

26 • Maps and the Early Modern State: Official Cartography

RICHARD L. KAGAN AND BENJAMIN SCHMIDT

INTRODUCTION: KINGS AND CARTOGRAPHERS

In 1539, the emperor Charles V, waylaid by gout, was obliged to spend much of the winter in the city of Toledo in the heart of Castile. To help pass the time, Europe's most powerful monarch asked Alonso de Santa Cruz, a royal cosmographer and one of the leading mapmakers of sixteenth-century Spain, to teach him something of his craft and of those subjects that supported his work. A number of years later, Santa Cruz would recall how the emperor "spent most days with me, Alonso de Santa Cruz, royal cosmographer, learning about matters of astrology, the earth, and the theory of planets, as well as sea charts and cosmographical globes, all of which gave him much pleasure and joy."¹

The emperor's interest in maps seems, in retrospect, only natural: what better way to keep up with his immense and ever-expanding empire than the sort of cartographic renderings solicited from the likes of Santa Cruz? Seen in a broader perspective, however, it suggests a profound transformation, in both the history of maps and the history of the state. For the so-called cartographic revolution of Europe was getting underway precisely around the time when Charles (r. 1516–56)—along with the other powerful, centralizing, and expansion-minded rulers of his day—was plotting the shape of his realm. The happy convergence of the two movements in early modern government and early modern cartography meant that the emperor and the mapmaker shared mutual interests, and their symbiotic relationship—and the parallel flourishing of mapmaking and state crafting that took place all across sixteenth- and seventeenth-century Europe—led to significant changes in the history of both.

Charles V's encounter with Santa Cruz is illustrative in a number of ways. It demonstrates, first, a conspicuous mapping consciousness on the part of the emperor: an awareness of maps and of geographic learning and a further concern, one surmises, with the utility of maps in operating a thoroughly Renaissance monarchy (as Charles's surely was). It suggests, second, an affiliation of cartography and the project of early modern state building. Mapping served the king (or queen) as a means of both record-

ing and enhancing political authority, and it quickly becomes apparent from later correspondence that Charles wanted from his *cosmógrafo mayor* not simply knowledge but also "power" in the form of cartographic products useful to his regime. In 1551, Santa Cruz happily reported to the king the completion of a new map of Spain, "which is about the size of a large banner (*repostero*) and which indicates all of the cities, towns, and villages, mountains and rivers it has, together with the boundaries of the [various Spanish] kingdoms and other details"—just the thing for an ambitious ruler like Charles V.² Finally, the emperor's cartographic tutorials point to another, equally vital, role of maps in the early modern European court, namely their ability to bring "pleasure and joy" to their royal patron. As would so many other rulers in the coming years, Charles not only learned from maps, but also delighted in them, and he ultimately collected them in a way that implies the aesthetic value of these prized princely artifacts.

The emperor's cartographic concerns, in short, were considerable. They were hardly unique, either. Around the same time that Santa Cruz gained his audience with Charles V, Sir Thomas Elyot was preaching to Henry VIII of England (albeit by printed text) a remarkably similar sermon on the use of maps in the service of government, emphasizing precisely the utility of cartography for administering and expanding the state and the "incredible

Abbreviations used in this chapter include: *Monarchs, Ministers, and Maps* for David Buisseret, ed., *Monarchs, Ministers, and Maps: The Emergence of Cartography as a Tool of Government in Early Modern Europe* (Chicago: University of Chicago Press, 1992).

1. Alonso de Santa Cruz, *Crónica del emperador Carlos V*, 5 vols., ed. F. de Laiglesia (Madrid, 1920–25), 4:24; see also 3:465, where Santa Cruz recalls previous tutorials with the emperor on matters of astrology, the celestial spheres, philosophy, and cosmography, "subjects that His Majesty liked very much."

2. Alonso de Santa Cruz to Charles V, Seville, 10 November 1551, in *Corpus documental de Carlos V*, 5 vols., ed. Manuel Fernández Álvarez (Salamanca: Universidad de Salamanca, 1973–81), 3:374. In this same letter, Santa Cruz informed the emperor that he had also just finished a map of France, "more precise . . . than one made by Oronco [Fine]," together with others of England and Scotland, Germany, Flanders, Hungary, Greece, and Italy, and that he was still working on one of Europe as a whole.

