



From the MixCache.com library

SAMPLE COPY

Mapping Europe: Cartography, Territory, and the Politics of Space

MixCache.com

SAMPLE COPY

Table of Contents

- **Introduction**
- **Chapter 1** Medieval Seas: Portolan Charts and the Invention of Navigable Space
- **Chapter 2** Worlds of Faith: Mappa Mundi, Pilgrimage, and Sacred Cartographies
- **Chapter 3** Ptolemy in Print: Renaissance Cosmography and the Birth of the Atlas
- **Chapter 4** Drawing the Line: Early Modern Frontiers from the Pyrenees to the Carpathians
- **Chapter 5** Instruments of Rule: Triangulation, Surveyors, and the Science of Territory
- **Chapter 6** Counting the Land: Cadastres, Taxation, and the Napoleonic State
- **Chapter 7** War by Other Means: Fortifications, Intelligence, and Military Mapping
- **Chapter 8** Cities on Paper: Capital Plans, Street Grids, and Urban Governance
- **Chapter 9** Mapping Elsewhere to Govern Home: Colonial Projections and Metropolitan Power
- **Chapter 10** Imagining the Nation: Ethnographic, Linguistic, and Historical Maps
- **Chapter 11** Plebiscites and Provinces: Cartography of 19th-Century Nation-Making
- **Chapter 12** The Balkan Lab: Boundary Commissions and the Cartography of Partition
- **Chapter 13** Redrawing Europe: World War I, Treaties, and New States
- **Chapter 14** Between the Wars: Minorities, Propaganda, and the Map as Argument
- **Chapter 15** Total War Geographies: Occupation, Resistance, and Strategic Cartography
- **Chapter 16** Secret Europes: Cold War Mapping, Secrecy, and Standardization
- **Chapter 17** From Customs Posts to Schengen: Integration and the Vanishing Border
- **Chapter 18** Corridors and Grids: Railways, Pipelines, and the Infrastructural Map
- **Chapter 19** Nature on the Ledger: Forestry, Resources, and Environmental Cartographies
- **Chapter 20** From Paper to Pixels: GIS, Remote Sensing, and Statistical Europes
- **Chapter 21** Lines of Flight: Migration, Asylum, and the Policing of Mobility
- **Chapter 22** Platform Territories: Navigation Apps, Logistics, and the Algorithmic City
- **Chapter 23** Counter-Maps and Memory: Heritage, Minorities, and the Politics of Place
- **Chapter 24** Maritime Europes: EEZs, the Arctic, and the Mediterranean Border Sea
- **Chapter 25** Seeing Power Today: Design, Projections, and the Ethics of Spatial Data

Introduction

This book argues that maps have never been mere pictures of the world; they have been among Europe's most consequential tools for making the world. From medieval sailors tracing rhumb lines across the Mediterranean to contemporary officials policing a geofenced border, cartography has shaped how power is assembled, where identity is anchored, and what kinds of futures become thinkable. To map Europe has always been to govern it—sometimes with ink and vellum, sometimes with code and satellites, always with claims about what counts as land, sea, nation, and neighbor.

The chapters that follow treat maps as both images and instruments. They are images in the sense that they persuade, seduce, and teach; instruments in that they measure, classify, and command. Survey chains, alidades, copperplates, litho stones, air photos, GPS receivers, and servers humming in distant data centers each represent a material regime through which space is rendered legible. Legibility is never neutral. A parish boundary drawn to assess tithes, a cadastral parcel fixed to levy taxes, a language frontier shaded to substantiate a plebiscite—these are acts that redistribute resources, rights, and risks. When spatial facts crystallize on paper, they can harden into institutions.

Our story begins on the water. Medieval portolan charts emerged from practice rather than theory, compiling compass bearings and distances into startlingly accurate coastal portraits that enabled commerce and conquest alike. Renaissance printers then married revived classical geography to the reproducibility of print, flooding Europe with atlases that standardized how continents should look and how authority should be framed around neat graticules. By the early modern period, rulers learned that to endure they must be measured. Triangulation networks spidered across the landscape; war ministries demanded topographic sheets; surveyors translated fields and forests into numbers and lines the state could read.

