



«Κύρτου πλέγματα»
Δίκτυα οικονομίας, εξουσίας και γνώσης στον ελληνικό χώρο από τους προϊστορικούς χρόνους έως τη σύγχρονη εποχή: αναλυτική τεκμηρίωση – ερμηνευτική χαρτογράφηση – συνθετικές προσεγγίσεις
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ΕΝΟΤΗΤΑ ΕΡΓΑΣΙΑΣ 1

Δίκτυα χερσαίων και θαλάσσιων δρόμων

«Παραδοτέο 1.2: Επιστημονικά δημοσιεύματα»

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Horizontal or diagonal: Latent axes and communication points in the Adriatic and Ionian seas during the sixth century

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Με τη συγχρηματοδότηση της Ελλάδας και της Ευρωπαϊκής Ένωσης - Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης (ΕΤΠΑ), στο πλαίσιο του Ε.Π. Ανταγωνιστικότητα και Επιχειρηματικότητα (ΕΠΑΝ ΙΙ) και των Π.Ε.Π. Αττικής, Π.Ε.Π. Μακεδονίας - Θράκης

Η Πράξη ΚΡΗΠΙΣ 447995 με τίτλο «Κύρτου πλέγματα. Δίκτυα οικονομίας, εξουσίας και γνώσης στον ελληνικό χώρο από τους προϊστορικούς χρόνους έως τη σύγχρονη εποχή: αναλυτική τεκμηρίωση — ερμηνευτική χαρτογράφηση — συνθετικές προσεγγίσεις» υλοποιείται στο πλαίσιο της Δράσης «Αναπτυξιακές προτάσεις Ερευνητικών Φορέων-Κρητίς», που χρηματοδοτείται από το Επιχειρησιακό Πρόγραμμα «Ανταγωνιστικότητα και Επιχειρηματικότητα» (ΕΠΑΝ-ΙΙ), Άξονα Προτεραιότητας (Α.Π.) 1 «Δημιουργία και Αξιοποίηση της Καινοτομίας Υποστηριζόμενη από Έρευνα και Τεχνολογική Ανάπτυξη» και από τα Περιφερειακά Επιχειρησιακά Προγράμματα (ΠΕΠ) στις 3 Περιφέρειες μεταβατικής στήριξης του Εθνικού Στρατηγικού Πλαισίου Αναφοράς (ΕΣΠΑ) 2007 – 2013. Η Δημόσια Δαπάνη συγχρηματοδοτείται από το Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης (ΕΤΠΑ) της Ευρωπαϊκής Ένωσης και από Εθνικούς Πόρους.

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Horizontal or diagonal: Latent axes and communication points in the Adriatic and Ionian seas during the sixth century*

A. The formation of the two axes of communication

The network formed by the local, regional and interregional lines of communication in the micro-region of the Ionian Islands and the Adriatic Sea was developing by the sixth century, along sea lanes known since antiquity. The main shipping routes of this intermediate space between the two parts of the Mediterranean, extending across the maritime region that lies between the Adriatic and Ionian seas, were basically structured on two main axes: one horizontal and one diagonal; the horizontal route was used for reaching the more distant regions in the West, while the diagonal one was meant to facilitate naval communications between the opposite coastlines of Illyricum and Italy. The shipping lines crossing the Ionian Sea united horizontally the most distant regions of the Western Mediterranean and were consistently used for further campaigns in southern Italy and Sicily. At the same time, it seems that the diagonal axis that connected the opposite coastlines was intensively used by both Byzantium and the Ostrogoths, the sixth-century rivals par excellence, who were claiming suzerainty over the Italian Peninsula. The diagonal axis that used the Dalmatian coast, invariably the city of Salona, as its point of departure, ended in Ancona or on the north shores of the Italian peninsula, and was meant to defend Ravenna, the most important center of Byzantine rule in North Italy.

The study of movements, to which the sources refer mainly in connection to acts of belligerence, has shown that different military strategies and goals – aiming either at long-distance expeditions for the reconquest of North Africa or at nearer destinations for the defence of the Italian peninsula – sometimes acquired a complementary character, serving indistinctly the objectives for control by Constantinople of the Byzantine Empire's western possessions. The use of these routes for military purposes was intensified during the reign of

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Justinian I (527-565). Military campaigns during this period renewed the frequency of communications and exchanges¹. Troops and fleets were successively dispatched from the East either along the naval route from Constantinople to the Western Mediterranean, or initially via the overland ways, across the Helladic region to the shores of Illyricum and then north to the Adriatic Sea. Such communications and military movements did not alter or affect the cultural diversities and distinct features of the way of living, which had taken shape on either shore of the Adriatic and Ionian seas and were still persisting in the sixth century². Neither these different situations, however, nor the rivalries between Vandals, Ostrogoths and Byzantium managed to hinder transportation and movements along the aforementioned communication axes. Instead, the need for communication and exchanges invigorated financial and administrative transactions in towns or naval stations on the shores of the Adriatic, Illyria and further south on the Ionian Islands and the coastal areas of the Greek peninsula³. This reality was substantially amplified when communication and interchanges between the two opposite coasts were intensified through the continuous military campaigns of the Byzantines in Italy and the Western Mediterranean. It should also be emphasized that trade was evolving in the Mediterranean Sea during this period in a continuous manner, due to the undertakings supported by the central government and powerful Church authorities in Italy, Egypt (Alexandria) and Constantinople, mainly carried on in cities major cities, as far as Carthage, all of which still retained their prosperity⁴. Transportations over long distances were enhanced as witnessed by archaeological finds, although local exchange remained the main element of the era's transactions⁵. The constant resupply of campaigning armies was also a determining factor for the continuous movement of goods⁶.

1. For the value of the East-West maritime itinerary, see A. E. LAIOU, *Sea Routes, The Oxford Dictionary of Byzantium*, ed. A. P. KAZHDAN, New York and Oxford 1991, v. 3, 1860-1861; 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, esp. 58-59.