delight” maps furnished the cultivated ruler.³ Henry’s passion for maps may not quite have matched that of Charles—nor did the extent of his realms—though it does indicate the diffusion throughout Europe of what might be called “official cartography.” From François I of France to Cosimo I de’ Medici of Florence, from Christian II of Denmark to Manuel I of Portugal, early modern rulers turned to cartographic devices in order better to govern their territories. Maps played a role in marking territorial boundaries, in managing land usage, in rationalizing fiscal instruments, and in preparing for military engagement. The central place of maps in early modern government is evidenced by the establishment, by a striking number of these monarchs, of specialized offices charged with cartographic production—and often headed by a privileged class of royal or imperial geographers. Aside from gathering basic geographic information, court cartographers had certain propagandistic duties, too, and in this respect their work both complemented and overlapped that of court painters, architects, and chroniclers whose task was to burnish the image and reputation of their prince. Royal mapmakers did more than simply outline existing realms, however. They further endeavored to chart a state’s designs for future expansion and to enunciate, in cartographic form, hopeful programs of state building. Mapmakers thus played a vital role in the articulation of the early modern state—a fact that often goes unremarked in the traditional history of “modern” nationalism.⁴

This chapter explores the rise of official cartography in sixteenth- and seventeenth-century Europe, paying particular attention to state-sponsored mapping and the role of maps in the rise of the state. It also attends to the place of geography in propagating early modern regimes, whether by means of official court geographers—common especially in France, Spain, and the German and Italian states—or by means of commercial mapmakers, who had more prominent parts to play in the cartographic business of the Low Countries and Britain. Our approach to the subject is comparative. It is also necessarily selective, and, following the work of Harley, it focuses on the ceremonial, ideological, and political uses of maps, while other chapters in this volume address more particularly their administrative and strategic uses.⁵

STATES AND SPACE

State mapping arose in conjunction with shifts in state government, especially newly developing notions of the space of realm and rule. Central to the emergence of official cartography was the concept of territorial sovereignty: the idea of the state as a precisely defined and delimited geopolitical unit. Aspects of this particular concept of statehood could be found in the classical world, espe-

cially in Rome at the time of Augustus. By the Middle Ages, however, territorial sovereignty was all but forgotten, for sovereignty had become a fundamentally legal construct, the equivalent of *imperium* or *majestas*, terms that had less to do with territory than with the power to make and enforce law. Sovereignty in medieval Europe was power over people, not place, and only gradually did it begin to encompass ideas of territoriality. In France, for example, the symbolic turning point occurred in 1254, when the royal chancellery, which had previously referred to the monarch as *rex francorum*, or king of the Franks, officially adopted the title of *rex franciae*, king of France. Such language was purely ceremonial, to be sure, yet it augured the emergence of a more territorialized notion of monarchy and, by extension, a more cartographic approach to governance itself. As early as 1259, the French monarch Louis IX, in the course of a dispute with the neighboring county of Champagne, attempted to learn about “the beginning and ends of the lands of this kingdom and of the country of Champagne”; he sought, in other words, to map his realms.⁶ In general, however, this shift toward a more territorialized vision of sovereignty occurred only gradually. Late medieval jurists continued to think of sovereignty as essentially a human, as opposed to a territorial, construct; even in the seventeenth century, Thomas Hobbes could write about the commonwealth without reference to boundaries or frontiers. As Sahlins has pointed out, the idea of territorial sovereignty was only a secondary consideration when, in the Treaty of the Pyrenees (1659), the king of France sat down with his Spanish colleague in an effort to fix a linear border between their respective domains. Traditional jurisdictional considerations weighed more heavily than purely geographical ones, and the treaty that was ultimately drafted

3. Elyot is discussed in Peter Barber, “England I: Pageantry, Defense, and Government: Maps at Court to 1550,” in *Monarchs, Ministers, and Maps*, 26–56, quotation on 31.

4. The lack of comment goes in both directions: early modernists have not adequately made the case that nationalism and cartographic state building took place in the period covered by this volume, while modernists have discounted the possibility that the mapping of the state might have taken place prior to the mid-eighteenth century. For an explication of what might be called the cartographic invention of the state, see Benedict R. O’G. Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism*, rev. ed. (London: Verso, 1991), esp. 163–85; see also the exemplary case studies of Thongchai Winichakul, *Siam Mapped: A History of the Geo-Body of a Nation* (Honolulu: University of Hawaii Press, 1994), and Matthew H. Edney, *Mapping an Empire: The Geographical Construction of British India, 1765–1843* (Chicago: University of Chicago Press, 1997).

5. See, most essentially, J. B. Harley, *The New Nature of Maps: Essays in the History of Cartography*, ed. Paul Laxton (Baltimore: Johns Hopkins University Press, 2001).

6. Cited in David Buisseret, “The Cartographic Definition of France’s Eastern Boundary in the Early Seventeenth Century,” *Imago Mundi* 36 (1984): 72–80, esp. 72.

defined the area annexed by France simply as the “countries, towns, castles, boroughs, villages, and places” that comprised Roussillon and Conflent.⁷ The result was a border that was, and remains, idiosyncratic.

