

Seasonal rhythms

THE VOLUME OF communications changed over the long timescale of the centuries. It also fluctuated over the short one of seasons. Simply put, bad weather affected man, beast, and ships. On this, and the winter hiatus of shipping, the conventional wisdom looks solid.

Yet a glance at land travel, particularly during the winter, will show that it is not merely a matter of snow or rain interrupting land communications. Even at sea the situation is more complicated than might first appear. We have already met the smallish ships, the prevalence of beaching, and the apparent ascendancy of the local that characterized navigation. They figure in fact in some accounts as prime villains in the desolate economic conditions of the early medieval Mediterranean. But might they not equally suggest something else? That more daring sailors could risk sailing outside the fine weather for which the Mediterranean summer is famous and the northern tourist today grateful? It is possible to test one of the most famous of ancient and medieval navigational phenomena, the *mare clausum*, the closing of the Mediterranean Sea during the rough weather of winter, against the aggregate evidence of our travelers' movements. And why not do so, if it confirms not only whether or not normal communications ceased, but when they did so, and when they resumed? Even if there seems little reason to doubt the conventional idea that the impact of winter on communication patterns (and therefore on economic ones) remained unaltered since antiquity, it is not a bad idea to compare general precepts with actual practice. A clearer understanding of the seasonality of shipping leads moreover to further issues of fundamental importance: the speed of communications and the history of the routes linking the different parts of the Mediterranean.

We shall begin with a quick look at seasonal variations in land communications. But we shall concentrate on the patterns at sea, where the comprehensive study of movements affords a look at monthly patterns of arrivals and departures. A first series of surprises will lead us to scrutinize more closely the marginal months of April and October. This will force us to probe more deeply the problem

of winter sailings. In the end, we will find that there is much to be said for the conventional wisdom. And some things to be said against it.

I. Seasonality of land travel

Seasonality affected first and foremost sea travel, but it was not without incidence on dry land.¹ Obviously, crossing early medieval Europe was more pleasant in fine weather, when it was also easier to fodder one's horses and mules.² Autumn seems to have been particularly favored for royal movements, and an effort may have been made to avoid the dog days of summer.³ Lack of fodder made winter travel difficult for large groups of mounted men. Nonetheless the royal court did move, as a few examples from the 770s show. To start with the movements of the turbulent winter of 771, when Charlemagne pounced on his brother's kingdom: in December, he reached Corbeny from Longlier. He moved on to Attigny for Christmas, then went to Blanzly in the Ardennes on 13 January 772. Finally he was off to Herstal for Easter (29 March).⁴ The next winter he celebrated Christmas at Herstal, moved on to Longlier by 20 January and then spent the rest of the winter at Thionville. Similarly in 778, the king was at Aachen on 6 December and at Douzy (Sedan) for Christmas.⁵

For smaller groups, winter travel was less difficult, if still no pleasure. Officials were on the road in the snowy season at the king's behest and also for their own reasons. Einhard, for instance, answered a royal summons to Aachen on 1 December 829 and reached Wiesbaden the next day. The year before he had been traveling from one estate to another in January when a royal mandate called him to court; he set out from Mühlheim am Main to the palace at Aachen in mid-January 828; he arrived there "a few days later," covering 300 km in the coldest weeks of winter without comment.⁶ Charles the Bald's uncle Rudolf returned to the west Frankish court from an embassy to Regensburg on 11 December 863. Officials traveling to the palace at Pavia enjoyed exceptional rights to requisition shelter in winter time, a sign that they slept mostly out of doors in the good weather.⁷

¹ There is no study of the seasonal rhythms of land travel in the Carolingian or Byzantine worlds. See nonetheless Brühl 1968, I: 61-7.

² Problems of getting fodder led Lupus of Ferrières to counsel against spring travel, Ep. 20, 4 (Levillain, Ep. 8, A.D. 837), 26.18-21, shortly after 29 April; cf. Ep. 63, 2, (41, A.D. 845), 68.29-69.6, shortly after 7 April.

³ Zielinski 1991, 40n16.

⁴ BM 142a-143a.

⁵ BM 150a-152 and 213-213a, respectively.

⁶ Einhard, Transl. Marcell. et Petri, 3, 19, 255.5-7 and I, 15, 245.20-4. Cf. also R385. The mysterious envoy Lazarus left someone's court on 4 January: Pros. "Lazarus I."

⁷ MGH Capit. no. 94, 4, I.199.3-4, A.D. 787.

The freezing of waterways could turn them, literally, into highways. Carolingian merchants adapted quickly to such conditions. The extreme cold of the winter of 859–60 froze the northern edge of the Adriatic for the first time in memory, and merchants who had always used boats to move their goods to Venice transported them to the sea city by horse and cart.⁸ We may wonder whether frozen waterways explain the fact that a message from the distant Bulgars, near the mouth of the Danube, arrived at the wintering Carolingian court (R385). In winter it was always incomparably easier and safer to travel over land than over water, although in 968–69, Liudprand of Cremona combined both modes of travel between October and January (R828).

Anyone who has ever crossed an Alpine pass knows that summer is better than winter; eighth- and ninth-century travelers naturally preferred good weather and we may presume that the volume of traffic was greater at that time. But it would be wrong to imagine that the bad weather sealed Italy hermetically, for winter crossings of the Alps are surprisingly well attested. Smaller groups and messengers did so when urgent circumstances dictated.

Analysis of papal correspondence has already demonstrated that, once the land road became the main route north, documents were in fact issued for northerners during the winter months (Ch. 3.1). Eighth- and ninth-century contacts over the more than 1,500 km separating the papal from the Frankish court were frequent by early medieval standards, and deserve a closer look. A preliminary impression of the intensity of contacts comes from the *Codex Carolinus* which preserves forty-six letters sent by Hadrian I to Charles the Great from late 774 to 791. This works out to a letter roughly every four months, not even counting Charles' presence in Rome in 781 and 787.⁹ In certain circumstances letters went north during the winter. Thus the desperate plea of Stephen II, written on or about 24 February 756 to Pippin and the Franks during Aistulf's siege of Rome, was sent north in three separate dispatches to insure arrival; two at least went by sea with Stephen's envoys, to avoid the Lombard attackers.¹⁰ Similarly, at the time of the mid-winter crisis of 772–3, Pope Hadrian I's ambassador Peter traveled to Marseilles by sea and he reached Thionville between 20 January and 7 March.¹¹ Several letters were sent in December.¹² To an angry Charlemagne Leo III dispatched a letter on the last day of

which the first at least appears to have been written shortly after the events of 22 January that it describes.

¹² JE 2549 (5 December 817; to Bernard, archbishop of Vienne); JE 2644 (after 8 December 853; to Lothar I); JE 2772 (11 December 864; to Ado of Vienne); JE 2945 (26 December 871; to the bishops of west Francia). Another winter letter seems to be

⁸ Ann. Fuld. a. 860, p. 54.