2. I. GOLDSTEIN, Byzantium on the Adriatic from 550 till 800, *Hortus Artium Medievalium* 4 (1998), 7-14.

3. V. VON FALKENHAUSEN, Réseaux routiers et ports dans l'Italie méridionale byzantine (VIe-XIe s.), in: *Πρακτικά του Α' Διεθνούς Συμποσίου: Ἡ Καθημερινή Ζωή στὸ Βυζάντιο*, ed. CHR. ANGELIDI, Athens 1989, 711-715; A. DUCCELLIER, L'Adriatique du IVe au XIIIe siècle, in: *Histoire de l'Adriatique*, ed. P. CABANES, Paris 2001, 113-118.

4. Eastern merchants were confined to jail in Carthage as Gelimer's prisoners, see *Procopii Caesariensis opera omnia*, I-II, De Bellis libri I-VIII, ed. J. HAURY and G. WIRTH, Lipsiae 1962, III 20, 5, v. 1, 397; D. PIERI, Marchands orientaux dans l'économie occidentale de l'Antiquité tardive, *Archéologie et Histoire romaine* 8 (2002), 7, <https://hal.archives-ouvertes.fr/halshs-00282237/document> submitted on 26 May 2008.

5. M. McCORMICK, *Origins of the European Economy. Communications and Commerce, A.D. 300-900*, Cambridge 2001, Map 2.3, 57; J. DURLIAT, Les conditions du commerce au VIe siècle, in: *The Sixth Century. Production, Distribution, and Demand*, ed. R. HODGES and W. BOWDEN, Leiden, Boston and Köln 1998, 89-118; S. KINGSLEY, Late Antique Trade in *Theory and Practice in Late Antique Archaeology*, ed. L. LAVAN and W. BOWDEN, Leiden and Boston 2003, 130-131,

Under these circumstances, the sixth-century expeditionary dynamics must have stimulated the revitalization of stationing and reallocation centers for the armies, without essentially improving the quality of life outside the major urban centers, the logistical infrastructures, or the fortified strongholds. Most vulnerable were the minor towns which suffered more from the conquest of Italy by the Goths and the Western Mediterranean by the Vandals and the Balkan provinces being without military support. These pressures did not allow for the restoration or improvement of infrastructures that had already begun to decline in the fifth century⁷. Nevertheless, the continuous efforts of Constantinople to control the centers of Byzantine authority in the Western Mediterranean, became a live issue and a priority in the reign of Justinian I. The task was performed by the missions of troops and naval forces sent from the faraway eastern provinces and which gathered at the shores of Illyricum (Peloponnese, Acarnania, Epirus, Dalmatia) before sailing westwards, offer the opportunity to outline an extremely dense network of exchanges, which revitalized naval routes and stations⁸.

B. Earlier infrastructures and new adaptations of the communication system

The maritime routes across the Ionian Islands operated as extensions of the *Via Egnatia*, the main overland axis connecting Dyrrachion with Constantinople⁹. Similar changes have been observed in the use of the

fig. 7; CHR. WICKHAM, *Framing the Early Middle Ages: Europe and the Mediterranean, 400–800*, Oxford and New York 2006, 696-697, 708-716; C. ABADIE-REYNAL, Les échanges interrégionaux de céramiques en Méditerranée orientale entre le IVe et le VIIIe s., in: *Handels Güter und Verkehrswege. Aspekte der Warenversorgung im östlichen Mittelmeerraum (4. bis 15. Jahrhundert)*, ed. E. KISLINGER, J. KODER and A. KÜLZER, Vienna 2010, 27-30.

6. For instance, Bologna belt buckles' distribution pattern is connected with the coastline, starting in northern Italy (Bologna and Trento) and following the line of Byzantine ports in the Balkans and the Crimea (Istria, Salona, Corinth, Athens, Constantinople, Chersonese), see J. JARIĆ, The Byzantine army in the Central Balkans between the fifth and the seventh centuries: A survey to military insignia, *Annual of medieval studies at Central European University Budapest* 16 (2010), 30-45.

7. F. MARAZZI, The destinies of the Late Antique Italies: politico-economic developments of the sixth century, in: *The Sixth Century*, 119-159, especially on 'territorial polarisation' see 152-153.

8. J. PREISER-KAPPELLER, Harbours and Maritime Networks as Complex Adaptive Systems – a Thematic Introduction, in: *Harbours and Maritime Networks as Complex Adaptive Systems. International Workshop*, ed. J. PREISER-KAPPELLER and F. DAIM, Römisch-Germanisches Zentralmuseum – Tagungen 23, Mainz 2015, 1-23.

9. A. AVRAMEA, Land and Sea Communications, Fourth–Fifteenth Centuries, in: *The Economic History of Byzantium*, ed. A. E. LAIOU, Washington, D.C. 2002, v. 1, 68-69; E. KISLINGER, Dyrrachion und die Küsten von Epirus und Dalmatien im frühen Mittelalter – Beobachtungen zur Entwicklung der byzantinischen Oberhoheit, *Millennium* 8 (2011), 313-314; G. VOLPE, G. DISANTAROSA, D. LEONE and M. TURCHIANO, Porti, approdi e itinerari dell'Albania meridionale dall'Antichità al Medioevo. Il 'Progetto Liburna', in: *Ricerche Archeologiche in Albania, Atti* (Cavallino-Lecce 29-30/4/2011), ed. G. TAGLIAMONTE, Ariccia 2014, 287-405.

Adriatic coast road created after the final Augustan conquest of *Illyricum* in AD 9¹⁰. The maritime network of the Ionian Islands acquired a more important place within the framework of the sea lanes of communication between Italy and the Western Mediterranean, when overland routes became almost impassable, following the expansion of Gothic attacks in Illyricum. Southern routes along the Ionian Islands were more regularly used from that time onwards, also because of the material and administrative deterioration of the communication system based on pre-existing urban infrastructures along the course of the *Via Egnatia*. Crossing the Ionian Sea was an alternative route towards the ports not only in Southern Italy but also in the North that became later used more intensively because of the difficulties caused in the Balkan Peninsula by the descent of the Slavic tribes; their incursions were met and directly repulsed only in the Northern provinces and the outskirts of Constantinople¹¹. Sea communications, despite the *thalassophobia* ("fear of the high seas"), became more regular from then on, owing also to their lower cost when compared with that of overland travel, imposed by the economic pressures of the period¹².