Despite the particular failure of this treaty to address territorial sovereignty more directly, by the end of the fifteenth century Europe’s rulers did show signs of being territorially conscious—and map savvy—in ways their medieval counterparts were not. The sources of this consciousness were many. To begin with, the translation from Greek into Latin (ca. 1406–10) of Ptolemy’s *Geography* contributed to what has been called the “geometrization” of space, the view that land could be measured and described in precise, mathematical terms.⁸ As in the case of many other humanist “discoveries,” not everyone was at once affected by this development, and for centuries most maps and views were produced without recourse to triangulation, plane tables, theodolites, and the other surveying instruments equated with the rise of Ptolemaic, or “scientific,” cartography. Nevertheless, by the end of the fifteenth century the ideas of Ptolemy and his many followers competed with, and ultimately challenged, at least two prior concepts of mapping: the Aristotelian notion of describing the land primarily in terms of its utility for humans and the Christian approach of delineating the moral boundaries of space, as was typically done in biblically inspired *mappaemundi*. Both of these strategies did persist, yet they increasingly gave way to Ptolemaic plotting. For example, new ideas of space worked their way into jurisdictional disputes, which soon sparked the development of a “juridical cartography,” Dainville’s term for maps designed solely to assist judges in resolving disputes.⁹ These juridical conflicts and their resolutions further contributed to the idea that sovereignty, traditionally conceived in terms of contractual relationships between lords and vassals, could also represent power over particular spaces whose boundaries needed to be measured and mapped. As early as the 1420s, Florence and Milan attempted to resolve a boundary dispute through the use of a map, and by the 1450s a series of jurisdictional disputes with ecclesiastical authorities led the dukes of Burgundy to commission new maps describing the territorial limits of their domains.¹⁰ Territorial consciousness of a somewhat different sort prompted Pier Maria Rossi, condottiere-prince of Parma, to record his gains in Emilia by decorating his castle at Torchiara with frescos that showed the fortresses and countryside he had recently conquered (this ca. 1460).¹¹ And one of the most telling signs of the rise of territorial consciousness occurred in the 1494 Treaty of Tordesillas, where Pope Alexander VI divided the non-Christian world between the Spaniards and the Portuguese by drawing a north-south line—the so-called Line of Demarcation—370 leagues to the west of the Cape Verde

Islands. According to the terms of the agreement, all lands to the east of the line belonged to the Portuguese, while those to the west went to Castile. The discovery of the Philippines and other Pacific islands by Ferdinand Magellan sparked a nearly century-long quarrel between the Iberian powers over control of the western Pacific. Nevertheless, the Line of Demarcation offers evidence that by this time even the pope had begun to view the world in territorial, as opposed to strictly jurisdictional (or even religious), terms.¹²

Territorial consciousness—a growing sense of space—paralleled territorial needs. And if those needs tended to differ across Europe, it was increasingly the case that meeting them led to similar ends: maps. Consider two contrasting examples drawn from the two traditional

7. Peter Sahlins, *Boundaries: The Making of France and Spain in the Pyrenees* (Berkeley: University of California Press, 1989), 299. The growing bibliography on the relationship between territorial boundaries and state sovereignty also includes John Breuilly, “Sovereignty and Boundaries: Modern State Formation and National Identity in Germany,” in *National Histories and European History*, ed. Mary Fulbrook (Boulder: Westview, 1993), 94–140; Lucien Febvre, “Frontière: The Word and the Concept,” in *A New Kind of History: From the Writings of Febvre*, ed. Peter Burke, trans. K. Folca (New York: Harper and Row, 1973), 208–18; Michel Foucher, *L’invention des frontières* (Paris: Fondation pour les Études de Défense Nationale, 1986); Daniel Nordman, “Des limites d’état aux frontières nationales,” in *Les lieux de mémoire*, 3 vols., under the direction of Pierre Nora (Paris: Gallimard, 1984–97), 2:35–61; idem, *Frontières de France: De l’espace au territoire, XVI^e–XIX^e siècle* (Paris: Gallimard, 1998); and Rita Costa Gomes, “A construção das fronteiras,” in *A memória da Nação*, ed. Francisco Bethencourt and Diogo Ramada Curto (Lisbon: Livaria Sá da Costa Editoria, 1991), 357–82.