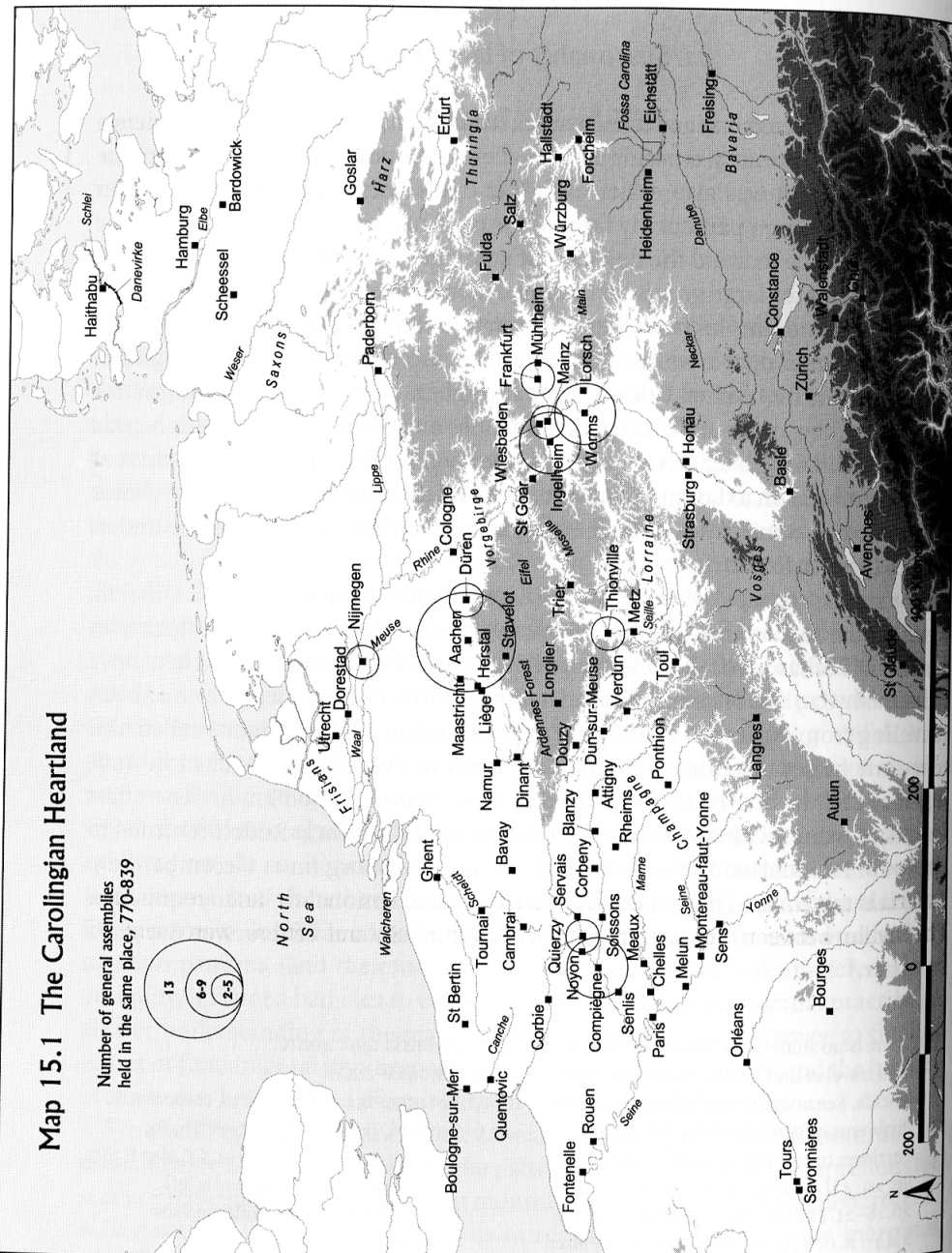
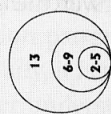
⁹ Cod. Car. 49–95, pp. 567–643; BM 235b, 282a and 285–286b.

¹⁰ Cod. Car. 8–10, JE 2325–7, pp. 494–503, esp. 495.43–496.1 and 497.28–35; 499.36–8.

¹¹ Liber pont., Duchesne, I.493.12–16, JE 2396, BM 152b and Classen 1985, 16. Cf. too Cod. Car. 82–3, JE 2461 and 2463, pp. 615–16, of

Map 15.1 The Carolingian Heartland

Number of general assemblies held in the same place, 770–839



December 808, and we know of a Frankish envoy who, in January, headed north from Salerno toward Charlemagne's court.¹³ In 877, John VIII's envoys to Charles the Bald left for France bearing letters dated February 10 and 13, along with palms for Palm Sunday.¹⁴ March too has left a few letters of which one at least arrived in the north in late May.¹⁵

But it was more than just intrepid messengers. Larger groups followed suit when dire circumstance dictated. At a moment of extreme crisis, Pope Stephen II and his entourage traveled from Pavia to Ponthion in late November and December. Between November 823 and the following February, a papal legation traveled back to Rome from Compiègne. And this was a particularly harsh winter.¹⁶ Notwithstanding what must have been a logistical nightmare, Frankish troops traversed the Alps on numerous occasions.¹⁷ Thus Charlemagne himself swept south in the winter of 786, reaching Florence by Christmas.¹⁸

Footnote 12 (cont.)

- that of Anastasius Bibliothecarius to Ado of Vienne, surely dispatched after Hadrian II's accession (14 December 867) and received in time for Ado to send the letter requested by Anastasius and elicit a response from Hadrian on 8 May 868: cf. Anastasius, *Ep.* 3, 400-1; JE 2907, 714-15.
- 13 JE 2517, MGH *Epist.* 5.92.33; *Cod. Car.*, 82, 616.10-14.
- 14 *Reg.*, 31-3, JE 3077-9, pp. 29-33; cf. *Ann. Bert.*, s.a., p. 212. The urgency in these letters lay in John VIII's request for military support. Other papal documents for Frankish recipients and dated February include JE 2894 (2 February 868), JE 2895 and 2898 (12 February 868), and JE 2902 and 2904 (23-5 February 868).
- 15 JE 2905-6, dated 8 March 868, addressed to Hincmar of Rheims and Herard of Tours, which were carried north by Actard, bishop of Nantes, who arrived at Servais shortly after the second Rogation Day (25 May 868): *Ann. Bert.* s.a., pp. 143-4. John VIII wrote JE 3340 to Louis and Carloman on 4 March 881, *Reg.*, 268, pp. 236-7. Stephen II appears to have sent *Cod. Car.*, 11, JE 2335, to Pippin in March or April 757: 504.21-3 and 506.4-7. This letter was carried north by Fulrad of St. Denis, George, bishop (of Ostia?), and John sacellarius, who participated in Pippin's

assembly at Compiègne. Gorze's foundation act implies that the assembly was taking place on 23 May: cf. BM 84a-85a. A third papal letter appears to have been sent off shortly after 25 March 808, and certainly before 16 April 808: JE 2515, MGH *Epist.* 5.87.30-88.11. Note too that Counts Helmgau and Hunfrid, Charlemagne's envoys to Leo III, had arrived at Rome a few days before 25 March ("post modicos <dies>," *ibid.*, 87.30), indicating a departure from Aachen no later than c. 24 February.

- 16 *Liber pont.*, Duchesne, 1.446.17-447.18; *Ann. regni Franc.*, a. 823, p. 162, arriving back at Rome a few days before the pope's death on 11 February 824 (*Liber pont.*, Duchesne, 3.121). On the harsh winter, *Ann. regni Franc.*, a. 824, p. 164.
- 17 Tyler 1930, 40-6, discusses difficulties medieval armies faced when crossing the Alps. Zielinski 1991, 40, emphasizes that troop movements across the Alps in winter were more common in the Carolingian period than is imagined.
- 18 BM 279a-281. To crush the Lombards, Charlemagne also crossed the Alps sometime after Christmas 775, when he was at Sélestat, and before 14 April 776, when he had already conquered Treviso: BM 198a-200e; he took an army with him to Italy again in the winter of 786-7: BM

October and November were surprisingly well traveled.¹⁹ Certainly travelers arrived in Rome from the north outside the fine months of summer, particularly in autumn.²⁰ Lupus of Ferrières, for example, planned to reach Italy at the very end of summer, at the earliest.²¹ John VIII ascended the Mont Cénis pass in late November 878, arriving at Turin on the twenty-fourth.²² Why was the autumn so favored? After all, unexpected delays then could lead to winter travel or worse.

The answer is fear. Awareness of diseases connected with warm weather encouraged northern travelers to plan Italian travel for cooler seasons. The archbishop of Rheims, for instance, seems to have considered June a bad time to leave for Italy.²³ His reason emerges when he describes Lothar II's fatal fever and the illness that decimated the royal retinue in August, during the trip from Rome to Lucca.²⁴ Pope Hadrian I was well aware of Frankish fears of "fever."²⁵

The papal correspondence and the movements of kings and armies converge: while it was certainly preferable to make the great journey across the Alps in good

279a. Arnulf crossed the Alps in January 894: BM 1892b-1893.