The Ionian Islands had always been regular stopping places for those sailing along the horizontal axis between the Western and Eastern Mediterranean, as indicated in geographical treatises of administrative character used as travelling manuals. In the *Itinerarium provinciarum Antonini Augusti* (c. 300) the Ionian Islands were marked as stations between the Dalmatian coast and Adriatic Sea (*Paxos, Propaxos, Asteris Itaca, Oxia, Cassiope*) and more to the south as a branch that departed *in mare quod Traciam et Cretam interluit* (Strophades, Zakyntos, Cephalonia, Ithaki). This maritime itinerary, which registered stations and calculated distances across the empire, was based on official government records; it even provides the intervals between ports of the Dalmatian shoreline and coastal cities of Italy, thus revealing an elaborate communication network in the region. Furthermore, the crossing of the Ionian Islands constituted part of a global route from Gaul to India and Ceylon that is depicted in the cartographic parchment of the *Tabula Peutingeriana* (originally from the fourth century, but copied again in the thirteenth). Stations in Cassiope (Corfu), Paxoi, Zakyntos,

10. J. WILKES, The archaeology of war. Homeland security in the South-West Balkans (3rd–6th c. A.D.), in: *War and warfare in Late Antiquity. Current perspectives*, ed. A. SARANTIS and N. CHRISTIE, Leiden and Boston 2013, 735-757, esp. 740.

11. FL. CURTA, *The Making of the Slavs. History and archaeology of the Lower Danube Region c. 500-700*, Cambridge 2001, 84-94.

12. S. COSENTINO, Mentality, Technology and Commerce: Shipping amongst the Mediterranean Islands in Late Antiquity and Beyond, in: *The Insular System of the Early Byzantine Mediterranean. Archaeology and History*, ed. D. MICHAELIDES, PH. PERGOLA and E. ZANINI, BAR International Series 2523, Oxford 2013, 65-76, esp. 65-67, 73; A. A. BANDOW, The late antique economy: approaches, methods and conceptual issues, in: *Local Economies? Production and Exchange of Inland Regions in Late Antiquity*, ed. L. LAVAN, Leiden 2015, 24-26.

Cephalonia and Ithaki were likewise marked in the *Anonymi Cosmographia* (seventh century)¹³.

These lines of communication represent the image of the already well-established and standard maritime routes in the Early Byzantine period, which likewise corresponded to the routes followed by Byzantine fleets during the sixth century; these fleets were dispatched from the Eastern Mediterranean with the intention of restoring the authority of Constantinople in territories and strongholds in Italy, North Africa and Spain¹⁴. According to descriptions of these naval expeditions, local ports and places of anchorage in the Ionian Islands and across the shorelines of the Peloponnese, Acarnania and Epirus and further north in Dalmatia, functioned as necessary stopping points before sailing across the open sea. Information on port facilities from archaeology is indicative, but insufficient and fragmented. However, there are some reports, combining written sources and whatever archaeological data exists, which confirm the regular sixth-century use of harbors or anchoring places already in existence since antiquity¹⁵.

13. *Itineraria Romana. Itineraria Antonini Augusti et Burdigalense*, ed. O. CUNTZ and G. WIRTH, Stuttgart 1990, v. 1, 78-79, 83-84; *Ravennatis Anonymi Cosmographia*, in *Itineraria Romana, Volumen Alterum, Ravennatis Anonymi cosmographia et Guidonis geographica*, ed. J. SCHNETZ – M. ZUMSCHLINGE, Stuttgart 1990, v. 2, 100. See CHR. ANGELIDI, Εμπορικοί και αγιολογικοί δρόμοι (4ος-7ος αι.). Οι μεταμορφώσεις της ταξιδιωτικής αφήγησης, in: *Πρακτικά του Α΄ Διεθνούς Συμποσίου: Η Καθημερινή Ζωή στο Βυζάντιο*, 675-685; M. PAZARLI, «Mediterranean islands in Tabula Peutingeriana», *e-Perimetron* 4 (2009), 104-105; E. SAVAGE-SMITH, Maps and Trade, in: *Byzantine Trade (4th-12th centuries). The Archaeology of Local, Regional and International Exchange*. Papers of the thirty-eighth Spring Symposium of Byzantine Studies, St John's College, University of Oxford, March 2004, ed. M. MUNDELL MANGO, Farnham 2009, 16-17.

14. M. LEONTSINI, Οι βυζαντινοί στόλοι στα νερά του Ιονίου πελάγους, 6ος-12ος αιώνας, *Ι΄ Διεθνές Πανιώνιο Συνέδριο, Κέρκυρα, 30 Απριλίου – 4 Μαΐου 2014, Τα Πρακτικά. Ι. Ιστορία ενόπλιες Α΄ και Β΄*, ed. TH. PYLARINOS and P. TZIVARA, Corfu 2015 [*Κερκυραϊκά Χρονικά*, περ. Β΄ 8 (2015)], 523-540.