8. Samuel Y. Edgerton, *The Renaissance Rediscovery of Linear Perspective* (New York: Basic Books, 1975), 114–15.

9. See François de Dainville, “Cartes et contestations au XV^e siècle,” *Imago Mundi* 24 (1970): 99–121.

10. For the Florence-Milan dispute, see Edgerton, *Linear Perspective*, 114–15, and for the Burgundy dispute, see Dainville, “Cartes et contestations.” Further cases can easily be cited. An early example of Spanish juridical cartography—a 1503 town plan of Aranda de Duero—is reproduced in Richard L. Kagan, “*Urbs and Civitas* in Sixteenth- and Seventeenth-Century Spain,” in *Envisioning the City: Six Studies in Urban Cartography*, ed. David Buisseret (Chicago: University of Chicago Press, 1998), 75–108, esp. 78, and a Dutch case involving the states of Holland and Jonker Wessel VI van Boetzaer, adjudicated in Mechelen with the help of a map by Jaspas Adriaensz., is discussed in Carry van Lakerveld, ed., *Opkomst en bloei van het Noordnederlandse stadsgezicht in de 17de eeuw / The Dutch Cityscape in the 17th Century and Its Sources* (Amsterdam: Amsterdam Historisch Museum, 1977), 102–3.

11. Joanna Woods-Marsden, “Pictorial Legitimation of Territorial Gains in Emilia: The Iconography of the *Camera Peregrina Aurea* in the Castle of Torchiara,” in *Renaissance Studies in Honor of Craig Hugh Smyth*, 2 vols., ed. Andrew Morrogh et al. (Florence: Giunti Barbèra, 1985), 2:553–68.

12. The Iberian dispute over the western Pacific, cartographic and otherwise, is discussed in Jerry Brotton, *Trading Territories: Mapping the Early Modern World* (Ithaca: Cornell University Press, 1998).

cradles of the Renaissance, northern Italy and the Low Countries. In the latter, it was the need to defend against flooding and other threats to low-lying terrain that led to the formation of *heemraadschappen* (water control boards) with the charge of measuring and recording information pertaining to the local water districts. These data-collecting committees—which commissioned rudimentary maps—brought about further and broader institutional organization, the formation of *hoogheemraadschappen* (larger water control boards), thus demonstrating how, in the Dutch case, the making of maps preceded and may even be said to have induced the organization of government.¹³

By contrast, defense against ambitious warlords drove the Italian city-states to map their territories during the conflict-riven fourteenth and fifteenth centuries. Or, to put it in Burckhardian terms, just as Italian condottieri took the lead in the art of war, laying intricate sieges and constructing expert fortresses, walls, and other defenses, so did Italian engineers take the lead in the art of mapping, which well served their princes in the never-ceasing battles of the day.¹⁴ War, first in Italy and later elsewhere in Europe, contributed appreciably to the rise of territorial consciousness. It also spawned a class of individuals, soon to be called surveyors and engineers, who developed the mathematical and charting skills necessary to plot out a city's defensive requirements in the form of ground plans or maps. It follows that some of Europe's first ground plans—a sure sign of territorial consciousness—came from northern Italy. An early example is the plot of Milan, produced for the Sforzas around 1430; another is that of the Po Valley town of Imola, attributed to Leonardo da Vinci and completed around 1484 as part of the town's fortification strategy.¹⁵ Like the contemporary plans of dikes and polders in the Netherlands, these texts were working documents, executed for practical purposes. Yet they contributed all the same to the concept of sovereignty as it came to be understood in later years: official control over space rather than people.

By the sixteenth century, the idea of territorial sovereignty, especially as it applied to borders, had begun to make inroads into Europe's political lexicon, too. Rulers were advised to think territorially, as it were: to know their realms so as better to defend them, as Niccolò Machiavelli would famously advise, and even to enlarge on them. The author of *Il principe* (1532) made these points explicitly in the wake of the horrible destruction wrought by the French invasion of Charles VIII in 1494–95. “The prince who lacks expertness in topography,” Machiavelli advised sternly, “lacks the first quality needed by a general, because [topography] teaches how to find the enemy, to choose encampments, to lead armies, to plan battles, and to besiege towns with advantage.”¹⁶ Much the same point was made, if more delicately, by Baldassare Castiglione; his

context was that of courtliness, and his audience included all ranks of courtiers.¹⁷ And it found expression, too, in the work of that other leading theorist of Renaissance statecraft, Francesco Guicciardini, who had in mind the failure of Italian city-states to know, and thus to defend, their own territories.¹⁸ The French jurist Claude de Seyssel, in his 1515 treatise dedicated to François I, emphasized the importance of “frontier” strongholds and, in a nod to emergent notions of territorial sovereignty, advised the king to “visit his lands,” especially those bordering hostile neighbors.¹⁹

The collective counsel of the theorists was generally heeded, insofar as rulers of the day began to incorporate regular instruction in geography into their education and that of their heirs. In Spain, Charles V passed down, along with his Burgundian inheritance, his cartographic learning, arranging for his son, Philip II, to be properly instructed in both cosmography and geography. In doing so, he established a Habsburg tradition that lasted until the end of the dynasty in 1700. Cosimo I of Florence did the same for his children, Francesco and Fernando de' Medici. And in France, starting in the mid-sixteenth century, the *géographe du roi*, in addition to his other duties, was responsible for teaching royal *enfants* about maps and related materials. The habit of royal instruction in geography may have been slightly less evident in England—this despite the good advice of Sir Thomas Elyot, who in 1531 encouraged rulers to make “portraiture or painting” of their terrain.²⁰ Yet Henry VIII did use maps in critical ways, and his cartographic instincts endured among the Tudors and Stuarts. By the opening of the seventeenth

13. The Dutch case is discussed in greater detail in chapter 43 in this volume.

14. Jacob Burckhardt, *The Civilization of the Renaissance in Italy*, 2 vols., trans. S. G. C. Middlemore (New York: Harper, 1958).

