

Commerce, communications, and the origins of the European economy

THE MEDITERRANEAN world that appears in the pages that follow may sometimes seem a different place from the one that historians have imagined until now. It is a world whose long-buried air pollution is prompting scientists to hypothesize about the changing aggregate metal production of the Roman empire, even as ships that sank centuries ago emerge from the ghostly depths laden with the secrets of an age once thought dark. Archaeologists now plot the ebb and flow of exchange from the tons of Roman ceramic containers issuing from excavations, or the spread of Arab-style buttons and weighing scales across ninth-century Scandinavia. It is a world in which Merovingian relic collectors eye the shrines of Byzantine Asia Minor, and their Carolingian successors focus on those of the Arab Middle East. In the 790s, a word stemming from the Malay tongue of southeast Asia makes its way into a Carolingian book written 15 km from the Rhine. In the same years, the pope who welcomed Charles the Great into Rome was also credited with helping the bishops of Africa, and he was but the first of his age to engage on the opposite shore of the Mediterranean.

In this world, we meet the same Bulgarian aristocrat on the banks of the Tiber and the Bosphorus. Jewish merchants trade at a European saint's fair and seek religious advice from learned rabbis living in Iraq, while Muslim businessmen from the Middle East report on the textile market of Rome. Mass conversion to Judaism on the eastern edge of the Black Sea intrigues a Carolingian scholar and infuriates a Byzantine emperor in Constantinople. We spy Frankish captives in jail near Baghdad, and catch a glimpse in Jerusalem of seventeen devout women from Charlemagne's empire serving the shrine of the Holy Sepulcher. It is a world in which Christian travelers in the Mediterranean can be observed and counted, not in tens and twenties, but in their hundreds. In this world, a powerful abbot in central Italy keeps his cash savings in Arab dinars, a pope festoons the shrines of Rome with hundreds of yards of precious silk, and a biblical commentator at work in the Ardennes talks about the Arab candy brought to him by travelers. In this world too, one discerns, dimly and sporadically, the figure of Europeans, driven in chains

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down the Alps or across the Apennines to the grim vessels that would ship them across the sea. A life of slavery in Africa and the Near East awaited these children, women, and men, whose bodies purchased the early wealth of Christian Europe.

From the end of Rome to the origins of the European economy

The problem of the transformations of the Mediterranean world, the end of Rome, and the origins of the European economy has excited historians of all obediences for most of the twentieth century. Few of them would recognize the picture just sketched, but that is not for lack of their efforts. Commerce and shipping, in particular, have sparked lively debate among historians of early Europe since the 1920s. The reasons are clear. Commerce has usually been deemed indispensable to assessing the economic characteristics of any civilization, including that of early medieval Europe. Its place in the early medieval economy illuminates the broader issues of the continuity or rupture of the first European civilization with respect to the ancient world that preceded it, and to the Europe that followed it. The signal role of international trade in the modern economy which produced the best historians has only deepened the resonance of the debate. The clear and contrasting positions about Carolingian commerce developed by two distinguished economic historians, Alfons Dopsch (1918–20; 1921–2) and Henri Pirenne (1922; 1923; 1937) still echo and shape discussion three quarters of a century later.

Carolingian commerce ranks among the most controversial issues in medieval economic history.¹ Despite enormous and learned efforts, there is little consensus. Like Maurice Lombard, a few “maximalists” see a thriving long-distance trade in Charlemagne’s Mediterranean, along the lines of what Dopsch envisioned.² But “minimalists” predominate today. They follow Pirenne, even if they do not accept his explanation that the Arab conquest killed international commerce. Almost emptied of ships and trade, their early medieval Mediterranean is reduced to near prehistoric levels of commerce, and their Europe stood isolated from the greater economies of the south.³ As Pirenne already sensed, this desolate

1 Thus Johaneck 1987, 8, at the beginning of his good overview of Carolingian trade north of the Alps. See also, e.g., Hübinger 1968; Claude 1985a, 9–16; Genicot 1987; and Verhulst 1993.