15. A complete and still useful survey of ports on islands and coastal towns based mainly on written sources and archaeology is that of P. SOUSTAL and J. KODER, *Nikopolis und Kephallenia*, *Tabula Imperii Byzantini* 3, Vienna 1981, 47-50, 109 (Antipaxos), 112 (Arkudi islet), 117 (Asteris islet), 132-134 (Buthroton), 144 (Astakos/Drageameston), 148-149 (Echinades islets, Ereikoussa), 168-170 (Ithaki, Kalamos islet), 172 (Cassiope), 175-177 (Cephalonia, Kephalos), 191-192 (Lagopodon on Zakynthos), 195-196 (Lefkas), 203 (Mathraki), 212 (H. Nikolaos in Zakynthos), 213-215 (Nikopolis), 216-217 (Nydriion in Lefkas), 219-220 (Othonoi, Oxeia islets), 224-225 (Orikon/Panormos), 227-228 (Paxos), 233-234 (Phidokastro and Phiskardo in Cephalonia), 255-256 (Anchiasmos/Onchesmos/H. Saranta), 266 (Strophades), 272-273 (Trigardo), 278-280 (Zakynthos). For the western Peloponnese ports see I. ANAGNOSTAKIS, Παράκτιοι οικισμοί της πρωτοβυζαντινής Μεσσηνίας. Η σιωπή των πηγών και η αποσπασματική μαρτυρία της αρχαιολογίας, in: *Πρωτοβυζαντινή Μεσσηνή και Ολυμπία. Αστικός και αγροτικός χώρος στη Δυτική Πελοπόννησο*, ed. P. THEMELIS and V. KONTI, Athens 2002, 137-160. On Epirus and Acarnania see M. VEIKOU, *Byzantine Epirus. A Topography of Transformation: Settlements of the Seventh–Twelfth Centuries in Southern Epirus and Aetoloacarnania, Greece*, Leiden 2012, 31 (Nikopolis), 37 (Koulmos Lefkas), 103-104 (Kato Vassiliki in H. Triada Hill, Lefkas Koulmos castle, Phidokastro,

We assume, therefore, that it was essential to keep infrastructures and a well-supported supply system in good condition so as to serve the needs of the fleets crossing the Adriatic and Ionian high seas. Securing logistics was, to say the least, an unavoidable process for the successive naval campaigns launched during the reign of Justinian I (527-565). However, ruins of functional buildings used for the warehousing and protection of goods are not always easy to identify¹⁶. We are only briefly informed, at quite an early period, of the production capacity and infrastructure of the Ionian Islands' that served to provide supplies to passing ships on such expeditions. Zakynthos and Cephalonia were described as *insulae habentes omnia bona* in the early account of the *Expositio totius mundi et Gentium* (c. 350-360)¹⁷. The text, on the other hand, presents Dalmatia as a province with an abundance of cheese, and also timber and iron, all important items to sustain and support the army. The Dalmatian cities, which appeared to be well-connected with land routes and some of them were marked as departure points for ships sailing to the Italian coast in the *Itinerarium provinciarum Antonini*, as also in the *Anonymi Cosmographia*, are absent from the *Expositio*, which, nonetheless, remarkably refers to the destruction of Dyrrachion by earthquakes and mentions Salona (near Split, Dalmatia) as *civitatem splendidam*¹⁸.

Thus, it appears that as early as the fourth century important resources of the region were gradually concentrated at Salona. The process that enhanced the city's vigor should have benefited from favorable administrative measures that aimed at establishing a permanent supply station, which was mainly exploiting the wealth of the region¹⁹. This becomes clear when Salona was established as a regular stopping place for troops and fleets that played a principal role in the military campaigns of the sixth century.

Trigardo-Oiniades, Vonitsa quayside), 296, 489-491 (Phidokastro). See also P. SOUSTAL, The historical sources for Butrint in the Middle Ages, in: *Byzantine Butrint. Excavations and Surveys 1994-99*, ed. R. HODGES, W. BOWDEN and K. LAKO, Oxford 2004, 20-22.

16. J. KODER, Handelsgüter und Verkehrswege Problemstellung, Quellenlage, Methoden, in: *Handelsgüter und Verkehrswege*, 17-18, where it is noted that buildings and facilities used in the Byzantine period had been constructed much earlier; L. LAVAN, Appendix: Storage and Transport, in: *Objects in Context, Objects in Use: Material Spatiality in Late Antiquity*, ed. L. LAVAN, E. SWIFT and T. PUTZEYS, Leiden and Boston 2007, 75-76; T. PUTZEYS, Productive space in Late Antiquity, in: *Objects in Context*, 76-77; PREISER-KAPPELLER, Harbours and Maritime Networks, 4-7.

17. *Expositio totius mundi et Gentium*, ed. J. ROUGÉ, Sources Chrétiennes 124, Paris 1966, 208-209.

18. *Itineraria Romana. Itineraria Antonini Augusti et Burdigalense*, 40-41, 51, 78-79; *Ravennatis Anonymi Cosmographia*, 55, 95; *Expositio totius mundi et Gentium*, 190-191.

19. The distribution of the religious monuments in the area is indicative of the development of the region, see P. CHEVALIER, BR. PENDER, M. PAŠALIĆ, B. VJEŠNICA and D. VUKIĆIĆ, *Salona II. Recherches archéologiques franco-croates à Salone. Ecclesiae dalmatiae. L'architecture paléochrétienne de la province romaine de Dalmatie (IVe- VIIe S.)* [En dehors de la capitale, Salona] Tome 2. Illustrations et conclusions, Split 1995, Rome 1996, 15-26, 37, 39.

The permanent requirement of supplying goods to both army and navy, with specialized demands (naval bases, shipyards, warehouses), must have relied at least partly on local natural resources. Salona, had become a significant hub destined for gathering Byzantine troops and fleets and providing them with raw materials and other essentials for military campaigns, as it was the post of the *sacrae largitiones*, the imperial office supervising the state factories producing arms (with iron from the mines of Bosnia) and clothing, operating well into the fifth century²⁰. These production capacities should have supported the development of a rudimentary infrastructure network capable of serving the repair-and-resupply needs of ships. A similar trend has also been identified in other settlements in the region²¹.