15. On city views, see Lucia Nuti, *Ritratti di città: Visione e memoria tra Medioevo e Settecento* (Venice: Marsilio, 1996); David Buisseret, ed., *Envisioning the City: Six Studies in Urban Cartography* (Chicago: University of Chicago Press, 1998); Richard L. Kagan, *Urban Images of the Hispanic World, 1493–1793* (New Haven: Yale University Press, 2000); and see fig. 36.16 in this volume.

16. Niccolò Machiavelli, *Chief Works and Others*, 3 vols., trans. Ian Gilbert (Durham: Duke University Press, 1965), 1:55–57, esp. 56.

17. Baldassare Castiglione, *Il libro del cortegiano* (Venice, 1528).

18. Francesco Guicciardini, *The History of Florence*, trans. Mario Domandi (New York: Harper and Row, 1970), 88, where the author describes the manner in which leading Italian states had to pay close attention to the landscape and enemy movements—this at the height of their interpeninsular rivalries of the late fifteenth century.

19. Claude de Seyssel, *The Monarchy of France* [1515], trans. J. H. Hexter, ed. Donald R. Kelley (New Haven: Yale University Press, 1981), 108–9. Charles IX embarked on just such a royal journey in 1564–66, which included symbolic inspections of the kingdom's frontiers; see Jean Boutier, Alain Dewerpe, and Daniel Nordman, *Un tour de France royal: Le voyage de Charles IX (1564–1566)* (Paris: Aubier, 1984).

20. Thomas Elyot, *The Book Named the Governor*, ed. S. E. Lehmberg (London: Dent, 1962), 23–24; cited in Barber, “England I,” 31.

century, the English mapmaker John Norden echoed Niccolò Machiavelli in his counsel to James I that “it well befitteth a Prince to be trulie acquainted with his own territories.” Norden advised the king, as well, to make certain that his heir, Prince Henry, had “the most requisite understanding of the particulars, topographicall and historicall of Englande and Wales.”²¹

To be topographically wise, as rulers were plainly counseled, is not quite the same as to be in control of one’s realms; knowing the discipline of geography is not the same as disciplining the land. Yet the two trends tended to run in conjunction around this time, and the first half of the sixteenth century witnessed numerous and varied attempts to rein in the land (or sea), graphically no less than politically. Once again, certain Italian precedents stand out. Venice, following its colonial expansion by the early fifteenth century to the mainland, or terra firma, and in the wake of the growing French threat following the 1494 invasion of the peninsula by Charles VIII, instituted a policy of producing surveys and commissioning regional maps to enable it effectively to manage its growing resources. A prominent map of the “state of the *Serenissima*” (now lost) decorated the doge’s palace.²² The Venetian project offers early evidence of state-sponsored cartography. It may well have been such Italian influences that prodded the centralizing regime of Tudor England toward a similar strategy of mapping. Yet what Barber has called “the Henrician cartographic revolution” (“a profusion of plats . . . by military engineers”) probably grew out of the more particular circumstances of the 1530s, by which time the pope had excommunicated Henry VIII, and an attack by François I of France (aided by Charles V) did not seem out of the question.²³ Whatever the stimulus, the English monarchy seized on the device of maps “as tools in the processes of government and administration,” suggesting that Thomas Cromwell well understood the link between cartography and statecraft.²⁴ The back-and-forth conflicts between Sweden and Denmark may well have instigated the respective Scandinavian crowns to sponsor projects for mapping their realms; there is even talk of a Konglischen Schule of cartography in Copenhagen.²⁵ And in the Holy Roman Empire the crisis of the Reformation may likewise have intensified cartographic undertakings, including, for example, Tilemann Stella’s great surveying project—which, if never fully realized, did produce an important map of Germany in 1560.²⁶