2 Dopsch 1921–2; Bolin 1953; Lombard 1972.

3 A few examples from many: Pirenne 1937; Hodges and Whitehouse 1983, 75; cf. Hodges and Whitehouse 1996, 170; Doehaerd 1971, believes that some commercial contacts occurred (e.g. 289–90), but tends to discount their economic

significance and to emphasize the changeless poverty between the fifth and tenth centuries (350–2), even if there were some scattered, timid signs of growth in Carolingian Europe. Cahen 1980, 22, believes that despite some continuing contacts, “genuine links, direct and intense” occurred only from the tenth century onwards. The stimulating work of Horden and Purcell 2000 appeared too late to be used here.

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Mediterranean contrasts strikingly with the economic effervescence increasingly visible from excavations around the North Sea. And, as if Carolingian commerce were not enough of an issue in itself, assessing it leads directly back to that greatest of historical problems, the fall of Rome and the end of the ancient world.

The reason for the lack of consensus on Carolingian trade is straightforward. Written sources that explicitly document Mediterranean commerce in the eighth and ninth centuries are rare and recalcitrant. This has obliged historians to rely, essentially, on a few anecdotes about merchants and imported fineries. The problem with anecdotes, however vivid, is that one is hard put to prove whether they illustrate the exception or the rule. To the firm believer in rising Mediterranean trade, a late report of a trader at Charlemagne's court who was in contact with the Holy Land is but the tip of the unrecorded iceberg; to the skeptic, he seems the rare bird a voluble biographer mentions just because he was so exceptional, and therefore noteworthy.⁴ Since the volume of scholarly discussion now far outweighs the evidence to which it is devoted, it might appear that everything that could be said about Carolingian merchants has been said.⁵ Why add one more study to a bibliography which is already lengthy?

Simply put, new insights are transforming the broader historical and economic context in which the old debate on Carolingian commerce in the Mediterranean has been played out.⁶ A scholarly Rip Van Winkle who went to sleep over his late Roman or early medieval dissertation twenty years ago would scarcely recognize the age which recent research has unveiled. New methods and tools have sprung up and invite new questions. Together, the new insights and new tools open large new vistas to the historian. The time is ripe for trying new approaches to old problems, including this one.

In the first place, a new and very different consensus is redefining the broader economic context into which Carolingian commerce fits. This is nowhere more clear than in the current understanding of the great estate, an institution that not so long ago symbolized all that was backward and inefficient in the early medieval economy. The time is also ripe because of an explosion of new information about shipping and exchange in the late antique Mediterranean. Appraisal of the Carolingian economy is necessarily shaped by what preceded it. However we understand the trend around 800, if, as Pirenne thought, shipping and commerce flourished at the end of antiquity, that would make the trend

4 E.g. Notker the Stammerer, *Gesta Karoli magni imperatoris*, I, 16, 19.20–20.22.

5 For instance, Lopez, once something of a maximalist, declared that the great debate about the volume of trade must be abandoned because it is moot: 1987, 309. This is not, of course, to deny that the debate has contributed greatly to illuminating other

aspects of Carolingian commerce, as Lopez himself notes. See below, Part V.

6 Just one large example which is only now coming to fruition is the European Science Foundation's program on the transformation of the Roman world: see the overview in Wood 1997.

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c. 800 appear very different from what it would seem if late antique trade had collapsed. But more than just the amount of information and its context have changed.

Earlier arguments relied heavily on information about traders in narrative sources, or more exactly, on the scarcity of that information. In the last decade or so, however, historians' approaches to early medieval literary sources have undergone a sea change. Latin and Greek works from the period have begun to be recognized as literature. Simple as it appears, this affects, deeply, how we interpret them. Historians, but also poets, biographers, and letter writers of late antiquity and the early Middle Ages are no longer viewed as direct, objective reflections of reality, to be quarried without querying the "facts" – and silences – which they contain, in light of the literary and social filters which sifted and shaped their observations.⁷

New methods are changing and deepening the testimony of old sources in more ways than one. Prosopography, the collective biography of many incompletely documented individuals, has just begun to produce dividends, by unveiling collective patterns of behavior which have lain concealed under the mass of individuals. Hagiography, the most venerable of all our subdisciplines, is moving beyond the old and honored obsession with "true" and "false" saints, to new questions which expand the explanatory power of the largest single body of evidence to survive from the early Middle Ages. Numismatics, as practiced particularly in Great Britain and France, has gone from triumph to triumph, creating incomparably greater precision in understanding the development of early medieval money and its movements. And who can do medieval history in the twenty-first century without appreciating that the digital promise of the 1960s is now entering fulfillment, in ways both anticipated and unforeseen?