However, storage facilities or installations serving shipping have not as yet been detected and adequately studied in the coastal areas of the Adriatic or the Ionian Seas, nor on the islands referred to in written sources as stopping places, although the needs of naval forces were infinitely more specialized. It is understood that the infrastructures necessary for the daily interaction of the micro-regions were not of the same size and quality as those intended for the ports and facilities needed in the war zones and the naval routes suitable for large warships²². The latter required war dockyards, shipyards for immediate repairs, warehouses and deep-water anchorages. The ancient peripheral network harbour towns operating on the coasts of Zakyntos, Cephalonia, Leukas and Corfu, extending to ports and naval bases on the opposite coast of western Greece, indicate that this practice was based on fixed antique infrastructures. Still, we are not in a position to assess to what extent the basic physical and organizational structures and facilities of the ancient harbour at Zakyntos and the recently recorded submerged

20. A. JONES, *The Later Roman Empire, 284-602. A Social, Economic and Administrative Survey*, Oxford 1964, v. 2, 834, 836; L. I. R. PETERSEN, *Siege warfare and military organization in the successor states (400-800 AD). Byzantium, the West and Islam*, Leiden and Boston 2013, 157-158. Salona is among known points where metallic objects have been found, testifying to intense activity. Buckles may be especially associated with military activities, see M. SCHULZE-DÖRRLAMM, *Der Handel mit byzantinischen Metallwaren aus archäologischer Sicht (Gürtelschnallen, Frauenschmuck, Zaumzeug, Bronzegefäße)*, in: *Handels Güter und Verkehrswege*, 259-260 plan 5 and 7, 264 plan 11; C. H. CALDWELL III, *The Balkans*, in: *The Oxford Handbook of Late Antiquity*, ed. S.F. JOHNSON, Oxford and New York 2012, 102-106.

21. P. CHEVALIER and J. MARDEŠIĆ, *La ville de Salone dans l'Antiquité tardive: déprise spatiale, mutations et renouveau de la parure monumentale*, *Hortus Artium Medievalium* 12 (2006), 55-68; M. MILINKOVIĆ, *Stadt oder „Stadt“*. Frühbyzantinische Siedlungsstrukturen im nördlichen *Illyricum*, in: *Post-Roman towns, Trade and Settlement in Europe and Byzantium*, Vol. 2. *Byzantium, Pliska, and the Balkans*, ed. J. HENNING, Berlin and New York 2007, 159-192.

22. P. HORDEN and N. PURCELL, *The Corrupting Sea: A Study of Mediterranean History*, Oxford 2000, 137. On port facilities see R. L. HOHLFELDER, *Building harbours in the early Byzantine era: the persistence of Roman technology* *Byzantinische Forschungen* 24 (1997), 367-380; T. MANNONI, *The transmission of craft techniques according to the principles of material culture. Continuity and rupture*, in: *Technology in Transition A.D. 300-650*, ed. L. LAVAN, E. ZANINI and A. SARANTIS, Leiden 2007, lvii-lviii.

remains of the Roman harbour in Cephalonia, as well the well-studied port of Corcyra, could possibly serve communications in later periods. For example, we assume only that the function of the mooring points in the island of Zakynthos continued as in antiquity,²³ since the island was a known crossing spot, not only attested in the *itineraria*, but also mentioned in written sources as one of the stopovers of the naval campaigns. The island was raided by a squadron of the Vandal fleet heading towards the Eastern Mediterranean, which was retreating from the Peloponnese, after having been pushed back at Cape Tainaron (461-467). As stated by Prokopios, the island's inhabitants, perhaps members of the upper class, were initially captured and then executed²⁴; these individuals might also have been locals, probably entrusted with services related to the guarding and servicing of maritime infrastructures.

The incident reveals that the tackling of the Vandal fleet, achieved earlier in Cape Tainaron, was apparently due to the safekeeping of the place, something that was not feasible in Zakynthos, perhaps because the island had never been threatened in the past. Zakynthos was also mentioned as the hindmost resupply station of the Byzantine fleet campaigning against the African Vandals (533) under the command of Belisarios, after leaving the other nearby mooring positions in the Peloponnese (Tainaron and Methone)²⁵. The weather conditions in the region (calm seas and lack of wind respectively) were well known as it was the last station on the naval route before reaching Sicily (Belisarios' fleet anchored in a port near Aetna). The island formed at that moment a main strategical transitional spot, for reaching the Western Mediterranean outposts as far as Carthage²⁶ and the campaign aimed at expelling the Vandals from the Western Mediterranean after destroying their operational bases in North Africa.

23. K. BAIKA, Ancient Harbour Cities – New Methodological Perspectives and recent research in Greece, in: *Häfen und Hafencities im östlichen Mittelmeerraum von der Antike bis in byzantinische Zeit*, ed. S. LADSTÄTTER, F. PIRSON and TH. SCHMIDTS, Byzas 19, Istanbul 2014, 447, 455, 478-483.

24. Procopii De Bellis, III, 22, 16-18, v. 1, 406; see H. PRYOR and E. M. JEFFREYS, *The Age of the Δρόμων. The Byzantine Navy ca. 500-1204*, Leiden and Boston 2006, 9.

25. On the description of the campaign by Procopius, see I. ANAGNOSTAKIS, Wine, Water, Bread, and Love-Affairs on a Sixth-Century Military Campaign: Narrative Strategies, Politics and Historicity, in: *Homage to Tibor Živković* (forthcoming).

26. Procopii De Bellis, III, 13, 21-24, v. 1, 372. See L. CASSON, Belisarius expedition against Carthage, in: *Carthage, VII: Excavations at Carthage 1978 Conducted by the University of Michigan, VII.*, ed. J. H. HUMPHREY, Ann Arbor 1982, 23-28; PRYOR and JEFFREYS, *The Age of the Δρόμων*, 10-15, 325-326; T. LOUNGHIS, Ο πρωτοβυζαντινός στρατός, in: V. VLYSSIDOU, ST. LAMPAKIS, M. LEONTSINI and T. LOUNGHIS, *Βυζαντινά στρατεύματα στη Δύση (5ος-11ος αι.). Έρευνες πάνω στις χερσαίες και ναυτικές επιχειρήσεις: σύνθεση και αποστολή των βυζαντινών στρατευμάτων στη Δύση*, Athens 2008, 48-51; E. KISLINGER, Verkehrsrouten zur See im byzantinischen Raum, in: *Handels Güter und Verkehrswege*, 151-152, 157, 173.