- 19 October: JE 2251 (29 October 739; to St. Boniface); JE 2274-5; and probably Gemmulus' letter of 31 October 745 (*apud* Boniface, *Epistolae*, 62, pp. 127-8); JE 2415 (27 October 775), containing urgent and sensitive news was sent to Charlemagne that very day: *Cod. Car.*, 54, 576.26-31; JE 2879 and prob. 2882 (23 and 24 October 867; to Hincmar and Charles the Bald; which arrived on 13 December 867), to Louis the German and his bishops); JE 3054 and, presumably, JE 3056 (28 and 31 October 876), to the church of Bourges and Charles the Bald. It is striking that all these letters are dated in the last week of October.
- 20 November: JE 2174 (22 November 726; to Boniface); JE 2271 (5 November 744; to Boniface); JE 2291-3 (4 November 751; to Boniface); JE 2416 (775; to Charlemagne: Hadrian insists that he has been expecting throughout September, October, and November the envoys he requested that Charlemagne send in the autumn, clearly indicating the normalcy of travel from the court south in those months: *Cod. Car.*, 55, 578.15-26); JE 2526 (11 November 813; to Charlemagne); JE 2527 (25 November 813; to Charlemagne with urgent news of a

- usurpation attempt against Leo V); JE 2698-704 (23-4 November 862; accompany bishops Radoald and John to Francia); JE 3061-6 (14-16 November 876; to Charles the Bald, etc.); JE 3114-15 (877; to Carloman and Theotmar of Salzburg).
- 21 Thus Willibald (*Ch.* 5.1). An annotation in a calendar in Vatican, B. Apost., Pal. lat. 1448, f. 69^r, suggests that an individual or group associated with Louis the Pious' court and Lorsch reached Rome on a 24 November in the earlier 9th C. (cf. Bischoff 1974, 116). In March 808, Charlemagne's envoys arrived at Rome after having passed through the court of King Pippin: Leo III, JE 2515, MGH *Epist.* 5.87-8. They necessarily left the northern court in February or earlier.
- 22 *Ep.* 67 (76; A.D. 849), 72.20-1.
- 23 John VIII, *Reg.*, 147, JE 3202, 125.16-17.
- 24 "Tempore inconvenienti," says he, about Lothar II's trip to Italy: *Ann. Bert.*, a. 869, p. 153.
- 25 *Ibid.*, p. 156.
- 26 To which he alludes when referring to plans to attack Benevento in the spring of 778: *Cod. Car.*, 80, JE 2460, 613.5-17. On the seasonal spike in late antique mortality due to malaria and the intestinal diseases which peaked in the Italian hot weather, see *Ch.* 1.3.

weather, urgent messages as well as emergency troop deployments could and did move between the two regions in winter. Not a few northern travelers consciously avoided the fine weather of summer. The sheer number of these kinds of movements, in bad weather and good, reinforce powerfully the evidence of improving routes and facilities linking northern Europe to Mediterranean Italy (Ch. 13.1).

2. The seasons of the sea

Afloat, the state of the weather is far more critical. Specialists in ancient travel have laid heavy emphasis on the seasonality of sea travel. Byzantinists have sometimes elevated it into an analytical tool for dating papal and patriarchal correspondence.²⁶ Indeed, this aspect of seasonality in communications seems so obvious that it has escaped closer scrutiny. For ancient Mediterranean travelers, it is believed that winter weather generally halted blue-water sailing from November 10 to March 10; conditions after 14 September and before 27 May were regarded as risky.²⁷ This “closed sea” (*mare clausum*) pattern seems to have held into the early Middle Ages and beyond. In the numerous documents of Jewish traders from the Cairo Genizah, there appears not a single reference to ships “setting sail for the high seas” from November through March.²⁸

Anecdotal evidence confirms that winter closure of the seas was familiar to Franks, Italians, and Byzantines. Every year during the naval siege of Constantinople from 674 to 678, warfare ceased from October to April even though the Arab fleet was established close by in the Sea of Marmara (R31). In 800, envoys from the Holy Land reached Charlemagne at Rome; they stayed there until April 801, when the Frankish ruler dismissed them and they presumably found a ship for home (R248; R253). In 807, Charlemagne sent envoys of the caliph and of the patriarch of Jerusalem to Italy; there they would await “the sailing season” for the trip home. Around 885, Pope Stephen V requested Basil I to station a Byzantine warship (*chelandion*) off the papal coast from April to September. Clearly, he expected that Arab pirates would remain inactive outside these months.²⁹ On the first day of December, Pope John VIII rather testily observed that no one was

26 To cite only three examples: egregious and explicit use of the winter hiatus: Dvornik 1948, 20 with n2 (“Traffic between the two cities [of Rome and Constantinople] being suspended from October till March . . .”) or 171, rightly criticized by Raasted 1981, 131n23; implicit use by Dölger e.g., nos. 273 and 533, both dated “summer” without

evidence; so too, e.g., Grumel² no. 467; cf. here R535.

27 Rougé 1952 and 1966, 32–3; Casson 1995, 270–3, and above, Ch. 4.3.

28 Claude 1985b, 31–4; Pryor 1992, 87–8; quote from Goitein 1967–93, 1: 316–17.

29 “Tempus navigationis,” *Ann. regni Franc.*, 2, 806, p. 124; JE 3403, MGH Epist. 7.374.29–31 requesting a *chelandion*.

sailing from Venice to Constantinople before the meeting he was trying to arrange for February: “neither your custom of sending to Constantinople nor the season escapes us.”³⁰ These dates in themselves, however, hint at a shorter winter interruption than the most prudent classical precept.

Sea closing has important implications for the seasonal quality of movements in the early medieval Mediterranean. As in late antiquity, communications which traveled predominantly by sea ebbed and flowed with the seasons, and this fluctuation may have further varied within and among the many smaller seas of which the Mediterranean was composed. As in antiquity, however, sea closure was not an absolute rule.³¹ Exceptions to the ending of travel in the winter need to be understood for the light they throw on the urgency of certain communications, and on more profound shifts in the infrastructure of communications between eastern and western Christendom. Besides, there is more to the problem of the seasonality of travel than winter closing. The fundamental climatic phenomena which shaped and to some extent continue to shape navigation in the Mediterranean mean that even within the window of fair weather, prevailing winds vary substantially and typically with the season. For instance, in the bay of Haifa, the prevalence of easterly winds needed to propel a sailing ship westward exceed 4 percent of all winds only from March (24 percent) through May (15 percent) and in October (11 percent), suggesting that experienced mariners may have favored these months for departures for the west from this part of the Levant.³² Such meteorological conditions imply that rhythms of travel would not have been consistent even in the fair weather.

30 Writing to Ursus, the doge of Venice, John first supposed on 24 November 876 (JE 3067) that if Bishop Peter of Jesolo had not yet left on his proposed embassy to Constantinople “and is not expected to leave before February” (“si nondum abiit, nec abire cis Febrarium mensem speratur”), he could attend a synod at Rome in February 877: *Registrum*, 20, 19.17–20. This seems to leave open the possibility of a November sailing – or an alternative means of reaching Constantinople – (ch. 19). A week later he insisted that a Roman synod on 1 February was no impediment to Peter’s embassy since “Constantinopolim mittendi nec mos vester latet, nec tempus,” (JE 3069) *ibid.*, 18, 16.22–24: no one would be sailing – the Venetian custom alluded to – for Constantinople between December and sometime in February.

31 Rougé 1952, 321–4; and esp. Meijer 1983.
32 This example comes from the work of John H. Pryor who has exemplified the application of modern navigational data to the written evidence of the Middle Ages, and so deepened considerably our understanding of medieval shipping. It implies – and detailed analyses seem to reinforce – substantial continuity in climatic phenomena in the Mediterranean since at least the 5th C.: e.g. Pryor 1989, 275. How this can be reconciled with growing evidence of historic change in the climate of the northern hemisphere remains to be seen. For the case in point see Pryor 1992, 1–3, on the sharp nautical observations of 12th-C. traveler Ibn Jubayr and the data supplied by the Israel Meteorological Services on Haifa Bay.