The most obvious of promises fulfilled are the new full-text databases and the awesome speed and exhaustiveness of the digital search techniques they allow. Vast collections of texts are now available in research libraries and, increasingly, on-line: all 222 volumes of the crotchety old *Patrologia latina*, 300 some volumes of the *Corpus christianorum*, a piece of the venerable *Monumenta Germaniae historica*, or the partial text database of the Dumbarton Oaks Byzantine hagiography project. So far, their importance has been double. In the pre-digital age, no historian of early medieval trade could have afforded to spend months reading fifteen or twenty thousand serried columns of Migne's *Patrologia latina* hoping to stumble on a stray mention of early medieval toll collectors. Even if one had that kind of ideal leisure, one could never be sure that the sole occurrence had not slipped by in a moment of fatigue or distraction. The speed of the new tools

⁷ Goffart 1988. Dopsch 1921–2, I: 26–8 (cf. v), long ago pleaded for economic

historians to consider their sources no less critically than other historians.

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makes such risky queries – does the word for toll station (*teloneum*) show up in Carolingian biblical exegesis? – a matter of seconds (ch. 22.1). The ability to fail cheaply fans audacity. Hence this book has been able to thicken the relatively thin dossiers that illuminate late antique and early medieval commerce, through digital searches which became feasible in its late stages, to be sure, but also through the old method, if that is the right word, of wide reading and serendipity.

The digital revolution has made a second and equally important contribution. The swift and exhaustive mustering of parallel word usages allows more precise interpretation of the slippery and still ill-charted languages of early medieval writers. A less obvious, but no less important advance has come from the diffusion of powerful computers into almost every scholar's office. They allow any of us to manipulate far larger sets of evidence than have ever been deployed in this debate.

But the best of tools are no better than the questions to which they are applied. In this respect too, it is time for change. Though the new digital tools expand it somewhat, the fact of the matter is that explicit evidence on long-distance trade and shipping is not abundant in the written sources. A much more dramatic change in the amount of data at our disposition comes from reformulating the question. No scholar can read Dopsch and Pirenne without admiring their command of the written sources and the clarity of the questions they posed.⁸ But we need not accept their every assumption. Scholars and economists, not to mention modern businessmen, have moved beyond Pirenne's unshakeable conviction that advanced international trade was possible only in a world founded on the gold standard. Two more assumptions call for scrutiny. From Pirenne forward, scholars have tended to assume that ninth-century writers were as interested in merchants as the sixth-century historian Gregory of Tours. It followed that only explicit references to merchants and long-distance trade similar to those of Gregory could shed light on the pattern of Mediterranean commerce in the age of Charlemagne. Silence in the ninth-century sources could only mean absence in ninth-century reality. But what if the sources were not much interested in commerce? In that case, we would have to look for activity in which they are interested, and which could shed light, directly or indirectly, on commercial ship movements. In that case, we should look for evidence of communications. More on this in a moment.

The second assumption, in Pirenne's demonstration, relied equally on the argument from silence to confirm the silence about the merchants. Since late antique men and women had written on papyrus and consumed large amounts of spices in their cuisine, Pirenne assumed that Carolingians too would have done

8 For interesting discussions of the development of Pirenne's thought on the transition

from antiquity to the Middle Ages, see Delogu 1998; cf. Bachrach 1998.

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the same, if these indubitable imports had been available. But that is to assume the unflinching cultural continuity of taste. Renewed scrutiny of papyrus shows clearly that some people continued to use it, and others did not. Focusing on this difference (of which Pirenne was aware), reveals that the question of papyrus imports had a rather more precise – and limited – significance than the great Belgian scholar imagined. So too with spices. Is it so obvious that once the supply of spices had been substantially interrupted for a generation or more, every kitchen in Frankland would have clamored for them anew when supply resumed? Pirenne's argument from silence implies yes. But here too, there are reasons to think otherwise (Ch. 24.2–3).