C. Key points in the network of passageways over the horizontal and diagonal axes

It seems likely that Zakynthos was one of the key points along the horizontal axis that connected the Eastern Mediterranean with Sicily. The reference to this island in the *cursus maritimus* of the well-organised naval expedition of 533, however, was exceptional, although to be expected if one is to take into account the routes described in the itineraries. The fleet was preceded by scouting vessels sent in advance by Constantinople, meant for ascertaining local conditions in order to guarantee the safe passage of ships across the open sea from the Peloponnese to Sicily. It was a standard operating procedure to reconnoiter ahead of the sea passages and locate appropriate anchorages. These squadrons were sailing under the command of the generals Valerianos and Martinos appointed by Justinian I; they were assigned to inspect the expedition and to secure the procurement of victuals on the southeastern coast of the Ionian Sea before the fleet sailed further westwards (532)²⁷.

The mission of those escort ships even included the detection of conditions prevailing in the wider region, since the crossings to Sicily were hazardous and not always crowned by success. The task would also include the management and control of supplies needed for the last part of the journey to Sicily or Southern Italy. Valerianos and Martinos were once again mentioned as being forced by weather conditions to seek safe havens along the coastal areas of Aetolia and Acarnania, on their way to Italy to reinforce the army of Belisarios (December 536)²⁸. They were dispatched from Constantinople at Belisarios' request, a fact that demonstrates trust in their ability to recruit adequate numbers of properly trained troops necessary for reinforcing the campaign. As naval expeditions were not always successful, either because of insufficient supplies or due to unfavorable weather conditions, the assistance of such auxiliary drafts of men became vital. The increased possibility of shortcomings in such a venture suggested that the participation of experienced personnel in long-distance expeditions was crucial, as was also supervision by officials with specialized expertise.

Information on the equally important maritime axis that diagonally linked Illyria with Italy, either on the northwest shores of the Adriatic Sea (Ravenna, and later Venice) or further to the south, is, to the same extent, sparse with regard to the vulnerability and resilience of port installations²⁹.

27. Procopii De Bellis, III, 11, 24-28; III, 13, 9-10, v. 1, 364, 370. See LOUNGHIS, Ο πρωτοβυζαντινός στρατός, 49-50; I. ANAGNOSTAKIS, Η Μεθώνη ως σταθμός κατά τον Βανδαλικό πόλεμο την εποχή του Ιουστινιανού (Ένα στρατιωτικό δίδυμο και τα προβλήματα του στόλου), *Επιστημονική Διημερίδα: Η Μεθώνη και η περιοχή της από την αρχαιότητα έως τα νεότερα χρόνια. Αρχαιολογικές και ιστορικές προσεγγίσεις*, Methoni May 16-17, 2015 (forthcoming).

28. Procopii De Bellis, V, 24, 18-22, v. 2, 120. See LOUNGHIS, Ο πρωτοβυζαντινός στρατός, 86.

29. E. ZANINI, *Le Italie byzantine. Territorio, insediamenti ed economia nella provincia bizantina d'Italia, (VI-VIII secolo)*, Bari 1998, 61-63, 209-215, 328-329; DUCCELLIER, L'Adriatique

Particularly important for resupplying and supporting campaigns were ports and anchorages lying along the coastline of Dalmatia. The strategic importance of the region was demonstrated by the Goths' attempts to blockade Salona and destroy its ability to acquire supplies from the city's hinterland. The attacks were also a response to Constantinople's attempt at restoring Byzantine suzerainty over Dalmatia, and also served as a diversion in the face of Belisarios' parallel operations in Italy. The central government in Constantinople was continuously counting on Dalmatia's capacities, as is shown first by the appointment of the general of Illyricum, Mundos, who ultimately fell on the battlefield during a series of inconclusive conflicts with the Ostrogoths, and a little later by the mission of the *comes sacri stabuli* Konstantianos, sent by Justinian I to Dalmatia to face the Goths directly and prevent the proliferation of hostilities (536)³⁰; naval forces under the latter's command gathered at Epidaurus (mod. Cavtat, Ragusa vecchia, near Dubrovnik), accompanied by land forces, and anchored in Lesina (the island of Hvar), while the Ostrogoths retreated northwest of Salona (in Scardona, near mod. Šibenik, Croatia)³¹.

These conflicts and the archaeological evidence confirm that the region was forming a maritime *limes* with fortified coastal posts serving the communication network in the Adriatic, a fact that was extensively exploited by Justinian's generals³². Besides, Prokopios' narrative contains references to the warships called *dromons*³³, ships whose speed and effectiveness made a significant contribution to naval battles. However, Prokopios chooses to refer more repeatedly and emphatically to the importance of a successful implementation of known naval tactics. These praiseworthy strategical ploys included the dispatch of a reconnaissance force to ascertain the numbers and

du IVe au XIIIe siècle, 114-117 ; S. GELICHI, Flourishing Places in North-Eastern Italy: Towns and *emporía* between Late Antiquity and the Carolingian Age, in: *Post-Roman Towns, Trade and Settlement in Europe and Byzantium*. Vol. 1. *The Heirs of the Roman West*, ed. J. HENNING, Berlin and New York 2007, 84-86; A. ZERBINI, The Late antique Economy. Regional Surveys, in: *Local Economies?*, 54-58; L. ZAVAGNO, *Cities in Transition: Urbanism in Byzantium between Late Antiquity and the Early Middle Ages (AD 500-900)*, British Archaeological Reports International Series 2030, Oxford 2009, 22-25.

30. Procopii De Bellis, V, 5, 2; V, 5, 11, V, 7, 26-37, v. 2, 25, 26, 36-38. See LOUNGHIS, Ο πρωτοβυζαντινός στρατός, 83; GOLDSTEIN, How the Byzantines made use of Adriatic Sea, 52; PETERSEN, *Siege warfare*, 502.

31. Procopii De Bellis, V, 7, 28, 32, v. 2, 37-38; GOLDSTEIN, How the Byzantines made use of the Adriatic Sea, 50-53; see also Prokopios. *The wars of Justinian*, translated by H.B. DEWING, rev. and modern. with an introduction and notes, by A. KALDELLIS, Indianapolis and Cambridge 2014, 268, nos. 479-481.