As borders sharpened, nations sought histories and geographies that would fit the outlines they desired. Ethnographic and linguistic maps claimed to reveal “natural” communities; school atlases taught generations to imagine themselves as part of colored territories bounded by precise strokes. Europe's own imperial ventures abroad, meanwhile, were a mirror. Colonial cartographies projected metropolitan fantasies onto other continents and then reimported those habits of spatial control, reinforcing a European sense of civilizational centrality even as rival powers contested the same lines at home.

Twentieth-century cataclysms redrew the continent repeatedly. Boundary commissions, plebiscites, and treaties inscribed new states after World War I; interwar

maprooms became theaters of propaganda; and total war demanded unprecedented coordination between intelligence, aerial survey, and logistics. After 1945, Europe became a continent of secret maps and standardized grids: NATO symbology, Warsaw Pact classifications, and parallel mapping universes that indexed not only terrain but also threat. Yet integration advanced as well. Customs posts fell; Schengen opened internal frontiers even as external ones thickened; regions were rescaled for planning, statistics, and cohesion.

The digital turn did not dissolve territory—it reprogrammed it. Geographic information systems stitched together censuses, cadastres, and satellite imagery; cartograms and dashboards quantified “Europes” of economy, health, and environment; algorithms now route trucks, patrols, and commuters through landscapes optimized for efficiency or security. Borders survive as databases and biometric checkpoints; maritime lines extend sovereignty into water columns and data cables; humanitarian and activist counter-mapping challenges official visions with new publics and new ethics. The map’s authority remains powerful, but more contested and more participatory than before.

Throughout, this book bridges geopolitics, visual culture, and the material tools of governance. It moves between courtly maprooms and municipal planning offices, between publishers’ workshops and survey brigades, between monastery scriptoria and satellite ground stations. Sources range from fragile portolans and battle maps to cadastral registers, technical manuals, and contemporary policy documents. Reading these heterogeneous objects together reveals not a single “European space” but many Europes, produced and reproduced at different scales by overlapping communities of practice.

Readers will encounter both sweeping transformations and concrete case studies: a frontier stabilized by arithmetic, a city disciplined by a grid, a nation imagined through a color wash, an ocean partitioned by legal geometry, a migrant’s route mediated by a smartphone screen. By the end, the cartographic past will appear less like a gallery of images and more like an archive of actions—techniques for seeing and seizing space whose legacies, promises, and dangers still organize European life. Mapping Europe is therefore not only a history of maps. It is a history of how space itself became political, how politics learned to be spatial, and how both continue to shape who belongs, who decides, and where the lines are drawn.

CHAPTER ONE: Medieval Seas: Portolan Charts and the Invention of Navigable Space

Every great story has a starting point, and this one begins not in a prince's court or a monk's scriptorium but on the deck of a ship, heaving in a crosswind off the coast of Provence. Someone is holding a scrap of treated animal skin, its edges soft with use, its surface scored with a web of lines and crowded with names. That scrap is a portolan chart, and it is about to change the way Europeans understood the space they lived in. Before nation-states, before printed atlases, before the grid of latitude and longitude became common sense, there were these charts: practical, beautiful, and quietly revolutionary. They did not describe the whole world. They described the parts of it that a sailor could reach, and in doing so they invented a new kind of space—a space measured not by scripture or speculation but by bearing, distance, and experience.