These considerations define the triple task of this introduction. Our first charge is to examine how recent research has changed understandings of the economic context in which early medieval trade occurred. Our second will be to consider more closely the nature of the literary record on whose explicit references to commerce the issue has stood or fallen. The third objective will be to outline a new approach to the problem, by uncovering the broader universe of communication within which trading voyages occurred.

The vision of an impoverished and stagnant agrarian economy in the time of Charlemagne still has powerful adherents. But new approaches are undermining that vision. The most important concern the economics of the great estate, the not unrelated issue of dependent traders, and the extraordinary trading world of the North Sea which is emerging from the earth. Together, these three developments challenge the old vision of a stagnant and closed economy in northwestern Europe around 800 A.D. And it is on northwestern Europe that we should focus: however much opinions might vary on Byzantine and Muslim economic strength in the eighth and ninth centuries, appraisals of their commercial activities have never approached the dismal levels meted out to the Frankish west. But this challenge also obliges us to consider the issue of why and how merchants appear as they do in the written evidence. This will lead us to ask whether we can reach beyond the long-distance and traveling merchants who are unambiguously announced as such in the sources. Do they truly stand isolated? Or can the study of communications allow us to recover a broader context of shipping and transport against which to view them? We shall attack the principal weakness of the sources by finding a new approach to the scattered mentions of isolated merchants.

The changing context of Carolingian commerce

A particular form of great estate has been emblematic of the Carolingian economy for the last hundred years. Simplifying somewhat, these large, agrarian

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institutions typically had a bipartite structure. Peasants of varying status held and farmed for themselves one part of the estate lands, in return for rents of various kinds and labor on the estate lands retained by the proprietor. How historians understand the origin and functioning of these estates has recently changed profoundly, with important implications for our vision of the overall economy. Rather than some kind of fossilized late Roman legacy, these large and complex agrarian establishments are now seen as a distinctively Carolingian phenomenon that expressed and incited economic dynamism. Though they may have preserved and developed elements inherited from the Roman economic and social order, bipartite estates prove now to have emerged from social, political, and agrarian conditions specific to several regions in the early Middle Ages. We find them chiefly in the lands between the Loire and the Rhine, and in northern and central Italy – the two most economically developed areas of the European continent in these centuries – and, finally, in the newly colonized lands east of the Rhine.

These new economic entities were often very large indeed, whether one counts the number of dependents who worked their fields, the number of acres they farmed or the cumulative distance of the sometimes far-flung holdings which produced for them. The Parisian monastery of St. Germain des Prés had about 1,700 peasant households (*mansi*) on its books, Lorsch and Prüm probably about 2,000 each. St. Wandrille calculated in 787 that it had 4,264 households, while, across the Rhine in the Frankish “wild east,” the colossus Fulda has been reckoned to own some 15,000 households.⁹ To broaden the range of products and guard against local shortfalls, geographic dispersion was the rule, and it could entail vast distances. For instance, one abbey just north of Paris owned an entire valley on the Italian slope of the Alps.¹⁰ Because the big religious houses and the royal fisc (the best documented estates) strove to produce as much as possible to meet their own needs, earlier scholars sometimes imagined a Carolingian economy dominated by great estates and an essentially agrarian autarky or “domestic economy.”¹¹ The great estate itself tended to satisfy all basic needs, they thought, to the detriment of market activity. In recent years, however, deeper scrutiny of how exactly these estates functioned has revealed a more complex picture, with greater implications for transportation, markets, and commerce than once appeared.

9 From a large bibliography, the key titles are Verhulst 1966, the various papers in Janssen and Lohrmann 1983, and in Verhulst 1985, and Toubert 1995, 116–55, in addition to the studies cited in the following notes. For further bibliography see Morimoto 1994. The size

estimates come from Kuchenbuch et al. 1991, 40–1.