Multiple conflicts, military threats, and military offensives all made the need for maps more acutely felt by Renaissance regimes. Field maps of some sort certainly existed in the Middle Ages, but Charles VIII of France (r. 1483–98) was the first European monarch on record to commission a map for purposes of strategic planning. As part of the preparations for his invasion of Italy, Charles

commissioned Jacques Signot to reconnoiter and map the alpine passes through which his army could pass, a charge that resulted in the “Code Signot” (1495), printed as *La carte Ditalie* in 1515.²⁷ Mapping quite naturally went hand in hand with expansion, as Christopher Marlowe’s imperial Tamburlaine boldly pronounced: “Give me a map. Then let me see how much / Is left for me to conquer all the world.”²⁸ The emperor Charles V does not leave so blunt a record, yet we know that he made use of maps to plan entire campaigns. In doing so, the Habsburg monarch had before him the examples of Cyrus the Great, Julius Caesar, and other ancient leaders who were said to have planned their battles with recourse to maps. He also had the intelligence of Machiavelli, who advised the prince to think as a general thinks and become topographically wise, and of Vegetius, the fourth-century military writer who similarly reminded rulers of the importance of maps.²⁹ Henry VIII and François I, likewise, are known to have made use of maps for military purposes,

21. Norden is discussed in Victor Morgan, “The Cartographic Image of ‘The Country’ in Early Modern England,” *Transactions of the Royal Historical Society*, 5th ser., 29 (1979): 129–54, esp. 141.

22. See Rodolfo Gallo, “Le mappe geografiche del palazzo ducale di Venezia,” *Archivio Veneto*, 5th ser., 31 (1943): 47–113.

23. Barber, “England I,” 34. See also P. D. A. Harvey, *Maps in Tudor England* (Chicago: University of Chicago Press, 1993), 44, on “the regular use of maps . . . in plans for individual fortifications and other royal works.”

24. Barber, “England I,” 32–33.

25. See the discussion in Ulla Ehrensverd, “Cartographical Representation of the Scandinavian Arctic Regions,” in *Unveiling the Arctic*, ed. Louis Rey (Fairbanks: University of Alaska Press for the Arctic Institute of North America, 1984), 552–61, and Christian Degn’s introduction to Caspar Danckwerth, *Die Landkarten von Johannes Mejer, Husum, aus der neuen Landesbeschreibung der zwei Herzogtümer Schleswig und Holstein*, ed. K. Domeier and M. Haack (Hamburg-Bergedorf: Otto Heinevetter, 1963).

26. For the Stella project, see pp. 1213–14 in this volume.

27. See figure 48.14 in this volume. The Signot project is discussed in David Buisseret, “Monarchs, Ministers, and Maps in France before the Accession of Louis XIV,” in *Monarchs, Ministers, and Maps*, 99–123, esp. 101; see also Monique Pelletier, “Des cartes pour communiquer: De la localisation des étapes, a la figuration du parcours 17^e–18^e siècles,” in *La cartografia francesa* (Barcelona: Institut Cartogràfic de Catalunya, 1996), 33–45.

28. Christopher Marlowe, *Tamburlaine the Great, Parts 1 and 2*, ed. John D. Jump (Lincoln: University of Nebraska Press, 1967), 2.5.3, ll. 123–24.

29. In his widely read *Art of War*, Machiavelli emphasized that “the first thing [the general] should do is to have all the country through which he marches described and mapped in such a way that he will know the places, the population, the distance, the roads, the mountains, the rivers, the swamps, and all their characteristics”; in Machiavelli, *Chief Works*, 2:674. For Flavius Vegetius Renuatus, see *Vegetius: Epitome of Military Science*, trans. N. P. Milner (Liverpool: Liverpool University Press, 1993), 71. Charles V’s use of maps for military purposes is discussed in James D. Tracy, *Emperor Charles V, Impresario of War: Campaign Strategy, International Finance, and Domestic Politics* (Cambridge: Cambridge University Press, 2002), 213.

in both cases turning the tools of cartography to the project of state.³⁰

Expansion overseas—and the commerce that ensued—also prodded official cartographic production. Beginning in the fifteenth century, the Iberian monarchs used sea charts, rutters, and other geographic devices to help with the planning of their imperial ventures. For this purpose, both created special cartographic repositories—the Almazém in Lisbon and the Casa de la Contratación in Seville—and accorded responsibility for the preparation and conservation of these cartographic materials to specialized officials: the *cosmografo-mor* in Lisbon, the *cosmógrafo mayor* in Seville. By the seventeenth century, the Dutch had taken over much of the Portuguese empire in the East and challenged both Spain and Portugal in the West. They also produced maps to support their ventures abroad, though this was done for the quasi-state-run Dutch East and West India Companies (founded in 1602 and 1621, respectively) rather than for the States General per se. In some cases, these maps were based on otherwise inaccessible Iberian documents, such as those that formed the basis of Jan Huygen van Linschoten's *Itinerario* (1596). Indeed, many of the great Amsterdam mapmakers of the seventeenth century served the needs of the overseas companies. Cornelis Claesz. functioned in the early years of the century as “keeper of the Dutch Almazém,” and the Dutch East India Company (VOC) House in Amsterdam served, in a manner, as a Dutch Casa de la Contratación. By 1617, Hessel Gerritsz. took over as cartographer of the VOC (at this point an official and paid position), to be replaced on his death in 1632 by the great Willem Jansz. Blaeu.³¹

