the island of Pharos was already known for its marker tower at this time, with the phrase: "where the tower is situated" indicating that at this time in the $4^{\text {th }}$ c. B.C. there was a considerable, a noteworthy and memorable tower structure, which both marked and defined this island for Alexander, as for others.
In respect to the $3^{\text {rd }} \mathrm{c}$. Hellenistic Pharonic Alexandrian Pharos, rather than its pre-Homeric and later Pharonic replacements constructed on the Pharos island, in this book the height of the $3^{\text {rd }}$ c. B.C. Hellenistic replacement structure has been revised, and has been downsized from a height of $130-160 \mathrm{~m}$. to $100-110 \mathrm{~m}$. p. 62 , which seems somewhat odd, in fact, quite the reverse of what one might have expected on the basis of the sources available. Odd, because after the complete loss of the uppermost section of the three stage antique Pharos, as also of its lantern and statue, it was during the $12^{\text {th }} \mathrm{c}$. that the famous geographer Al-Idrisi ( $1100-66$ ) records it as at that time having a height of -166 m. ; at the start of the $13^{\text {th }}$ c. it is in fact recorded by 'Abd al-Latif al-Baghdadi as standing to a height of 233 cubits, $-466 \mathrm{ft} .=-142 \mathrm{~m}$., with a 10 cubit $\sim 6 \mathrm{~m}$. high masjid-mosque, built by the Fatimids, standing on top of the remaining two stages of this antique structure, giving it a total height of $\sim 148 \mathrm{~m}$., clearly indicating the original height for the Hellenistic Pharos was in all probability well in excess of 150 m ., 150 m . being its approximate height in the $13^{\text {th }} \mathrm{c}$., after the collapse first of the lantern section and then later of most of the cylindrical shaft, first in the earthquake of $796-7$, after which the upper section was restored by Ahmad ibn Tulun, the Abbasid governor of Egypt (868-884) and this restored upper cylindrical part was then destroyed by the earthquake of $955-6$, leaving intact only the lower two, the square and octagonal sections, rather than the lesser height of 100-110 m. being the total height for the complete Hellenistic Pharos which is stated as the revised height for the $3^{\text {rd }}$ c. B.C. Hellenistic Pharos in this volume. Later Abu'l-Feda by 1321, following the 1303 earthquake, indicated the Pharos, then consisting only of its lowest square in section part, remained a building 8 stories high, and