10 St. Denis owned the Valtellina, where the Adda river empties into Lake Como: DDKar 1, no. 94 (775 A.D.); see Map 13.1.

11 See the succinct overview in Toubert 1983, 5–9.

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Case studies of the transport of goods within four of the best documented of these new domanical systems bring out these implications well. They come, moreover, from three very different economic and geographic regions. One estate centered on Paris and the Seine. Another was in western Germany, situated on a tributary of the Moselle, on the Eifel plateau. Two more lay in northern Italy, and scattered their holdings across Lombardy and down the Po river.¹² In all four cases, close scrutiny has uncovered highly organized systems of communications over land and water. Thanks to labor and transport services imposed on the tenants, large quantities of agrarian and craft goods flowed yearly from outlying locations to the central domain. The goods under way ranged from cereal staples to high value products such as wine and iron tools. In all four cases, the drive to satisfy the needs of the central house was powerful, but in none did those needs exhaust the surplus production of the whole complex. Some was sold off in markets near the place of origin, while other goods were transported to a central market for sale. In the case of St. Germain, for example, this meant transporting large quantities of wine (an estimated 6,000 hectoliters for its Paris area vineyards) toward Paris and other regional and international markets.¹³ This kind of productive organization was not confined to agrarian products. The distant land acquisitions of the Parisian abbey of St. Denis in the eighth century have recently been reinterpreted as a large-scale policy of acquiring mineral resources, particularly iron ore and salt.¹⁴ In other words, the economy of northwestern Europe in the ninth century possessed a good number of overlapping regional systems whose nature it was to centralize for consumption or for sale surpluses supplied by dispersed production centers.¹⁵

Centralizing and accumulating wealth presented further opportunities for commerce, both in terms of supply of estate wares and demand for other goods. At the same time, the yearly transport of estate wares had spillover effects by intensifying circulation and communication along the rivers and roads of Francia and northern Italy. This certainly affected the infrastructure of transport, for instance by encouraging work on roads or the development of new river ports.¹⁶

12 See, respectively, St. Germain des Prés: Devroey 1993b, XI (originally 1984); on Prüm: Devroey 1993b, X (originally 1979) and, with some reservations, Kuchenbuch 1978; for Bobbio and Santa Giulia at Brescia, Toubert 1995, 183–20 (originally 1983).

13 Devroey 1993b, XI, 577–81; the estimated volume comes from Jean Durliat, cited *ibid.*, 577.

14 Stoclet 1993, esp. 418–34.

15 Documents may soon be extended by

archaeology, which is pointing toward links between ceramic supply and estate ownership: see below pp. 66of.

16 See the interpolation c. 850 of Charlemagne's diploma of 786 for St. Germain, DDKar I, no. 154, justifying the creation of a port and market on both sides of the Seine at Marolles and Montereau-faut-Yonne (see Map 15.1), at the confluence of the Yonne, as discussed by Devroey 1993b, XI, 581; cf. the roughly contemporary efforts by Lorsch to obtain landings along the

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Sometimes archaeology combines with the texts to unveil striking instances when ninth-century administrators renewed the ancient infrastructure. For example, excavation has shown that one of the fortified Rhine ports with which the Roman emperor Valentinian I (364–75) had reinforced the frontier was abandoned in the early Middle Ages. It came back to life in the eighth century as a royal estate and river port. It then passed into the hands of the abbey of Lorsch, which lay a few kilometers upstream on the creek into which the stone port structures – perhaps including the foundation of a Carolingian crane – were built.¹⁷ Finally, and no less importantly, where coinage was available, a surprising proportion of the rural dues are specified in cash.