The office of mapmaker, whether for the state or an overseas company, indicates that cartography was becoming institutionalized by the latter half of the sixteenth century, at the latest. This reflects, most basically, the rising interest of the state in maps; yet it also suggests a growing need by the state to reduce its dependence on less reliable sources for cartographic knowledge. Rulers found it necessary to become producers as well as consumers of maps, and for this purpose they created specialized cartographic offices charged to manufacture the materials they required. Imperial expansion allowed Spain and Portugal to take the lead in this area when they created their respective “cosmographic” offices. Yet other states were not far behind in recognizing the utility of just such administrative instruments. By the mid-sixteenth century, Venice had established specialized offices—*magistraturi*—responsible for the maps and surveys required by the state for the management of wood, water, and other natural resources. In 1548, moreover, the Venetian senate instituted the position of *cosmografo della Repubblica*, granting this official overall responsibility for the mapping of the Venetian state. The first holder of the position was the

Piemontese cartographer Giacomo Gastaldi, whose duties included offering lessons in cosmography and cartography to various members of the senate. In addition, the senate commissioned Gastaldi to produce a series of wall maps, including one of all of Africa as well as others of Asia and “the world found by Spaniards fifty years ago,” by which was meant the Americas.³²

Similar offices soon appeared elsewhere, their very pervasiveness demonstrating how widely official cartography had spread. In the Low Countries, the accomplished Jacob van Deventer served first as the “imperial geographer” of Charles V and subsequently as the “royal geographer” of Philip II (r. 1556–98). Five provincial maps (some covering multiple provinces) were printed for Charles V, and some 260 town plans were produced (evidently intended for military use) for Philip II.³³ Following the revolt against Spain, official cartography did continue in the Low Countries, though in the north this fell under the authority of the Raad van State (States Council). The southern, or Spanish, provinces remained under the control of Philip and, as such, came under the purview of Habsburg royal cartographers. In France, Henri II (r. 1547–59), a monarch with a special interest in maps, established the office of *géographe*—later elevated to *cosmographe—du roi*. The first to hold this office was the celebrated cosmographer André Thevet.³⁴ The office

30. See Barber, “England I,” and Buisseret, “Monarchs, Ministers, and Maps.”

31. See K. Zandvliet, *Mapping for Money: Maps, Plans and Topographic Paintings and Their Role in Dutch Overseas Expansion during the 16th and 17th Centuries* (Amsterdam: Batavian Lion International, 1998), quotation on 42, and chapter 46 in this volume. Gerritsz. replaced Augustijn Robaert, who filled a similar position yet without (apparently) drawing a salary.

32. See Gallo, “Le mappe geografiche,” 59 and 61. For other mapping efforts by the Venetian Republic, see Ennio Concina, “Conoscenza e intervento nel territorio: Il progetto di un corpo di ingegneri pubblici della Repubblica di Venezia, 1728–1770,” in *Cartografia e istituzioni in età moderna: Atti del Convegno, Genova, Imperia, Albenga, Savona, La Spezia*, 2 vols. (Genoa: Società Ligure di Storia Patria, 1987), 1:147–66; Emanuela Casti, “Cartografia e politica territoriale nella Repubblica di Venezia (secoli XIV–XVIII),” in *La cartografia italiana* (Barcelona: Institut Cartogràfic de Catalunya, 1993), 79–101; and chapter 35 in this volume.

33. On the Van Deventer commission, see Geoffrey Parker, “Philip II, Maps and Power,” in *Success Is Never Final: Empire, War, and Faith in Early Modern Europe* (New York: Basic Books, 2002), 96–121, esp. 101–2. Van Deventer's original town plans for the northern Netherlands are available in a facsimile edition: C. Koeman and J. C. Visser, *De stadsplattegronden van Jacob van Deventer* (Landsmeer: Robas, 1992–). Those for the southern part of the Netherlands have been published in Jacob van Deventer, *Atlas des villes de la Belgique au XVI^e siècle: Cent plans du géographe Jacques de Deventer*, 24 pts. in 4 vols., ed. C. Ruelens, É. Ouverleaux, and Joseph van den Gheyn (Brussels, 1884–1924).