[^1]each of these 8 stories constructed of Hellenistic stone blocks would certainly have been of some considerable height.
There is simply no possibility that the antique statue was removed from the Pharos in the $13^{\text {th }} \mathrm{c}$., as is stated by B. Giardina, p. 63, "It (the antique statue) was then finally removed in the thirteenth century." This is because the lantern top of the Pharos fell in the $8^{\text {th }} \mathrm{c}$. with the statue standing on top of it therefore lost at this date or earlier. And also because it would mean that Ahmad b. Tulun replaced this antique statue on top of his own restoration when it was completed, and there is no record of this most singular event, and then, when the Fatimid masjid-mosque, built on top of the remains of the cylindrical section was constructed after the earthquake of 955-6, it would certainly not have been surmounted by the suggested antique bronze statue of Helios, returned to its former location by the Fatimids, as statues of human figures on top of the domes of mosques, as distinct from surmounting the domes of other structures, are absolutely unknown, and there is no evidence to support this statement presented by either Naser-e Khosraw in the $11^{\text {th }}$ c., nor by the subsequent depictions of the Pharos in Venice as elsewhere, nor by B. Giardina in the $21^{\text {st }} c$., to show that this was in fact the case.
Likewise, p. 61, where it is stated: "In the summer of 1303, a violent earthquake caused the lighthouse to collapse. The Mamluke sultan Qaitbey decided at this time to build his fortress on this spot, the structure embracing what was left of the tower." Ditto p. 62. However, the lowest square in section part of the Pharos remained standing after the 1303 earthquake, it did not collapse in 1303, as it remained enterable and was recorded as such by Ibn Battutah, as also by Abu'l Feda, and so presumably carried a light until 1341, marking for mariners the functioning major international Mamluke port of Alexandria. While the Mamluke Sultan Qaitbey in fact ruled from 1477-80, that is in the $15^{\text {th }}$ century, so he did not decide anything 'at this time' in the summer of 1303 , that is at the start of the $14^{\text {th }}$ rather than towards the end of the $15^{\text {th }}$ century, while the record of the construction of the replacement for the Hellenistic Pharos by Sultan Al-Malik al-Nasir by 1349 is quoted from Ibn Battutah by B. Giardina, p. 62; but, bizarrely the possibility is also stated in fn. 316, that the original Pharos, which the eyewitness Ibn Battutah records in 1347, subsequent to the 1341 earthquake, as being 'entirely ruined,' and thereby causing the start of the construction of the replacement of the Hellenistic Pharos by Sultan Al-Malik al-Nasir, had instead, in the author's opinion, possibly remained of a sufficient height to have served nearly 150 years later, in the later $15^{\text {th }} \mathrm{c}$. as the minaret of the new fort constructed by the Mamluke Sultan Qaitbey, suggesting that the antique Pharos retained a substantial height in 1477. This assertion remains quite unsupported by any factual evidence, and is seemingly contradicted by the report that relates Sultan Al-Malik al-Nasir, began the construction of the new replacement lighthouse before 1347 due to the Pharos' ruined state more than a century earlier, and the contemporary record that the base of the Hellenistic Pharos in 1347 was so dangerous as to preclude physical entry, the structure being recorded by Ibn Battutah as being 'entirely ruined'. One of the reasons why the Mamluke replacement pharos was not completed in the $14^{\text {th }}$ c. was that Alexandria was sacked by the Latin Crusader fleet of Peter I of Lusignan Cyprus, with assistance from the fleet of the Knights of St. John of Jerusalem on Rhodes, the Venetians, the Genovese and the French, on October the $10^{\text {th }}$ 1365, and the city was during its brief 7 day occupation largely destroyed by fire, 30 years later in 1395 it was reported by the notary Nicholas of Martoni that one eighth of the city of Alexandria still remained burnt out from the 1365 sack, ${ }^{8}$ and, following this Crusader horror there seems to have been little Mamluke interest in rebuilding the Pharos, as distinct from having a smaller port marker light and tower. However, although not suggested in this corpus, it may have been the case that Sultan AlMalik al-Nasir's uncompleted $14^{\text {th }}$ c. replacement pharos formed the base of Sultan Qaitbey's mânarminare in his fort, marking the harbour entrance, like the later Ottoman mânar-minare constructed on top of the fortification-tower of the St. Nicholas Tower at the entrance to Rhodes harbour, although

[^2]conclusive evidence for the reuse of Sultan Al-Malik al-Nasir's incomplete replacement as the base for the mânar-minare inside Sultan Qaitbey's fort seems to be lacking today. It is however related that in 1472 Sultan Qaitbay caused a new lighthouse to be constructed near the old one, which communicated with the city by means of a dyke, and it was provided with a masjid, a mill, and a bake-house and also a platform from which strange vessels could be seen at the distance of a day's sail, so that time was afforded for preparing the guns with which the tower was supplied, to resist their approach. So it may be that Al-Malik al-Nasir's uncompleted replacement pharos was incorporated into the new tower equipped with cannon in 1472 . There is no evidence to suggest the structural remains of the $3^{\text {rd }}$ c. B.C. Hellenistic Pharos, as distinct from the reuse of masonry from this fallen edifice, was incorporated into Sultan Qaitbey's fort.
This lighthouse corpus makes no mention of the Patara anti-pharos documented by inscription,' and the importance to navigation of the twin lights at different heights, pharos and anti-pharos marking the physical entrance to a harbour at night seems to be little emphasised in this book. The date of the Patara Roman pharos's probable collapse in the earthquake and tsunami of 1609 , as it is recorded as still standing to a considerable height in the $16^{\text {th }}$ c., serving as a navigational marker on Piri Reis's charts of this coastline, giving a life of 1500 years for this Roman pharos serving as an aid to navigation, ${ }^{10}$ is not noted; nor is it noted that with ships of the Alexandrian grain fleet at times overwintering in Malta, that in all probability the entrance to Grand Harbour was marked by a lighthouse, as was later the case with the beacon tower constructed at the entrance in the Middle Ages, followed by the construction by the Knights of St. John of Jerusalem on Malta in the late $16^{\mathrm{h}}$ c. of the Valletta lighthouse by Fort St. Elmo. ${ }^{11}$
In a work addressing Lighthouses from Antiquity into the Middle Ages, it is intensely irritating read on p . 45, "Known through literary sources, images and archaeological evidence, the number of Medieval lighthouses is too great to allow for a complete list here." If this book was instead entitled Lighthouses of Antiquity, rather than, Lighthouses from Antiquity into the Middle Ages, one would find acceptable the absence from this corpus of catalogue entries of the numerous recorded Early, Middle and Late Medieval lighthouses. As it is, the entire Islamic coastal/harbour lighthouse-marker towers/ribat system of manāra-mânar-minare, including that which was constructed by order of the Umayyad governor of Iraq al-Hajjaj, to mark for ships the navigable channel opened through the newly drained marshes and which was called the Manāra Hassan on the Hwar al-Muhammadiya constructed before 714; that lighthouse constructed by order of the Umayyad governor of Iraq, Khalid b. 'Abdallah al-Qasri for the Caliph Hisham (724743 ) and which is recorded in the following verses by the poet Jarir (d. 728-9), at a time when the Pharos of Alexandria was still standing to almost its full height and was functioning as a lighthouse at night as well as serving as a marker for the port by day, as was related by Bishop Arculf in c. $700^{12}$ :