TABLE 15.1

Monthly rhythms of Mediterranean communications, c. 650–970: departures and arrivals

Month	Monthly total	Departures	Arrivals	Percentage
January	3	1	2	2
February	4	2	2	3
March	9	6	3	6
April	18	10	8	12
May	11	5	6	8
June	16	6	10	11
July	14	8	6	10
August	21	13	8	14
September	14	6	8	10
October	15	6	9	10
November	8	3	5	6
December	12	6	6	8
Total	145	72	73	100

The monthly patterns of movements

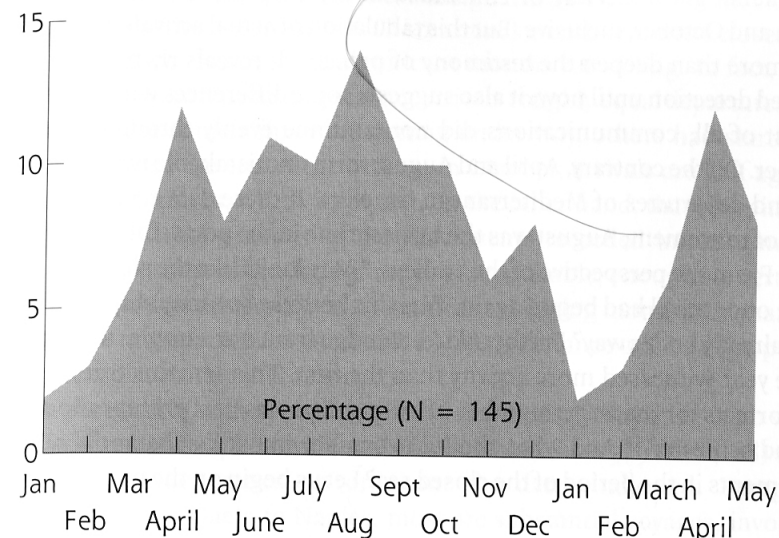
To date, most research has focused on general statements of practice about sailing made by the ancients and medievals themselves, and on the kind of anecdotal evidence we have just seen. This has yielded results which do not become less interesting if they are tested against the actual practice of travel. Our research has uncovered 145 arrivals and departures in the Mediterranean dated to the month between the seventh and tenth centuries (Table 15.1).³³ Most of the dates are arrivals or departures, so it would be fair to say that they reflect most directly the seasons of activity at ports, and, somewhat indirectly, navigational activity. Most are substantial movements of more, often considerably more, than 100 kilometers. A few movements are known from precisely and explicitly dated statements of texts. Others are furnished by the dates of imperial letters which were conveyed by ambassadors. These will usually have traveled within a week or two of the date of their delivery.³⁴ Still others can be deduced from the movements of

³³ This table excludes movements which occurred almost entirely overland, as well as arrivals and departures north of the Alps. It excludes moreover all of the conjectural dates advanced by Dölger and Grumel in their registers. The research from 700 to 900 has aimed at exhaustiveness; the data

from the 7th and the 10th C. does not. Movements are catalogued in Appendix 4.

³⁴ E.g., Liudprand of Cremona received an imperial chrysobull from Nicephorus II on Thursday, 17 September and, despite imperial impediments to the logistics of his departure (the government refused to

Chart 15.1. Monthly rhythms of communications, late seventh–late tenth centuries



This graph shows the changing monthly rhythms of 145 arrivals and departures in the Mediterranean basin from the late seventh to the late tenth century. April and August were the most active months, January and February the least active. Although a few probable or certain land legs of longer sea trips slightly overstate the percentages of October, November, and December for sea travel, the graph also includes ships that certainly landed or departed in these months (see pp. 458–67 for details).

travelers.³⁵ Finally, most of these data are new. It is impossible to know how many such movements actually occurred in the period, although there can no doubt that our sample is relatively small.³⁶ Even so, Table 15.1 marks a first step beyond mere impression. Chart 15.1 makes clear that early medieval practice followed ancient precept in a general way, even as it introduces a new element of complexity.

furnish pack horses for the land leg) he left Constantinople on Friday, 2 October 968:

Legatio, 56–8, 206.8–207.17. The sheaf of letters sent to Constantinople in spring 878 offer an exception that proves the rule. The earliest document is dated 26 February 878 (JE 3118); the latest group (JE 3130–5) is dated to 16 April. Shortly after the earlier letters were written, Lambert of Spoleto invaded Rome and besieged St. Peter's for thirty days, manifestly disrupting the dispatch of this embassy as well as other business: John VIII, *Reg.*, 107, JE 3142, 99.26–35.

³⁵ See e.g. the departure of Amalarius from

Constantinople or the travels of Basilus 4, Pros.

³⁶ While Liudprand was looking to leave Constantinople in the summer of 968 he was apparently keeping track of ship movements involving Italy; he mentions one Venetian merchant mariner in June, a major military movement in July and the arrival by sea of papal envoys in August, suggesting a minimum of a ship movement a month in the good weather between Constantinople and Italy at this date: *Legatio*, 14, 183.30–1; 31, 191.30–2; 47, 200.20–33.

Arrivals and departures clustered in the good weather months. 81 percent of movements got underway or concluded in the 66 percent of the year between March and October, inclusive. But this tabulation of actual arrivals and departures does more than deepen the testimony of precept. It reveals rhythms which have escaped detection until now; it also suggests some differences with antiquity.

First of all, communications did not continue evenly throughout the good weather. On the contrary, April and August form unmistakable twin peaks in arrivals and departures of Mediterranean travelers. If these data reveal the monthly pulse of movement, August was the busiest time in the ports, followed closely by April. From the perspective of the "valleys," May looks like the slowest month for ports, once travel had begun again. Was this because so many ships and travelers were already under way? Furthermore, to judge from our sample, the second half of the year witnessed more activity than the first. This remains true, even when one corrects for the larger number of sailing days classical precept allotted to the second semester.³⁷ And what about the smaller but still substantial number of movements in the period of the closed sea? Let us begin on the margins.

Two marginal months: April and October

April and October are surprises in more than one way. In late antiquity, Vegetius had considered April, May, and October risky months, especially for military movements.³⁸ But the late Roman state itself defined the sailing season of the African grain fleet expansively, in the interest of feeding the capital and army. It ran from 13 April to 15 October (Chapter 4, n62). In the early Middle Ages, the appraisal of risk appears more in line with the African sailing season. A papal pronouncement of the late ninth century suggests that the Venetians were sailing to Constantinople as early as March.³⁹ The new evidence of travelers' movements

37 Sixty-one arrivals or departures can be assigned to January through June, and eighty-four to the rest of the year (Table 15.1). This disproportion holds if one adds movements which can be assigned only to a semester to movements which can be dated to the month. Most importantly, an imbalance still occurs when one reckons the average departure per sailing day in the two periods: the 112 sailing days in the first semester (10 March–30 June) yield 0.54 movements per day, while the second semester's 133 sailing days (1 July–10 November)

yield an average of 0.63 movements per day.

38 "Uncertain" (*incerta*, with a nuance of risk) 10 March to 27 May, and 14 September to 11 November: Vegetius, *Epitoma rei militaris*, 4, 39, 1–7, 246.711–248.729. Still, the prudent Vegetius had recognized that merchants might brave the risks of the sea well before the 15 May that he recommended for the start of military operations. Between the "natalis navigationis" (i.e. the *plioiphesia* of 5 March, I presume) and 15 May: *Epitoma*, 4, 39, 8–10, 248.732–9.

39 Above, n30.

proves that the spring months of March and April alone account for almost a fifth (18 percent) of the movements that we can assign to a particular month. October, similarly, was as active as September. The marginal months require a closer look.

April and October were clearly significant months for sailing. In fact, in the early – April – weeks of the sailing season, arrivals roughly equal departures, suggesting that while some ships were getting under way, others had started out earlier still. Toward the end of the season, in October, arrivals are half again as numerous as departures, clearly implying, on the other hand, that shipping was winding down. Closer scrutiny of the movements recorded in these months shows that, while some of the datings are not unassailable, enough are certain to justify the conclusion that April was a significant shipping month, and that a fair number of the movements are unmistakably long-distance ones. Let us put our cards on the table, as it were (Table 15.2).

One might quibble with some interpretive decisions.⁴⁰ But there is no way to dismiss the direct and explicit evidence of half of them (nos. 5, 9–11, 14–18) which claim arrivals or departures on or about the dates indicated. Except for Willibald's trip from Gaeta to Naples, most are substantial voyages, involving, according to the hypothesis of the shortest possible sea travel, a trip of 76 NM (140 km) across the open sea in the strait of Otranto (no. 6; see below). The early medieval Mediterranean was alive in the month of April.