Overall, from the eighth century to the tenth, the general trend among great estates to monetize the dues of rural households has become unmistakable. This is now recognized to be true in the Po valley and, more remarkably, between the Loire and the Rhine. Even if coins were specified only as a standard of value, the implications for rural markets and the spread of money into the countryside are obvious. Without both of these, the dependent peasants of the great estates could scarcely have made or understood payments increasingly defined in terms of money, not goods.¹⁸ The independent evidence of the coinage itself bears this out. Not only is Carolingian money infinitely better understood than a generation ago: it is now seen as a coinage whose technical characteristics indicate the minting of “a very large number of coins” of consistently high quality, itself the token of “a prosperous and tightly controlled economy” under Louis the Pious. The minting of obols (half-pennies) seems also to increase. This is what one would expect if demand were growing for smaller coins for smaller transactions.¹⁹ In other words, directly and indirectly, great estates stimulated trade. They encouraged or followed the nascent trend to a monetary economy, even as they intensified the developing networks of communication within and among the different regions of the Carolingian empire. This is a far cry from the domestic or closed economy that the great estates were thought to betoken less than a generation ago. And from the 770s to the 830s at least, those developing communication networks enjoyed some two generations of exceptional institutional and political stability.²⁰

Rhine: Johaneck 1987, 47. Archaeology has revealed a shoreline settlement connected with the royal palace complex – the royal fisc was the supreme example of a great estate – at Ingelheim on the Rhine: Ellmers 1981, 89–91. For Carolingian roads in general see below, Ch. 13.1.

17 At Zullenstein: Jörns 1979, esp. 121 on the 2.2 2.5 m stone base facing the port building’s entry. Jörns evokes the

possibility of a crane or a fixture to tie up the boats. Wood pilings would have sufficed for the latter and been safer for the boats, and there was probably no shortage of trees in the area.

18 Kuchenbuch 1988, 337–8 and Toubert 1995, 132.

19 Coupland 1990, 24 (quotation), 26 and 28.

20 Hägermann 1989, and the works of D. C. North, e.g. 1990.

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A further sign of agrarian economic growth comes from the new understanding of water mills. These expensive and complex mechanical installations signal investment for productivity. They represented a major and highly profitable release of human or animal power from the labor necessary to grind grain for daily bread. We now know that they had spread much more widely in late antiquity than was even recently believed.²¹ Scholars have long recognized their presence in the Carolingian countryside, but argued from their uneven distribution in estate records that “undoubtedly progress in this direction was timid and slow.”²² More exacting scrutiny of the same records reveals a very different picture. By the earlier ninth century, water mills had been built everywhere that the hydrology permitted. Some went back as far as the seventh century; some had certainly been built by lay proprietors before entering the abbeys’ holdings; and in the 820s, the abbot of St. Germain was busy putting in new mills whose productivity was still greater than that of the old ones. Mills on the royal estate of Annappes were the most productive of all.²³ Far to the southeast, on the northern edge of the Alps, mills also began to spring up along the creeks of Bavaria toward the middle of the eighth century, and growth spurted again a century later.²⁴ Across the Alps, water mills were being built in the Po delta and the duchy of Rome, to name only two easy examples.²⁵ Much work remains before the final word on Carolingian water mills is written. But it is already clear that, in the eighth and ninth centuries, this key indicator of investment and agrarian productivity now points upward.

In general economic terms, the steady erosion of the old vision of demographic stagnation is even more significant. It helps make sense of the new understanding of individual developments like the great estates and water mills. Cemetery populations, rapidly expanding areas of arable land, population densities derived from estate registers, and fertility ratios deduced from the same source tell the same story in many different regions of Europe. Whether we look at the Seine or the Po river basins, the Namurois, northern Spain and southern Gaul, the Rhineland, Thuringia, or Provence, population and economies were growing, sometimes at a surprising clip. Even the episodic famines that hit the Carolingian heartland in Charlemagne’s day can be taken as “accidents of growth,” arising out of the

21 Wilson 1995.

22 DUBY 1976, 17.

23 Lohrmann 1989, whose findings make a new and systematic examination of the entire problem a pressing desideratum. The most recent archaeological discoveries, becoming available as this book went to press, entirely confirm and extend Lohrmann’s argument: see Böhme 1999.

24 Koller 1982.

25 Po: see e.g. Lazard 1986, 387, who argues that the term *aquimola* (also well-attested at Rome) is a calque from Byzantine Greek. For Rome, see for instance the references which this word yields from the digital *Patrologia Latina Database*, which also point in the same direction of growth, once they are checked against the standard editions.