Banayta 'I-manāra 'I-mustanīra 'alā 'I-hudā fa-asbahta nūran daw'uhu ghairu khāmidi banayta binā’an lam yara 'I-nāsu mithlahu yakādu yuwāzī sūruhu bi 'I-farāqidi

You built the illuminated manār to guide
So you became a light whose shine is not subsiding;
You built a building the likes of which none had ever seen Its walls almost attain the level of Ursa Minor. ${ }^{13}$

[^3]As also those constructed in the $8^{\text {th }}$ c. in Syria/Palestine, and along the north African coastline and which remain today at Monastir of 796 and the ribat marker-lighthouse tower at the port of Sousse of 821, confirming its function as a lighthouse is its inscription referring to a safe harbour; ${ }^{14}$ as likewise those in Andalusia and Sicily; that constructed early in the $9^{\text {th }}$ c. at Siraf on the Gulf coast of Iran that marked both the location of the Great Mosque of the city as also the location of this major coastal port to mariners, ${ }^{15}$ serving the same purposes, if not of the same height, as the later Huaisheng Light Tower minaret in Canton and the later campanile of St. Mark's Basilica in Venice, also serving this same dual purpose. All these are missing from the introductory chapter on Medieval lighthouses and from the corpus, the catalogue. This lacunae seems to this reviewer to be a marked dis-service to any reader who is even remotely interested in the continuity of use/reuse, influence and function of the antique and the clearly related Islamic Middle Age lighthouse/marker type structures constructed in the post $7^{\text {th }}$ c. period, and which, in consequence of this omission, leaves the introductory chapter most misleadingly entitled, "The first medieval lighthouses: Genua, Portus Pisanus, Coruan", suspended over a considerable period and most considerable body of material which is largely unaddressed in this work and unmentioned in the catalogue and so returns the reader to the old Eurocentric myth of the Dark Ages; while the $13^{\text {th }}$ c. lighthouse at Brindisi, which was personally designed by King Charles of Anjou (12271285); ${ }^{16}$ as also the re-dated (formerly early $8^{\text {th }}$ c. Tang Dynasty period, now probably to be associated with the 1350 reconstruction of the mosque ${ }^{17}$ Huaisheng Light Tower minaret of the Guangta Mosque (Light Tower Mosque) in Canton, China, standing 46 m . high, constructed of stone and brick, with a twin spiral internal staircase and which marked and still marks the location of both the congregational mosque and the Muslim settlement in Canton for shipping coming up the Zhujiang River, and which remained the tallest building in the city of Canton well into the $20^{\text {th }} \mathrm{c}$. are unmentioned.
The $13^{\text {th }}$ c. documented Latin Medieval lighthouses of Sicily are unmentioned, however, in addition to the earlier Muslim coastal ribat observation, marker and signalling towers constructed on the model of Sousse, which were a notable feature of coastal architecture, not only along the Syrian, Andalusian and north African coastline, but also constructed at a slightly later date along the northern Sicilian coast, built to mark territory by day and night and employed to warn the capital Palermo of East Roman attacks launched from southern Italy, ${ }^{18}$ these subsequent Latin Sicilian lighthouses may well have provided a transition point for lighthouse design from the Islamic world to Italy via Emperor Frederick II Hohenstaufen, and so to the design of the Medieval lighthouse of Genoa, given the Genovese maritime contacts with Sicily, as also with North Africa; as earlier seems also to have been the case for the form of the Italian campanile, which otherwise suddenly appears in the $9^{\text {th }}$ c. complete, but which are without precedent in Latin Christian architecture, the precedent for the form, not for the function, of these campanile being the marker tower, as likewise a marker for a mosque, termed a minaret, but initially employed as a marker and as a reminder of the location of a city's one congregational mosque, not constructed in this period as the place to give the call to prayer, which was given from the roof or by the door of the mosque, and therefore initially built to serve a rather different function from a campanile/bell tower.
Likewise this corpus gives no indication of the in situ remains of the $13^{\text {th }}$ c. mânar, lighthouse-marker tower, Tore de Stalimure-Pyrgos H. Nikolau-Tower of St. Nicholas, at Taşdibi, marking the harbour