October looks remarkably similar. If anything, the data for this month are even more secure. Again, one could quibble with some interpretations.⁴¹ In seven

40 Perhaps I have underestimated the time it took Willibald to reach Naples (nos. 1–3) and the arrival and departure of the Egyptian ship occurred a week or so later. Nonetheless, Gaeta was only four to six days' walk from Rome; from Gaeta to Naples was a quick sail of some 50 NM. See Pros. for the chronology of Willibald's movements. And when did the Egyptian ship shove off from its home port? Opinions also might differ about: the exact date on which the Arab ambassadors reached Marseilles in 768 being unknown (no. 4); the genuineness of the diploma of 870 (no. 8); the assumption that Peter did not travel overland through hostile territory in spring 779 (no. 13; or perhaps the letter is to be dated a year later; he then would have reached Rome in March).

41 The Spanish ambassadors, for instance, could have arrived before their audience on

24 October, since some envoys cooled their heels at Constantinople. But the emperor had solicited their visit and was eager for an alliance, and an eyewitness seems to suggest they were freshly arrived. Cf. the treatment accorded the papal envoys in 869, who also had come at Byzantine initiative: other obligations kept the emperor from receiving them the day after their arrival; they apparently were granted an audience immediately thereafter: Liber pont., Duchesne, 2.189.20–9; R594. Other potential differences of opinion: Liudprand did not board a ship in October; he did, however, board ships en route home in December and January. We do not know for sure the date on which a dying Pope Constantine disembarked from his ship at Gaeta, although Gaeta was less than a week's walk from Rome: see n40.

TABLE 15.2
Sailing movements dated to April (cf. Table 15.1)

Date	Movement(s)	Location	Place of origin or destination	R no.	Item no.
723	Willibald takes a ship	Gaeta	to Naples	108	1
c. last week in April 723	ship had arrived before; then it departed for Calabria, etc.	Naples	from Egypt; to Calabria, Sicily and points east	109	2-3
after 10 April 768	Pippin III's audience of Arab envoys around Easter; then they went to	Marseilles	to Damascus	175	4
774	Adalgis fled from	Salerno	to Constantinople	183	5
879	ambassador had already arrived at this date	Bari or Otranto	from Constantinople	660	6
927	Romanus I's privilege	Constantinople	to San Vincenzo	805	7
3 April 870	Louis II's envoys reached	Venosa	from Constantinople	602	8
c. 6 April 727	Willibald arrives	Constantinople	from Tyre	117	9
7 April 809	Arab raid	Corsica	from Spain	290	10
7-21 April 866	Byzantine fleet departs	Constantinople	for Crete	554a	11
10 April 824	date of imperial letter	Constantinople	to Frankish court	383	12
c. 11 April 779	envoy Peter arrives	Rome	from Naples	191	13
c. 13 April 814	Amalarius leaves	Constantinople	for Frankish court	330	14
c. 15 April 781	Theophilus leaves	Constantinople	for Sicily	196	15
c. 16 April 724	shortly before Easter Willibald reached	Paphos	from the coast of Asia Minor	111	16
18 April 727	rebel fleet had arrived at	Constantinople	from the Aegean	120	17
16-28 April 878	John VIII's letters	Rome	to Bulgaria via Constantinople; to Constantinople	650	18

cases, the October date is explicitly given in connection with arrivals and departures, and it is unmistakable in most of the others.

So the early medieval evidence is strong for early and late season sailings in April and October, when antiquity had counseled against it because of the risky weather. What is more, the arrivals and departures are not confined to the last weeks of April, or the first ones of October: travelers set out and arrived from beginning to end of both months, as Tables 15.2 and 15.3 show. Of course, in all

TABLE 15.3
Mediterranean movements occurring in October

Date	Movement(s)	Location	Place of origin or destination	R no.	Item no.
681/7	Arculf arrives	Alexandria	Jaffa	42	1
801	convoy with elephant lands	Porto Venere	from Africa	256	2
829	Arab fleet meets and defeats Byzantines	Thasos	presumably from Crete	411	3
829	Byzantine fleet meets Arabs	Thasos	from Constantinople?	411	4
888	Arabs defeat Byzantine fleet at	Milazzo	from Constantinople	720	5
c. October 888	Elias 1 flees impending Arab attack	to Patras	from Reggio	719	6
c. October 888	Elias returns as soon as Arabs leave	Reggio	from Patras	719	7
911	Himerius and Byzantine fleet attack	Crete	from Cyprus	778	8
2 October 968	Liudprand leaves	Constantinople	for Italy	828	9
5 October 709	Pope Constantine leaves	Rome	for Constantinople	73	10
shortly after 5 October 709	Rizokopos leaves Naples	for Rome and Ravenna	from ?Sicily and/or ?Constantinople	74	11
12 October 711	large Byzantine fleet sets out	from Cherson	for Constantinople	78	12
24 October 711	Pope Constantine	reaches Rome	from Constantinople, after landing at Gaeta	79	13
24 October 949	ambassadors' audience	at Constantinople	from Cordova	818	14
26 October 785	date of Hadrian I's letter	Rome	to Constantinople	208	15

periods, when its supreme interests were at stake, servants of the state did sail. That might account for one or another voyage (e.g. Table 15.2, no. 6). But, however eager Charlemagne was to see his elephant, transporting the beast across the Mediterranean was scarcely such a case (Table 15.3, no. 2); nor was Elias' return to Reggio after the Arab raid, nor Arculf's trip to Alexandria (Table 15.3, nos. 7 and 1, respectively). Nor can one argue that these are all very short hops. For October movements, the shortest sea stretch implied by these movements is the strait of Otranto; the rest are longer, usually much longer. Indeed, in

one instance (no. 14) the voyage ran from the Atlantic Ocean to the Bosphorus. So how do we explain this trend?

Technology may have had a hand in it. Climate too. The lateen sail was now at home in the Mediterranean (see above, p. 408) and gave ships superior sailing abilities against the wind. Compared with ancient ships, the new rig therefore made sailing easier in periods of unstable weather. It is precisely shifting winds that tend to mark the end of the Mediterranean summer. Although the debate is only in its early stages, it is, moreover, beginning to seem that the early medieval climate was different. Notwithstanding the apparent sameness of some ancient and modern winds and the accuracy of modern navigational aids in describing early medieval conditions in certain times and places, it is still too early to rule out some differences at the margins.⁴² But even more important, probably, were characteristics we have already noted (Ch. 13.3) and which will find further support in the analysis of routes. Early medieval ships were small; they easily put into the mouths of minor creeks, tiny coves, or even more or less sheltered beaches. Joined with the tendency for early medieval sailors to stick to regional waters, and therefore to know every nook and cranny of the local shoreline, this made it much less risky to sail in the changeable weather of spring and fall for most of these travelers. When, thanks to long experience of familiar cloud or wave formations, the sensation of atmospheric pressure, or the behavior of sea birds, local sailors felt trouble approaching, they usually were but a long stone's throw from the safety of dry and familiar land, aboard ships that could beach almost anywhere along a coast they would have known like the palm of their hand. Paradoxically, precisely the most decried aspects of early medieval navigation, its small ships and local leanings, best explain its advance with respect to ancient sailing, at least as far as lengthening the sailing season is concerned.

Winter

The winter months raise a final issue. About them Chart 15.1 suggests several observations: the first is, as one would expect, that activity decreased during the traditional closing of the sea, from November to March. The second is that activity nonetheless was taking place: almost a fifth of all movements occurred during the winter months. The third observation is more interesting still: the winter months present a two-tier level of activity: the nadir, in January and February, and the low but active levels of November, December, and March.

42 One might imagine with respect to anti-quity, e.g. more stable weather for somewhat longer or different periods in some parts of the inland sea. See nonetheless for

the applicability of modern navigational data, above, n32, and below on the strait of Otranto.

The first reaction is to scrutinize the data more closely for special features which might explain the surprising levels of activity. Some part of the proportion of our early medieval travel in marginal seasons reflects in fact the very anomalous character of such travel: observers tend to mention the unusual rather than the routine, and the overall pattern of arrivals and departures has shown clearly that winter movements were unusual (Chart 15.1). Several December movements reflect special circumstances also: they come from the rich series of miracles associated with St. Nicholas, which naturally tend to cluster around the saint's feast day (6 December).