32. GOLDSTEIN, How the Byzantines made use of the Adriatic Sea, 53.

33. Procopii De Bellis, VII, 35, 23-27, v. 2, 457; CASSON, Belisarius, 24. For earlier references to dromons see PRYOR and JEFFREYS, *The Age of the Δρόμων*, 12-14, 123-128, 347 (Table 7). On dromons sent by Totila while he was besieging Naples in 542-543, see Procopii De Bellis, VII, 6, 24, v. 2, 324. Dromons were built by Belisarios in Ostia (Portus, 546), Procopii De Bellis, VII, 19, 5, v. 2, 378; see PRYOR and JEFFREYS, *The Age of the Δρόμων*, 15.

position of the enemy and the gathering together of all Byzantine naval forces before a coordinated assault³⁴. The appreciation of Prokopios for these war tactics was based on the outcome of the retreat of the Goths and the voluntary subjection of some of them to the Byzantines.

Salona's territory was once again well-fortified, after Konstantianos had its ramparts repaired; he subsequently marched as far as Ravenna to secure Byzantine control all along the Adriatic coast. The concentration of Byzantine troops and ships in the region of Salona exercised direct pressure at very short notice on Ravenna, a center of strategic importance and not only a major point in the communication network, but also a principal seat of administrative power that had earlier passed to the control of Vittigis, the king of the Ostrogoths. The attack launched from Ravenna against Salona with troops sent by Vittigis was part of a distraction strategy involving this particular point of major importance to the Byzantines, while Belisarios was preparing to recapture Rome (537)³⁵. Nevertheless, this onslaught proved that the axis diagonally connecting the Dalmatian coast with Ravenna, which had become the starting point of the Ostrogothic campaign in question, constituted a particular naval route that had to be constantly well-protected by local stationary regiments together with the naval forces.

The horizontal axis between the Ionian Islands and Sicily also had to be safeguarded in a similar fashion. Accordingly, the three different phases of operations after the counterattacks of the Goths, which also involved the fort of Osimo and Ancona, its seaport, in 538, 548, and 551/2³⁶, clearly show that safeguarding the outposts on the fringes of the Adriatic and Ionian seas remained vital for communications. Belisarios also marched from Salona to Ravenna and Rome in 544³⁷. As Salona and Ravenna were the key endpoints of the diagonal maritime line of traversing the Adriatic, their control became strategically important for the stationing and resupply of Byzantine campaigns before invading the Italian peninsula. Armies and fleets were dispatched by the Ostrogoths to Dalmatia, such as the one sent by Totila in 547, under the command of Indulf, a former officer of Belisarios, who appears to have been well informed on Byzantine tactics and was probably well acquainted with the features of the Dalmatian ports. He moored his ships at Muccurrum (possibly Makarska, southeast of Split), a coastal town near

34. Procopii De Bellis, III, 11, 15, 16 ; III, 15, 36 ; V, 7, 28-36, v. 1, 362, 381; v. 2, 37-38 (in 533: 92 long-ships of Belisarios' campaign sent to Carthage under Kalonymos and in 548/9 in Dalmatia, under the commander of Salona).

35. Procopii De Bellis, V, 16, 7-18, v. 2, 84-85. See LOUNGHIS, Ο πρωτοβυζαντινός στρατός, 85-86; PETERSEN, *Siege warfare*, 504. On the presentation of the stages of the war and of victories of the Byzantines by Procopius, see M. KOUROUMALI, The Justinianic Reconquest of Italy: Imperial Campaigns and Local Responses, in: *War and warfare*, 973-974.

36. Procopii De Bellis, VI, 11, 4, 15 ; VI, 13, 5-7; VII, 30, 17; VIII, 23, 1, 39-41, v. 2, 197, 206-207, 429, 608, 615-616.

37. Procopii De Bellis, VII, 10, 3, v. 2, 337. See LOUNGHIS, Ο πρωτοβυζαντινός στρατός, 103.

Salona which he captured, and from there he spread his forces throughout the region. Klaudianos, commander at Salona, immediately sent an army and fleet of dromons to Laurento, where ships carrying grain and other provisions were stationed; there the Ostrogoths managed to defeat the Byzantine land and naval forces³⁸.

The Byzantines continued to constantly exploit both axes. Just north of the axis along which the ships of Belisarios (Methoni, Zakynthos, Aitolia, Akarnania) had been sailing earlier, another fleet followed a similar route to Sicily, moving across Cephalonia, under general Artabanes. His ships however reached Malta, battered by heavy storms, and he then returned to the Peloponnese (550)³⁹. This misadventure indicated that the effort of travelling westwards to Sicily, along the horizontal axis, always required a large number of naval forces with ample supplies, and above all a mastery of sea lanes' crossing and yet, particular experience in weather conditions and sailing, as was the case in 532 and 536 with the appointment of able leaders and crews; generals Valerianos and Martinos, must have been, as the reputed seafarer Demetrios from Cephalonia, 'thoroughly skilled in all matters relating to the sea and its risks' (542)⁴⁰.

Uncertainty and insecurity applied also to travel along the diagonal axis, although the latter was shorter and could follow a path closer to the coastline. Naval forces and numerous troops were gathered at Salona during a new series of operations aimed at restoring Byzantine control in Italy undertaken by Ioannes and Germanos in 550. The technical difficulties were ever-present, since weather conditions prevented this army from setting sail. On the other hand, the joint naval expedition out of Ravenna and Salona against the Ostrogothic fleet in Senogallia (mod. Sinigaglia, near Ancona) that followed soon afterwards, demonstrated the strategic importance of the diagonal axis in preserving the indisputable domination of the Byzantines in Ravenna⁴¹. Salona was once again a stopover in the land campaign launched by general Narses against the Goths of King Totila in 552. Earlier, Totila had attempted to prevent the arrival of the Byzantine military force along the shores of Epirus and he

38. Procopii De Bellis, VII, 35, 23-27, v. 2, 456-458; GOLDSTEIN, How the Byzantines made use of the Adriatic Sea, 56-57.