[^4]of the Medieval pilgrimage port of Myra, Antalya, Turkey for Christian pilgrims; ${ }^{19}$ nor of the $13^{\text {th }} \mathrm{c}$. Rum Seljuk reuse of the Roman pharos at Patara; nor of those examples recorded for example on Haji Abu'l-Hassan's Europe-Mediterranean-North Africa portulan of 1560 , based upon a $15^{\text {th }}$ c. Catalan portulan, Topkapi Saray Istanbul, TSM H-1822, standing as a guide to mariners undertaking Anatolian coastal navigation in the $16^{\text {th }}$ c., and probably including a depiction of the Hıdırlk Roman mausoleum/harbour marker, still then serving as a noteworthy cliff-top marker for the port of Antalya. Likewise the Lighthouse in the Garden, that is the Pharos-Fener of Fenerbahçe, Istanbul, has remained on the same spot probably from when the first lighthouse was erected there, of early East Roman, if not of Roman date, and which was mentioned in the $15^{\text {th }}$ c. by Gioran-Maria Angiolelle, ${ }^{20}$ before it was replaced by another lighthouse in this same location important for maritime navigation, constructed by the Sultan-Caliph Süleyman Kanuni, the firman for its construction survives dated, recep $969=$ March 1562 and construction was complete by 1570, "A turret of stone 120 steps high having a great glass lanthorne (lantern) in the top, four yards in diameter and three in height, with a great copper pan in the midst to hold oil, with twenty lights (wicks) in it." ${ }^{" 21}$, and it, in turn was replaced in 1720-1 and yet again in 1837-8 in precisely this same place; among other significant omissions of Antique and Medieval lighthouses from this corpus.
But then what does one expect to find in a book entitled Navigare necesse est, but which has a chapter entitled: The first medieval lighthouses: Genua, Portus Pisanus, Coruan, as though nocturnal navigation and therefore the need for lighthouses and marker lights had entirely ceased throughout the Mediterranean at the end of Antiquity, with the exception of Emperor Charlemagne's restoration of that at Gesoriacum in 810 , until the construction of the lighthouse at Genoa, a tower with light in the $12^{\text {th }} \mathrm{c}$. and a purpose built lighthouse, the Lanterna, in the $14^{\mathrm{h}} \mathrm{c}$. Is it not the case that long distance voyaging was undertaken including sailing at night from pre-Homeric times onwards? And has it not continued, if at times at a reduced rate, down to the present day? And is this work not entitled, Navigare necesse est? By 700 Bishop Arculf stated that the Pharos of Alexandria then in Muslim hands was, "a large tower, which is every night lighted up with torches, lest mariners might mistake their way in the dark,", ${ }^{22}$ presumably indicating by relating, "which is every night lighted up with torches," that sailing was practiced night and day all year round in the $8^{\mathrm{hb}} \mathrm{c}$. in the Eastern Mediterranean and thereby suggesting there was probably somewhat more maritime traffic, at least in the eastern Mediterranean, early in the $8^{\text {th }} \mathrm{c}$. than is usually credited, ${ }^{23}$ for the expense of torches to be lit each night on the Alexandrian Pharos to act as a marker for shipping; while in 726 Willibald completed his pilgrimage and after waiting many days for a ship to Constantinople, he left the Muslim port of Tyre on November the $30^{\text {th }}$ and was at sea all winter before reaching his destination a week before the Julian calendar's Easter, ${ }^{24}$ arriving about the $6^{\text {th }}$ of April 727. It can be understood that the use of lighthouses and their construction and restoration as with the Alexandrian Pharos, continued as required throughout this period between the end of antiqui-

[^5]${ }^{24}$ J. Wilkinson, Jerusalem Pilgrims before the Crusades, Warminster 2002, 248.
ty and the $14^{\text {th }} \mathrm{c}$., even if the record of this no longer survives, given the necessity of these markers for nocturnal navigation.