By classical precept, the sea closing, however reckoned, always included the months from November to March. This was when sailing was extremely dangerous, both because of storms – in medieval as in ancient and modern Greek the word for winter (*cheimōn*, etc.) means also “storm” – and because of the quieter, but deadly danger of poor visibility: short days, long nights, thick clouds, and fog, not to mention rain and snow storms, all added to the risk of winter sailing.⁴³

Again, one could quibble with one or another of these datings, but that would not affect the larger picture. Two of these movements occurred after a major shift in the infrastructure of communications to which we shall return. It suffices to note here that they probably do not reflect sea travel, at least in the initial legs (Table 15.4, nos. 3 and 13; see Chapter 19), and so do not concern the sea closing. Another three (nos. 4–6) cluster right around 11 November, the classical date for the closing of the sea. What is more, they took place in the same year, so here we might be seeing only exceptionally fine weather. The significance of the papal envoys' arrival just before Christmas (no. 15) is uncertain, since they were just then returning from captivity among the Croats. They presumably crossed the Adriatic by ship, but it is conceivable that they traveled some more roundabout way. One trip (no. 22) may have covered only a few miles along the southern shore of Constantinople: for that kind of short hop, one needed only to await a break in the winter weather. However, Demetrius' pilgrimage from Constantinople to Athyras was an annual custom he kept for St. Nicholas' feast: there is no hint that the fact that he traveled by sea that year was exceptional. The ship sailed well into the night, covering a distance of some 27 NM, and it provides a first clue of what was happening in other cases.

Three winter movements certainly involved more substantial, and dangerous voyages. All nevertheless fit the ancient pattern for winter sailing: something which was very risky, but not impossible if the stakes were high enough. This describes the arrival of news of Constantine V's death (no. 23), for transitions of

43 For the word, e.g. *Sea Law* 3, 43, 36.1; for, e.g. *acheimastos*, “storm free”: V. Nicetae patricii (BHG 1342b), 30, p. 347. Visibility,

particularly, and storms, e.g. Vegetius, *Epitoma*, 4, 39, 7, 248.729–32; Pryor 1992, 87.

TABLE 15.4

Movements occurring in the period of the "closed sea" (cf. Table 15.1)

Date	Movement(s)	Location	Place of origin or destination	R no.	Item no.
November 839	Byzantine envoy reaches	Cordova	from Constantinople	445	1
November 901	Byzantine naval raid	Syrian coast	from the Byzantine empire	748	2
10 November 871	Letter of Hadrian II	to Constantinople	from Rome	614	3
c. 11 November 813	Arab raid	Reggio	from Spain or Africa?	325	4
11 November 813	papal envoy returns	to Rome	from Sicily	325	5
after 11 November 813	papal ship brings news from Constantinople	to Rome	from Byzantine Italy or further afield	326	6
20 November 968	Liudprand boards ship	from Naupaktos	to Offidaris (mod. Euenos) river	828	7
30 November 726	Willibald boards ship	from Tyre	to Constantinople	117	8
2 December 968	Liudprand sails	from Offidaris	to Leukada	828	9
3 December 819/890	Arab raid	on Sicily	from Africa	361a	10
5 December 824/900	Arab raid	on Myra	from Crete	386a	11
6 December 850/900	Demetrius pilgrim	from Constantinople	to Athyras	386b	12
1 December 867	Basil I writes	from Constantinople	to Rome	573	13
4 December 968	Liudprand sails	from Leukada	to Kerkyra	828	14
2 December 870	papal envoys finally reach	Rome	from Constantinople via captivity in Croatia	606	15
3 December 800	Zachary reaches	Rome	from Jerusalem	248	16
January 969	Liudprand sails	from Corfu	for southern Italy	828	17
20 January 788	Byzantine officials land	at Agropoli	from Sicily and ?Constantinople	217	18
20 January 788	Byzantine officials send news	from Naples	to Constantinople	218	19
February 781	Elpidius sent	from Constantinople	to Sicily	195	20
February 911	Leo VI's privilege at	Constantinople	for Monte Cassino	776	21
February 868	Basil I sent a grain ship	from ?Constantinople	to Stoudiou, at Constantinople	582	22
7 February 776	news reaches	Rome	from Constantinople, via Naples	185	23

power in Constantinople were always dangerous, fraught with the potential for civil war and usurpation. The January arrival of envoys from Sicily and, probably, Constantinople is equally impressive, as is dispatch of news to Constantinople from Naples (nos. 18–19). But these too were matters of utmost gravity for the state. The arriving envoys were charged with laying the groundwork for Byzantium's impending invasion of Italy. The news they sent in the other direction was no less momentous: the critical local ally had died, throwing the whole plan into jeopardy, just as war with the Franks was about to break out.

Even with these trips factored out or explained in traditional terms, there remain the other, indubitable voyages that occurred during the season when the seas had theoretically closed, and which no supreme political interest explains. So far as we can tell, Willibald had never been in a hurry to get anywhere, yet he found a ship which sailed all winter long, from Tyre to Constantinople. Zachary's remarkable trip home from Jerusalem was doubtless a matter of some prestige for the king, but it is hard to conceive that it was a matter of life or death. Besides, both of these travelers had to content themselves with the means of transport available to them, which means that some shippers were sailing outside the traditional parameters. Liudprand was traveling with the help, or rather the hindrance, of the Byzantine state. He had unpleasant news, but the fate of Ottonian power probably was not riding with him. The Arab raiders may have been fortified by religious zeal in the course of their attacks, but the details of what they did on them shows that they were mostly slave-gathering enterprises. They aimed at profit, not suicide. In sum, some early medieval ships plied the Mediterranean over lengthy courses even in the dangerous weather of winter for purposes which fell short of life or death.

These communications prove that, unless our understanding of late antique shipping patterns requires substantial revision, early medieval sailors were more likely than their ancient forebears to brave the wintry sea. Two Byzantine navigational treatises from the end of our period confirm that the ship movements that we have observed in November, early December, and February were a real part of early medieval practice. These treatises warn of the most dangerous times for storm. In keeping with contemporary cosmology, they ascribe storms to the rising of particular stars or constellations.⁴⁴ The list of dangerous days is long.

One treatise is ascribed to the wisdom of the Mardaite. These Byzantine seadogs had fled the mountains of Lebanon to the coast of Pamphylia, where they bore the brunt of the early naval war against the triumphant Muslims, under the commander of the naval province of the Kibyrrhaiōtai. Between 25 March and 14 November, this treatise lists many dangerous days and weeks when one could

44 The "Mardaite" and the Anonymous Prōtopatharios have been dated to the second half of the 9th or the first half of the

10th C.; on their date and characteristics: Dagron 1990, 150–6.

expect storms, as well as particularly serene weather. For this author, almost any time at sea was dangerous. But only from 14 November to 15 February did “no che-landion or galley sail.”⁴⁵ Early November was in fact a good time for sailing.⁴⁶ In other words, this author’s conception of sea-closing ran considerably shorter than the ancient one. The second treatise is ascribed to an anonymous Prōtopatharios and military governor of the Kibyrrhaiōtai. It describes many of the same dangerous stars and their storms. It too signals 15 November and the setting of the Pleiades as the beginning of very stormy weather.⁴⁷ But the “Prōtopatharios” limits this most dangerous period to forty-nine days: it ended on 6 January. And he declares that sailors sail from that day until 20 March, since the sea in that period is neither prone to much storm nor perfect tranquillity.⁴⁸ He then catalogues the successive phases of the sailing season from 25 March in a way that recalls the Mardaite wisdom.⁴⁹

By their ascriptions and some of the details they provide on the Arabs, these treatises are redolent of the seafaring world of southern Asia Minor in the ninth or tenth century. The navigational conditions which obtained there perhaps do not automatically apply to the rest of the Mediterranean. They nonetheless supply a context which confirms what our other evidence suggests: the period in which the sea was reckoned to be closed for all but emergency sailings in the early Middle Ages was shorter than that which appears to have obtained in antiquity. Sailing came almost or completely to a standstill in December according to both eras. They differ on how soon thereafter it might resume, but it is clear that even though one could sail in January, the conditions were reckoned at least moderately difficult. All in all, the testimony of actual ship movements and navigational treatises is mutually reinforcing. This is particularly so for the case of Willibald’s long haul from Tyre to Constantinople, which began in late November and lasted all winter and into April: his ship was sailing precisely in the home waters from which the two treatises stem.