The earliest surviving portolan charts date to the late thirteenth century, though the tradition almost certainly stretches back further. The Carte Pisane, named for the Pisan family in whose archive it was found, is usually cited as the oldest known example, dating perhaps to around 1290. It is a deceptively simple object: a single piece of vellum, roughly fifty by thirty centimeters, on which the outlines of the Mediterranean, the Black Sea, and portions of the Atlantic coastlines of Europe and North Africa have been drawn with surprising accuracy. There are no mountains, no cities rendered in miniature, no biblical scenes. Instead, the chart is dominated by coastlines drawn in ink, studded with hundreds of place names written perpendicular to the shore, and overlaid with a network of sixteen lines radiating outward from hidden compass roses. Those lines are rhumb lines—lines of constant compass direction—and they form the backbone of the chart's navigational logic. A sailor could place a ruler between his current position and his destination, read off the rhumb, and set his course accordingly. The chart did not tell you what the sea looked like from above. It told you how to move across it.

That distinction matters more than it might seem. Medieval Europe already had maps, but they served almost entirely different purposes. The great mappaemundi—those elaborate diagrams of the world produced in monasteries and cathedrals—were exercises in theology and cosmology. They placed Jerusalem at the center, illustrated the journeys of saints, populated distant lands with monsters and marvels, and organized space according to spiritual meaning rather than geographic accuracy. They told you where salvation might be found, not how to reach Genoa. Portolan charts were the opposite in almost every respect. They were secular in origin and intent, based on observation and practical knowledge rather than scripture, and they valued

positional accuracy above all else. Where a mappamundi asked "what does the world mean?", a portolan chart asked "how do I get there?"

The makers of these charts belonged to the maritime communities of the central and western Mediterranean. Genoa, Venice, Pisa, Amalfi, Majorca, Barcelona—these were the cities whose wealth and power depended on seaborne trade, and it was in these cities that portolan charting flourished. The charts were not the product of a single genius or a royal workshop. They emerged from a culture of cumulative, communal knowledge: generations of pilots recording compass courses, distances estimated by dead reckoning, the shapes of headlands and the silhouettes of islands, the locations of safe harbors and dangerous shoals. This knowledge circulated in two forms. The first was the chart itself, a visual document that could be consulted at sea. The second was the portolano, or pilot book—a written text that listed sailing directions, distances between ports measured in leagues, and descriptions of landmarks. The two were complementary. A pilot book could be read aloud by a navigator standing at the helm; a chart could be spread on a table in a counting house to plan a voyage or settle a dispute over cargo routes.

How accurate were these charts? The short answer is: remarkably so, at least for the Mediterranean. Modern scholars have overlaid portolan charts onto modern charts and found that the outlines of coastlines match with startling fidelity, given the tools available. The shape of the Iberian Peninsula, the curvature of the Dalmatian coast, the sweep of North Africa from the Strait of Gibraltar to the Gulf of Sidra—all are rendered with a precision that would not be surpassed until the age of printed maps. Some researchers have pointed out that the accuracy is uneven. Well-traveled routes—the corridor between Genoa and the eastern Mediterranean, for instance—are rendered in exquisite detail, while more distant or less frequented coasts grow vague or distorted. This makes perfect sense. Portolan charts were compilations of practical experience, and practical experience was unevenly distributed. A Genoese captain who had sailed to Acre dozens of times knew that coastline intimately; his knowledge of the Baltic was nonexistent.

The technique behind the charts also invites admiration. Drawing a portolan required a steady hand, a good compass, and a method for transferring accumulated sailing data onto a flat surface. The standard procedure appears to have involved first sketching the overall outline of the coastline, then rotating the chart so that each stretch of coast faced the direction a sailor would actually see it from seaward—north on the left when sailing east, south on the left when sailing north, and so on. This trick, sometimes called the "portolan convention," gave the charts an orientation that looks peculiar to modern eyes accustomed to north-up maps, but it was perfectly adapted to use at sea. The compass rose, usually a large, ornate design of radiating lines and sometimes decorative motifs, was placed at a strategic point on the chart and allowed the navigator to read off bearings. Distances were indicated by dots or small marks along the rhumb lines, each mark representing a set number of leagues. The result

was a tool that was both elegant and functional—a fusion of art and engineering that a ship's captain could actually use in rough water.