## Conclusions

Having spent the sum of $£ 56$ from my own pocket in ordering this volume in 2010 , and then waiting some months, due to the delay in publication/distribution, to find an unedited, largely un-indexed volume, a volume that fails to record and investigate either the etymology of, or the initial use of the word pharos by Homer, by Euripides, and by others; as also any account of the construction of lighthouses by the Sasanians; ${ }^{25}$ a volume that is also missing considerable numbers of recorded Early, Middle and Late Medieval Mediterranean lighthouses, constructed by Latins, East Romans and Muslims, and which, although a corpus presenting us with a catalogue of lighthouses extending to the Straits of Dover and the North Sea to the Black Sea, is also missing important Medieval examples recorded in the Baltic and the Gulf, as for example those marking for centuries the Tigris estuary and 'Abbâdân, and those constructed further afield; it is sad to say that with so much that that is missing from both the introductory section and from the catalogue of this corpus, that this book unfortunately was a somewhat disappointing purchase, although the Etruscan harbour sanctuary marker examples are recorded.
If the publishers British Archaeological Reports (BAR) had bothered to employ an editor, and if they had omitted from their advertisement for this volume the sentence, "With this book, the author has given us a systematic exploration of the subject, its results arranged in such a way as to demonstrate the earliest form of these structures and their evolution in time.", I would probably still have bought it, and I would not have regretted its purchase quite as much as I do. The publishers seem to have forgotten that an editor's job is to prevent a work in this uncorrected and apparently unedited, index-less condition from being published, and so preventing the good name of an academic publishing house from becoming tarnished; although regrettably today the number of publications on a publishers list, the quantity rather than the quality of each published volume, seems to be of greater importance in the eyes of some publishers, than the task of providing the reader, as distinct from the electronic scanner, with an edited and properly indexed scholarly work, that is a work that one can refer to, a work of reference. While a title accurately reflecting the actual contents of a volume can also be of some considerable assistance to any prospective purchaser.

## T. Michael P. Duggan*, Antalya

Note: This review was written for the Festschrift in preparation in 2013 for Prof. Dr. Sencer Şahin, prior to his death in 2014. In the manner of its writing I hope it reflects some of the invaluable and most necessary criticism that Prof. Şahin contributed to the academy. This review unfortunately found no place in the memorial volume, but it was written for it.

[^6]
[^0]:    ${ }^{1}$ Steph. Byz. Ethnika 660, records the initial name of the city as: Пıtv́ovod (Pityousa), possibly relating to the pine
     structed by Herod at Caesarea was called Фáoŋŋ入os (Phaselos or Phasaelus) after the name of his brother, Ioseph, Ant. Iud. 16.142.
    ${ }^{2}$ See in the Lexicon of Liddle and Scott, s.v. بápos and $\sigma \dot{\lambda} \lambda o c$. As for example is recorded in the navigational instructions under 'Tekrova (ant. Pharselis)', in J. Purdy, The new sailing directory for the Mediterranean Sea, The Adriatic Sea, or, Gulf of Venice, The Archipelago and Levant, The Sea of Marmara and the Black Sea, R. H. Laurie, London, 1826, 302, "There is clean anchorage in the offing.".
    ${ }^{3}$ Ф́́p, tó, occurs in the Apocalypse as a form of بápoৎ, (pharos) Hadrian Grammaticus I. 394. My thanks to Assoc. Prof. M. Alkan for his assistance in this matter. See also in the Lexicon of Liddle and Scott, s.v. بáp.
    ${ }^{4}$ See in the Lexicon of Liddle and Scott, s.v. ب $\dot{\alpha} \omega$.
    ${ }^{5}$ See in the Lexicon of Liddle and Scott, s.v. $\lambda \dot{\alpha} \mu \pi \omega$ and $\lambda \alpha \mu \pi \alpha \dot{\alpha}$.