39. Procopii De Bellis, VII, 40,14-17, v. 2, 478-479. See LOUNGHIS, Ο πρωτοβυζαντινός στρατός, 116-117; PRYOR and JEFFREYS, *The Age of the Δρόμων*, 17. Similar was the forced semimonthly navigation of the ship carrying the Apostle Paul, which was swept away by stormy winds in Malta. The ship had left Cyprus and it was originally scheduled to hibernate in Crete, see F. BRAUDEL, *La Méditerranée. L'espace et l'Histoire*, Paris 1985, 63-64.

40. Demetrios, having sailed with Belisarios to Italy and Libya and therefore was appointed by Justinian I governor of Naples, was mutilated by Totila in 542: Procopii De Bellis, VII, 6, 20-26, v. 2, 323-325.

41. Procopii De Bellis, VII, 40, 10-11; VIII, 23, 9-11, v. 2, 478, 609-610. See LOUNGHIS, Ο πρωτοβυζαντινός στρατός, 116-118; PRYOR and JEFFREYS, *The Age of the Δρόμων*, 17-18; PETERSEN, *Siege warfare*, 156, 546; A. SARANTIS, *Tactics: A Bibliographic Essay*, in: *War and warfare*, 199-200.

also destroyed their supply bases there; his ships descended on Corfu, where the Ostrogothic fleet plundered a number of Byzantine vessels carrying supplies to Narses' troops. His ships ravaged the straits and the Epirotic coast: Sybota, Dodona, Nikopolis and Anchialos (Onchesmos 551) were found to be unprotected⁴². The episodes reveal that coastal, protection although necessary was rather ineffective due to the conditions of the era.

This brief report on sea lanes, based on the records of sixth-century historical works narrating the wars of Justinian, makes it obvious that the maritime axes and communication points in the Adriatic and Ionian seas were of equal value with regard to the policies of reclaiming the Empire's western provinces from the Vandals and Ostrogoths. At the same time, some of their characteristics differ with regard to the direction of the Byzantine strategy and the geographic orientation that determined sailing routes and points of arrival. The horizontal axis towards South Italy and Sicily required highly organized navies, maritime expertise on the part of its commanders, and knowledge of the seaways. Moreover, sailing to Sicily or further west demanded well-trained crews and a fair number of transported forces. The diagonal axis along the Dalmatian coastline and the crossing to Ravenna required the assistance of large army contingents marching alongside the sailing ships and the chance to victual in the hinterland of Illyria.

Instances of travel in the Adriatic and Ionian seas in the sixth century were much more numerous than those included in the campaigns described by Prokopios. The evidence is overwhelming in comparison to other periods. Diplomats, clergymen and officials are known to have travelled between Constantinople and Italy or North Africa in the sixth century, and we assume that many of them would have moved along the sea lanes followed by the imperial fleets⁴³.

The large number of maritime travelers during this period would have been encouraged by the conditions of the time, and the frequent expeditionary movements seemed to support and facilitate mobility. Stimulating to the economy and maritime traffic was the reconquest of Africa by the Byzantines in 533, as is demonstrated by the material evidence offered by underwater findings attesting to the transportation not only of essential products but also

42. Procopii De Bellis, VIII, 22, 17-32, VIII, 26, 5, v. 2, 605-608, 630. On the identification of Anchialos with Onchesmos (H. Saranta), see *Prokopios. The wars* by KALDELLIS, 513, n. 825. See also SOUSTAL and KODER, *Nikopolis und Kephallenia*, 267; LOUNGHIS, Ο πρωτοβυζαντινός στρατός, 120-122.

43. T. C. LOUNGHIS, *Les ambassades byzantines en Occident depuis la fondation des états barbares jusqu'aux Croisades (407-1096)*, Athens 1980, 463-466 (Appendix 1); M. BALARD, *Voyageurs italiens à Byzance (VIe-XIe s.)*, in *Voyages et voyageurs à Byzance et en Occident du VIe au XIe siècle, Actes du colloque international organisé par la Section d'Histoire de l'Université Libre de Bruxelles en collaboration avec le Département des Sciences Historiques de l'Université de Liège (5-7 mai 1994)*, ed. A. DIERKENS, J.-M. SANSTERRE and J.-L. KUPPER, Genève 2000, 257-261.

of costly items, as revealed by the shipwreck of Marzamemi on the south-eastern tip of Sicily, dated to the sixth century. The ship's cargo of prefabricated architectural marble elements, destined to be parts of a basilica, was associated with the expansion of political, cultural and religious influence exerted by Constantinople. Two more shipwrecks in the Aeolian Islands (off Filicudi/Fenicode) and on the southern coast of France (Anse de la Palu, off Port Cross island), the former dating from the late fifth or the early sixth century and the latter from the end of the sixth century, were transporting foodstuffs (oil, wine) and other commodities between the two ends of the Mediterranean (from North Africa, the Black Sea and the coast of Palestine)⁴⁴.

Information on the movements of armies or government and diplomatic officials gives a clear view of the networks during this period. The network lines between the departure and arrival points was always shaped by the infrastructure of ports and coastal sites that were used for military purposes and were strengthened by state support or by funding from powerful magnates, like Belisarios. Alongside the centralized supervision, the local conditions, like the particular dynamics of the insular environment (leeward harbours, supply facilities), as well as the right conditions for regional connectivity supported and shaped the structure of these networks⁴⁵. Above all, the complex grids of the maritime network, as Prokopios implies, were navigated in actual fact by the sailors of the time who managed to adapt ancient seafaring knowledge to the needs of long travels imposed by the political and economic momentum in the Mediterranean Sea during the sixth century.

44. F. VAN DOORNINCK, Jr., Byzantine shipwrecks, in: *The Economic History of Byzantium*, ed. A. E. LAIOU, Washington, D.C. 2002, v. 2, 899-900.

45. PREISER-KAPPELLER, Harbours and Maritime Networks, 12-13, 18-19.