Materials mattered. The earliest charts were drawn on vellum—sheepskin or goatskin prepared for writing—which gave them a smooth, durable surface that could withstand handling aboard ship. Ink was carbon-based, and the finest charts show careful, confident linework that suggests professional draughtsmanship. Some were colored: coastlines in red or green, compass roses highlighted in gold or blue, names in black or red ink. The color coding was not merely decorative; it served a practical function, helping a navigator pick out the most important information at a glance in the cramped, dim conditions below deck or on a pitching sterncastle. Several charts were later copied and updated, sometimes by adding new coastlines or correcting old ones, which suggests they were treated as living documents rather than finished artifacts. The idea of a map as a fixed, authoritative representation of space that changes only when an official redraws it is a later invention. For the medieval Mediterranean, a chart was as current as the last voyage that had improved it.

The rise of portolan charts coincided with a period of extraordinary commercial expansion in the Mediterranean. The Crusades had opened eastern markets and created demand for the spices, silks, and luxury goods of the Levant. Italian maritime republics competed fiercely for control of trade routes, and the chart was both a commercial tool and, in a loose sense, an instrument of power. Cities guarded their navigational knowledge. Venice maintained official chartmakers and regulated the production of maps. Genoese cartographers carried their skills across the western Mediterranean, establishing a tradition of chart-making in Majorca that would become one of the most productive in Europe. The Majorcan school, active from the late thirteenth through the fifteenth century, produced lavishly decorated charts—some on parchment, some on paper—that extended coverage to the Atlantic coasts of Europe and West Africa. These charts were commissioned by monarchs and merchants alike, and their decorative programs—elaborate compass roses, wind-rose motifs, figures of rulers—signal that they were objects of prestige as well as utility.

Abraham Cresques, a Majorcan Jewish cartographer working in the late fourteenth century, produced what is arguably the most famous medieval portolan chart: the Catalan Atlas of 1375, made for the court of Peter IV of Aragon and later sent to Charles V of France. The Catalan Atlas is remarkable not only for its geographic scope—it covers the Mediterranean, the Atlantic coast of Europe, West Africa, and parts of Asia—but also for its willingness to blend different kinds of knowledge. Biblical and legendary geography sits alongside empirical observation; the Nile is shown with reasonable accuracy, but Prester John still rules somewhere in Africa, depicted enthroned and crowned. The atlas is a transitional object, hovering between the medieval mappamundi tradition and the empirical, observation-based cartography that would characterize the early modern period. It is also a political document: by representing the known world in a single authoritative image, it asserted the reach

and sophistication of the Aragonese crown.

It would be wrong, however, to reduce portolan charts to instruments of commerce and conquest, even though they were certainly that. They also transformed the cognitive geography of the people who used them. Before the widespread availability of charts, knowledge of the sea was local and embodied—carried in the memory of experienced pilots, transmitted orally, and difficult to share across distances or generations. The chart externalized this knowledge, making it visible, portable, and at least potentially transferable. A chart could be studied in advance of a voyage, consulted by multiple people in a planning meeting, copied and sent to an ally or a client. It turned individual experience into collective resource. In this sense, the portolan chart anticipated the information revolution of the printing press by two centuries—it was already a technology for the democratization of geographic knowledge, even if access remained limited to those with the resources to commission or acquire a chart.

The charts also redefined the relationship between land and sea. In medieval thought, the sea was often conceived as a chaotic, dangerous space—a realm of monsters, storms, and divine judgment. Coastlines were thresholds between the ordered, inhabited world and the unknown. Portolan charts recast the sea as a network of routes, a space that could be traversed systematically and, within limits, controlled. The rhumb-line grid imposed a rational structure on the water, turning the open Mediterranean into something like a grid of corridors. Harbors became nodes in a network; distances between them could be measured, compared, and optimized. This was not yet sovereignty over the sea in the modern sense—maritime jurisdiction would develop later—but it was a decisive step toward thinking of the ocean as territory that could be mapped, claimed, and defended.