Winter sailing close up

The best picture of what winter sailing was usually like comes from Liudprand’s voyage from central Greece to Italy. Each leg presented specific navigational

45 “Mardaite,” *Navigational Treatise*, 171.11–173.14; quote from 173.13–14. These are both of course warships; this leaves open whether the author thought other ships were at sea.

46 *Ibid.*, 173.7–12.

47 Anonymous Prōtopatharios, *On the Stars Observed by Sailors*, 174.1–15.

48 *Ibid.*, 174.20–24; the author even seems to assume that some sailing might occur in the forty-nine days of frequent storms, since he warns that the “star of St. Nicholas,” i.e. 6 December, also causes a storm: 174.18–19.

49 *Ibid.*, 174.2–176.3.

conditions (Map 18.2). Liudprand kept closely to the kind of coastal sailing that seems so characteristic, regardless of the season. From a small port or a river mouth, his ships watched for a break in the weather, then scooted along the coast to the next stop, where they put in and awaited the next good weather.⁵⁰ This meant three days’ waiting at Naupaktos followed by two days’ travel to the river Euenos, and then another week of waiting, due to the bad weather and anger of St. Andrew, whose shrine Liudprand had failed to visit this time around. A break in the December weather let him make the next leg, arriving at the Ionian island of Leukada after a four-day sail. He stalled again in Leukada, this time for eight days. Then it was off to Kerkyra (Corfu), which he reached after another four-day sail. He was stuck on the island for twenty days; he ascribes the delay this time to the sheer evil-mindedness of the local governor. These three hops measured approximately 20 NM each, and about 70 NM each for the next two legs (Table 15.4, nos. 9 and 13). The way Liudprand describes the four-day voyage from the Euenos river to Leukada (no. 9) confirms that his ships sailed mostly when the weather was fine, and waited on shore when it was not. Over those four days, the sea was perfectly calm and the only navigational problem they faced was that of turbulent currents at the mouth of the Acheloos river. This confirms that Liudprand’s ship hugged the coast; strong currents at the river mouth are scarcely surprising during the rainy winter season.⁵¹

But hugging the coast could get you only so far. The most dangerous leg of Liudprand’s trip offers insight into extremely specific conditions within yet another of the many small seas which, in Braudel’s vision, constitute the greater Mediterranean. It came when the ambassador took another ship across the strait of Otranto (Map 16.1). Presumably the vessel was local and its crew expert in these treacherous waters. Liudprand set sail from Kerkyra, surely for Italy, on 7 January.⁵² A very close counterpart to this tenth-century crossing occurred during the winter of 709–10, as Pope Constantine’s convoy was struggling eastward toward Constantinople.

General climatic conditions in the summer produce prevailing winds from west to east which make sailing eastward in the Mediterranean much easier than the opposite. Toward the winter, the situation shifts somewhat, especially in the

50 *Legatio*, 58–65, 207.8–212.38. The coastal character of his movements follows from his explicit statement (59, 207.22–5), the lengths he gives, and a detail about turbulence, below.

51 *Legatio*, 66–8, 208.30–210.25; on Leukada, see TIB 4: 195.

52 The end of Liudprand’s report is lost, but

his reference (*Legatio* 58, 207.16–17) to his trip home to Otranto, along with his diatribe on the status of that see and the usual sailing route (see below) show he went there from Kerkyra. Leo koitōnites thus is an official in Byzantine Apulia. A possible candidate is Leo, *patrikios kai stratēgos Langobardias*: von Falkenhausen 1978, 85.

eastern Mediterranean.⁵³ Liudprand and an earlier papal envoy probably profited from a local variation on this broader winter pattern. The winter weather had prevented the papal retinue from crossing the Ionian Sea eastwards, blocking Pope Constantine's ships at Otranto. Precisely during the delay ("Dum . . . moras faceret"), a papal envoy arrived at Otranto from across the sea, traveling westwards from Constantinople.⁵⁴ The fact that the papal ships stalled at Otranto is not surprising, since in this season it would be normal for the prevailing winter wind at the exit of the Adriatic Sea to be a cyclonic sirocco blowing east-south-east to south-south-east, that is, in just the opposite direction from that required by an eighth-century ship to sail southeast across the strait. Conversely it was perfect for the envoy who needed to sail west across the strait, toward Otranto.⁵⁵ The papal envoy who made that winter crossing, Liudprand, as well, probably, as the Byzantine envoys who had reached southern Italy by April 879 (Table 15.2, no. 6) all benefited from identical local winter sailing conditions, which ran against the prevailing summer wind patterns.

Another factor

The strait of Otranto is something of a special case. But detailed research will probably reveal others. For instance, specific geographic features characterize the Bosphorus, with its narrow channel, and the land- and peninsula-studded waters of the Sea of Marmara and especially the Aegean, where one island so often stands in sight of others and a stone's throw from the mainland. Here too the scope for coastal sailing is great, even in winter. Then as now the very topography of the Byzantine capital invited quick, short boat trips between the city's different neighborhoods, and to the suburbs across the Golden Horn and the Bosphorus when good winter weather beckoned: the transport on 2 February of grain by boat to a monastery in the westernmost sector of the capital is a case in point (Table 15.4, no. 22). Ship movements, rare and more dangerous, but nonetheless real, even in the winter, were part of the fabric of life in the central sea corridor of the Byzantine empire that ran from the Black Sea and through the Aegean.⁵⁶

53 See Pryor 1992, 15–21.

54 The envoy was bearing an imperial mandate upgrading the logistical level of their transit facilities to that accorded the emperor himself: R75.

55 Simovic et al. 1986, 14–15.

56 In addition to the more precisely dated trips summarized in Table 15.4, middle Byzantine sources mention a number of such trips assigned only generally to the "winter." Invoking a saint calmed a

terrible lightning storm at sea one winter's night in the 9th C.: *V. Petri Atroae* (BHG 2364), 40, p. 155; cf. *V. Petri Atroae retractata* (BHG 2365), p. 115. During Lent (i.e. sometime between 2 February and 24 April, the earliest and latest possible days of that liturgical season, depending on the year), a disabled ship was being driven toward shipwreck on the southern shore of the Sea of Marmara when Theophanes' prayers saved it: Methodius, *V. Theoph. Conf.*, 23,

TABLE 15.5

Sailing movements dated to March (cf. Table 15.1)

Date	Movement(s)	Location	Place of origin or destination	R no.	Item no.
March 868	Byzantine fleet with army reaches	Sicily	from Constantinople	584	1
March 911	navy squadron sent to reconnoitre	from Attaleia	to the Syrian coast	775	2
18 March 843	Byzantine fleet leaves	Constantinople	for Crete	462	3
18 March 862	Pope Nicholas I writes	at Rome	to Constantinople	542	4
well before 25 March 773	papal envoys land	at Marseilles	from Rome	181	5
25 March 901	Arab fleet leaves	Palermo	for Messina	742	6
25 March 919	Romanus I arrives with a fleet	at Constantinople	from less than a day's sail away ^a		7
29 March 840	Arab slave raid	at Osor	from Taranto	449	8
c. 1–20 March 797	under arrest, Theodore Studite sails	from Lampsakos	to Embolos, via Abydos, Lemnos, etc.	235	9

Note:

^aTheoph. Cont. 6, 12, 393.18–394.1.

Yet outside the protected waters of the "Sea of Marble" and the Aegean's narrow channels, or those where special conditions might prevail, winter sailing remained dangerously exceptional, and sometimes miraculous. Thus, around 800, when Bishop George of Amastris (mod. Amasra, Turkey) on the Black Sea learned that some merchants of his town faced execution in Trebizond, he braved the winter weather and sailed some 400 NM to deliver them. The sea was miraculously tranquil during the holy man's voyage.⁵⁷

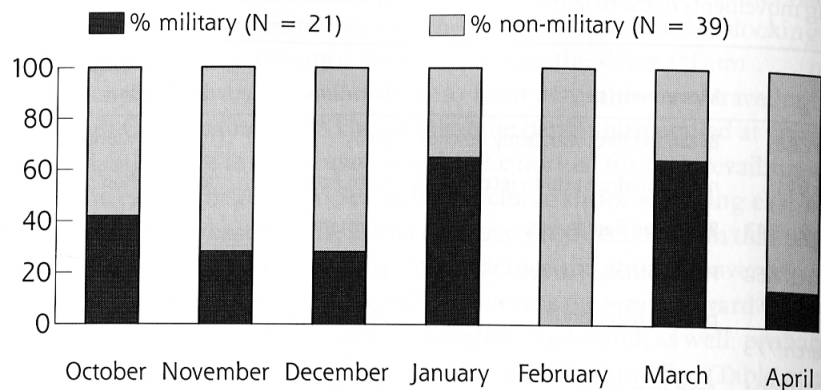
The remaining trips in Table 15.4 uncover another, special circumstance which especially fostered sailing in marginal weather. What this circumstance becomes clear when we examine the ship movements catalogued for the month of March, when ancient observers also considered the seas very risky.