[^1]:    ${ }^{6}$ Arr. anab. VII. 23. 7: It is noteworthy that in the translation by A. De Selincourt and revised by J. R. Hamilton, Arrian, The Campaigns of Alexander, Penguin, London, 1971, 389, reads: "The letter contained instructions for the erection of a shrine in Hephaestion's honour in the city of Alexandria, and another on the island of Pharos, where the lighthouse is, both to be of great size and built regardless of expense". The translators understanding of the word tower to mean in this context lighthouse, as later, for example, "In between is a lighthouse that is called the tower "of Messina". The lighthouse on Cape Pelorus mentioned in, Petrarch, Itinerarium, 12.1-12.2 being known as the tower of Messina.
    ${ }^{7}$ Contra, Giardina 2010, 34, who states: "although of course, it had not yet been built at the time of which he is speaking". The possibility that there might have been an earlier marker/lighthouse in the same place is unfortunately not seriously considered by Giardina.

[^2]:    ${ }^{8}$ N. Daniel, The Arabs and Medieval Europe, London - New York 1979, 312.

[^3]:    ${ }^{9}$ H. İşkan-Işık - W. Eck - H. Engelmann, Der leuchtturm von Patara und Sex. Marcius Priscus als statthalter Der Provinz Lycia von Nero bis Vespasian, ZPE 164, 109 with fn. 10. For notice of two Roman 1st c. B.C / $1^{\text {st }}$ c. A.D. marker beacons at Anemorium, see T. M. P. Duggan - A. Akçay, On The Missing Navigational Markers - Beacon Towers-Pharos of Antiquity - and Notice of Two Extant Small Marker Beacon Towers of Roman Late I ${ }^{\text {st }}$ c. B.C. Early Ist c. A.D. Anemorium, Cedrus II, 2014, 421-433.
    ${ }^{10}$ T. M. P. Duggan, The Lycian port of Patara and its environs during the $13^{\text {th }}$ and $14^{\text {th }}$ centuries - an interpretation, Gephyra 7, 2010, 52 and Fig. 9, 10.
    ${ }^{11}$ As recorded on the map of Valletta engraved c. 1601 by Francesco Villamena.
    ${ }^{12}$ T. Wright, Travellers in Palestine (1848), New York 2003, 10.
    ${ }^{13}$ Translation in, J. M. Bloom, The Minaret, Edinburgh 2013, 47.

[^4]:    ${ }^{14}$ Ibid. 120 and fn. 21.
    ${ }^{15}$ Ibid. 72-73.
    ${ }^{16}$ S. Runciman, The Sicilian Vespers, London 1960, 145.
    ${ }^{17}$ Bloom op. cit. (fn. 13), 290-292, fn. 32, 33.
    ${ }^{18}$ Citing Ibn Hawkal, e.g. M. Amari, Description de Palerme à la moitié de l'ère vulgaire, par Ebn Haucal, Journal Asiatique IV/4, 1845, 96; A. Metcalfe, The Muslims of Medieval Italy, Edinburgh 2009, 61.

[^5]:    ${ }^{19}$ T. M. P. Duggan - A. Aygün, Myra’nın Ortaçağ ve Sonrasındaki Limanı "Taşdibi-Stamira", in: Ed. N. Çevik, Arkeolojisinden Doğasına Myra/Demre ve Çevresi, Antalya 2010, 163.
    ${ }^{20}$ S. Yerasimos, Les Voyageurs Dans L'Empire Ottoman (XIV ${ }^{e}-\mathrm{XVI}^{e}$ ) Bibliographie, Itinéraires et Inventaire des Lieux Habites, Ankara 1991, 115.
    ${ }^{21}$ D. Alan Stevenson, The World's Lighthouses from Ancient Times to 1820, New York 2002, 19. (reprint; 1959 OUP)
    ${ }^{22}$ Wright op. cit. (fn. 12), 10.
    ${ }^{23}$ E.g. "...there was far less movement (of shipping) in the eight century than in the ninth, and this does not seem to be simply the result of the disappearance of written sources from the eighth century, since the evidence of shipwrecks is also less rich during that time." D. Abulafia, The Great Sea: A Human History of the Mediterranean, London 2012, 256.

[^6]:    ${ }^{25}$ B. Finister - J. Schmidt, Sasanidische und frühislamische Ruinen im Iraq, Baghdader Mitteilungen, Berlin 1976, 25-6.

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