Italian and Iberian charts began to extend beyond the Mediterranean during the fourteenth and fifteenth centuries, reaching down the Atlantic coast of Africa and eventually, in fragmentary form, toward the Indian Ocean. These extensions reflected the growing ambitions of Iberian maritime powers—Portugal and Castile above all—that were pushing the boundaries of known navigation in search of trade routes and, later, new continents. The portolan tradition provided the cartographic foundation on which these ventures were planned. Portuguese chartmakers, working in the tradition inherited from Majorca, produced increasingly detailed charts of the African coast that accompanied and guided the voyages of exploration that would, in the late fifteenth century, bring Europe face to face with the rest of the world.

Yet for all their ingenuity, portolan charts had limitations that would become more apparent as European navigation expanded. Their accuracy depended on the quality of the observations that fed into them, and far from well-traveled routes, those observations thinned out rapidly. They worked best for coastal navigation—keeping a ship within sight of land—and offered less guidance for blue-water voyages across

open ocean. The rhumb-line grid, so elegant in the relatively enclosed Mediterranean, became increasingly distorted on a global scale because it assumed a flat surface rather than a curved one. When Ptolemy's *Geography* was rediscovered and translated into Latin in the early fifteenth century, it offered a radically different framework: a coordinate system based on latitude and longitude that could, in principle, represent the entire globe on a flat surface using mathematical projection. That framework would eventually supplant the portolan tradition—but not before the charts had already reshaped Europe's relationship with the sea and with space itself.

The social world of the portolan chartmakers deserves attention for what it tells us about knowledge and power. These were not isolated cartographers working in isolation. They belonged to networks—family workshops, guild-like associations, patron-client relationships—that linked navigators, merchants, princes, and churchmen. A chart might be commissioned by a king planning a military expedition, by a merchant house evaluating the cost of a shipping route, or by a diplomatic envoy needing to illustrate the geographic context of a negotiation. The patron's needs shaped the chart's content: which coasts were emphasized, which ports named, which features left out. In this way, portolan charts were already instruments of perspective, framing the world in ways that served particular interests even as they claimed to represent objective reality.

The charts also intersected with questions of law and governance. As Mediterranean commerce grew more complex, disputes over maritime boundaries, fishing rights, and trade access became common. Charts could be introduced as evidence in such disputes, lending an air of objectivity to claims that were often political in nature. The chart's apparent precision—the neat lines, the measured distances, the authoritative labeling—gave it a persuasive power that oral testimony alone could not match. In this way, portolans began the long process by which maps would become legal and administrative instruments, tools not just for finding one's way but for justifying one's presence.

There is something almost paradoxical about the portolan chart. It is a product of an age that we associate with superstition, religious certainty, and a limited understanding of the physical world—and yet it exhibits a commitment to empirical observation and spatial accuracy that feels startlingly modern. Its makers did not have satellites, aerial photography, or computers. They had compasses, log lines, accumulated experience, and a willingness to trust what their own eyes and the eyes of their predecessors told them about the shape of coastlines and the direction of winds. That empirical spirit, embedded in a practical and commercial culture rather than an academic one, was one of the portolan chart's most important legacies. It demonstrated that precise geographic knowledge did not require a philosophical system or a cosmographic framework; it could be built up piece by piece, voyage by voyage, chart by chart.

By the time the portolan tradition began to wane in the fifteenth and sixteenth centuries, its influence was everywhere. The Mediterranean it had mapped was a Mediterranean of routes, ports, and navigable corridors—a space made legible to power in ways that would underpin centuries of maritime empire. The conventions of the portolan chart, from the compass rose to the coastal profile, would be absorbed into the printed atlases that followed, carrying forward a visual language that sailors and statesmen would continue to use long after the originals had been superseded. And the broader lesson of the portolans—that controlling the representation of space was inseparable from controlling space itself—would become a foundational principle of European statecraft. The charts were small, fragile, and often anonymous in authorship. But the world they helped to create was vast.

SAMPLE COPY

This is a sample preview. Purchase the book to read the full content.

Visit MixCache.com to purchase the complete book.

SAMPLE COPY