The only movements which concern normal, peaceable communications were the papal letter and the transport of Theodore Studite and other prisoners from Bithynia to Thessalonica (Table 15.5, nos. 4 and 9). The papal envoys of 773

25.6–15. Another winter we hear of a ship with many passengers aboard, apparently sailing on the Sea of Marmara: *V. Constantini Iudaei* (BHG 370), 54, 643E–644A.

57 R225; on the two ports: TIB 9: 161–70; on navigation along the northern shore of Asia Minor, which affords little shelter from weather sweeping across the Black Sea, TIB 9: 135–7.

Chart 15.2. Comparison of military with non-military ship movements, October–April



This graph shows the substantial proportion of military operations among the ship arrivals and departures recorded between October and April. Naval activity, as opposed to other types of shipping, peaked in October and March. Reckoning by percentages of each month's activity overstates the significance of the evidence from January and February.

exceptionally took a ship along the Italian coast because the Lombard king was threatening Rome: this was indeed a matter of life or death. All the other ship movements are military. Of the sailings which occur on the fringes of the normal sailing season, a large part are connected with issues of war and peace, and indeed, mostly war. This emerges clearly from Chart 15.2.

We may perhaps attach little importance to the starkly contrasting proportions of January and February, since movements slowed in any case to the point that the value of the tiny number for each month (three) is overstated by the translation into percentages. That exception aside, the chart shows clearly that military movements were a large proportion of all movements during the bad weather months. They were a clear majority in March. When one looks at the more traveled months of October, November, and December, military movements constitute a significant share as well. The reason becomes clear when we recall that the pope solicited Byzantine warships to guard the Italian coast from April to September: he expected no defense of his coast between October and March. Many of these bad season naval operations were raids: hit and run attacks made the tactical element of surprise a fundamental condition for success, and that is what winter sailing allowed.⁵⁸

For instance, the retaliatory mission of John against the church of Rome resulted in the execution of a number of high church officials. One now sees that it

⁵⁸ For another possible case of a raid in November, see R63.

was probably scheduled for sometime in October 709, when the town might be taken unawares (Table 15.3, no. 11). The tactical element of surprise must surely have played a role in the timing of the major Byzantine raid on Syria: the news reached Baghdad on 27 November 901, implying that it happened slightly earlier in the month (Table 15.4, no. 2). The landing of Byzantine military and political officials at Naples on 20 January 788, which in turn prompted the emergency communication to Constantinople of urgent news, was the prelude to a large-scale Byzantine invasion of Italy (Table 15.4, nos. 18–19). On the other side of Italy an Arab squadron raided Osor and the northern Adriatic, beginning on 29 March (Map 18.1).⁵⁹ One early Byzantine attempt to reconquer Crete set out from Constantinople on 18 March. In March 868, the Byzantines tried a major landing in Sicily, launched apparently from Constantinople, which again implies a departure very early in the spring, or even in late winter (and, probably, exploitation once again of the special winter wind conditions in the strait of Otranto). On a regional level, an Arab land and sea operation against Messina set out from Palermo on 25 March 901 (Table 15.5, nos. 3, 1, 6, respectively). From a military perspective, there was often much to be gained from ventures at risky times: thus the internal government report on Himerius' failed invasion of Crete in 910 notes that a squadron was sent to the Syrian coast in March, to scout out enemy military preparations on the eve of the great undertaking. In this instance, the need for timely intelligence is stressed, but one may surely suppose that Arab coastal surveillance was looser in the early spring. In a sense, the element of surprise in these unseasonable military movements confirms the rule of a substantially slackened shipping in the early medieval winter. And they underscore the shift from late antiquity, when sailing ceased longest precisely for military operations.⁶⁰



Early medieval land and sea travelers moved in all seasons. Very local and short coastal movements certainly continued, even in December or January. But longer-distance sea travel in the worst weather months, December and all or part of January, was chiefly confined to the most urgent political or military matters – chiefly, but not exclusively, as Willibald's winter trip from Syria to Constantinople

⁵⁹ Table 15.5, no. 8. It had followed immediately the defeat of a Venetian squadron which had joined a Byzantine fleet in attacking the Arab stronghold of Taranto, sometime between 22 February and 29 March 840: R450.

⁶⁰ Why this difference? One possible explanation is the development of more seaworthy warships, exemplified perhaps by the

transition from ancient *liburnae*, still emphasized in Vegetius, to the *dromons*, on which see the forthcoming study of Jeffreys and Pryor (ch. 13, n60). Another may be that the appearance of permanent enemy fleets around the Mediterranean changed profoundly the nature of naval operations, with respect to late antiquity.

shows. Sailing in the bad months was not fast, and therefore not very efficient. But it could and did happen more than we are used to thinking. In general, early medieval seamen appear to have set sail more commonly in the higher risk periods of early spring and late fall than is believed to have been the case in antiquity. From an economic perspective, these early spring and late fall sailings are likely to have been more significant than deep winter voyages, which were mainly military. Byzantine navigational practices are better documented than western ones, and they confirm the evidence of actual ship movements, that the period of winter closing was shorter in the early Middle Ages. This might have been made possible in part by technological change (the lateen sail) and perhaps also by climatic change. But it was surely encouraged by two characteristics which are often cited as prime shortcomings of early medieval navigation. Ships tended to be small, and so could easily keep to shallow waters near shore and beach. Then they could run for shelter in a cove or river mouth when the weather changed, as it was apt to do between mid-September and early May. That many ships and seamen probably tended to ply more regionally circumscribed routes (Ch. 18.3) means further that the sailors knew better where those safe refuges were, and how to exploit or avoid the special and highly local weather conditions of their home waters. Paradoxically, in other words, the rather small scale of early medieval shipping fostered lengthier sailing seasons, and therefore the opportunity for more numerous ventures. At least on the margins, change characterizes the seasonal patterns of early medieval navigation.

Time under way

HOW LONG DID it take to move from point A to point B? The speed of travel has usually attracted scholars seeking to understand and reconstruct particular events. But its implications are critical for evaluating the economic significance of communications patterns around the inland sea: the velocity of circulation of people and things is essential to their economic potential.¹ Once we detect the speed, or speeds, of travel, we can ask whether they changed. Moreover, the speed of travel and communications sheds indirect light on other important matters, such as the state of the infrastructure.

But it is not an easy issue. Direct, explicit early medieval evidence on travel times is scarce and scattered. So much so that Liudprand of Cremona's valuable Mediterranean testimony has served the discussion of nautical speeds in the very different cultural, climatic, and navigational setting of the northern seas.² Of even more consequence to analysis is the fact that both the evidence which has long been known and the new data made possible by this study are very disparate. This makes a few distinctions essential, since the kind of travel described might affect both speed and routes. Between ships, for instance, pilgrims did not necessarily follow the same schedules as merchants, and we have already seen that reasons of state compelled officials to take seasonal travel risks that merchants might have avoided. While pilgrim accounts certainly throw light on the infrastructure of early medieval travel, unless we know that the pilgrim boarded and remained on a particular ship, they are not necessarily reliable evidence on typical speeds between two distant points, especially if there were sights to see or relics to venerate in between. Willibald's famously nonchalant tour may well correspond more to his sightseeing plans than to the exigencies of contemporary shipping infrastructures; using it *alone* as evidence on the slowness of connections between Italy and the Aegean or Levant is a dicey proposition.

¹ The point is well made in another context by Langdon 1986, 270-2.

² Ellmers 1972, 250.