34. Frank Lestringant, *André Thevet: Cosmographe des derniers Valois* (Geneva: Droz, 1991), 259–74.

subsequently went to Nicolas de Nicolay, a military engineer who was ordered, as part of his duties, to begin work on “a visitation and general and particular (detailed) description of the kingdom.”³⁵ This was the first such survey ever commissioned by a French ruler, albeit one that, for reasons associated with the wars of religion, was never finished. Later French monarchs also had their official cartographers, and by the reign of Henri IV (1589–1610), the *géographe du roi* was assisted by a corps of *ingénieurs du roi* responsible for provincial mapping and other surveys.³⁶ In Germany, things were typically complicated by the multiple divisions of free and imperial states, principalities, and so forth; sometimes, too, the *geographus regiae maiestatis* of the Habsburg monarch could labor in the Holy Roman Empire, as did Christiaan Sgrooten for Philip II from 1557. There are also records of numerous court cartographers in Germany operating on a smaller scale: Duke Albrecht V of Bavaria (r. 1550–79) employed the esteemed Philipp Apian; the court of the Landgraves in Hesse used various cartographers and scholars, from as early as 1528, for the purpose of surveying their lands; and the electors of Saxony, beginning with August I (r. 1553–86), a prince who had surveying experience himself, commenced a project of topographic surveys that endured into the seventeenth century.³⁷ The same pattern exists for the various states of Italy: Cosimo I, for example, named Egnazio Danti *cosmografo de Sua Alteza Serenissimo* of the duchy of Florence (this in 1562, not long after the Venetian magistratures had been instituted), and Genoa established an office of *delineatore e ingegnare de la Repubblica*.³⁸ There is evidence for eastern Europe as well—in Poland, for example, where King Stefan Batori (r. 1575–86), as part of his military campaigns against the Turks, named Matthias Strubicz to the office of royal cartographer.³⁹

By the seventeenth century, this process only intensified, nowhere more so, perhaps, than in the militarily ambitious kingdom of Sweden. Gustavus II Adolphus (r. 1611–32) employed several official cartographers for administrative, defensive, and, indirectly, offensive purposes. In 1628 Georg von Schwengeln, a Polish cartographer who had crafted for Gustavus several *tabulas geochorographicas* of Estonia and Livonia, proudly used the title “confirmed *geographicus*” of the king.⁴⁰ That same year Gustavus appointed another cartographer, Andreas Bureus, and ordered him to survey the entire kingdom in order to investigate possibilities for economic development. Bureus, who had followed a family tradition by going into the natural sciences, was the engine behind the Swedish Lantmäterikontoret, or Land Survey Office, which by the middle of the century was to develop into “one of the foremost cartographic institutions in Europe.”⁴¹ In the meantime, his 1626 map of the kingdom alerted the monarch to the importance of maps for plan-

ning purposes. As head of the new surveying office, the energetic Bureus directed a staff of six (this would grow to twenty-six) that helped him produce detailed cadastral surveys. In addition to information on boundaries, resources, and even soil types, these documents also recommended possibilities for improvement. The whole topographic package was ultimately bound into special books called *geometriska jordeböckerna*, carefully stored in the royal archives. The Swedish king, in addition, created the Militaringenjörshar, a military map office staffed by military engineers. The monarch’s overall engagement with maps demonstrates the deep inroads made by state-commissioned cartography by the middle decades of the seventeenth century.⁴²

Some of the most significant mapmaking of early modern Europe took place in the Low Countries, more particularly in Amsterdam; and it is worth noting how the Dutch case (and, to a lesser extent, the English) in many ways complicates arguments pertaining to official cartography. The Low Countries, most obviously, had a far messier version of “official” cartography than the countries we have discussed thus far. An independent republic

35. Roger Hervé, “L’oeuvre cartographique de Nicolas de Nicolay et d’Antoine de Laval (1544–1619),” *Bulletin de la Section de Géographie* 68 (1955): 223–63, esp. 224 n. 1.

36. David Buisseret has devoted several essays to the cartographic projects of the French monarchy in the sixteenth and seventeenth centuries. In addition to chapter 49 in this volume, “Monarchs, Ministers, and Maps,” and “Cartographic Definition,” see “The Use of Maps and Plans by the Government of Richelieu,” *Proceedings of the Annual Meeting of the Western Society for French History* 14 (1987): 40–46. For Louis XIV and maps, see Monique Pelletier, “Cartography and Power in France during the Seventeenth and Eighteenth Centuries,” *Cartographica* 35, nos. 3–4 (1998): 41–53.

37. The German context, including that of the Holy Roman Empire, is reviewed in chapter 42 in this volume.

38. For Tuscany and Genoa, see, respectively, Leonardo Rombai, ed., *Imago et descriptio Tusciae: La Toscana nella geocartografia dal XV al XIX secolo* (Venice: Marsilio, 1993), 58, and Gianni De Moro, “Alla ricerca di un confine: Modifiche territoriali e primi sviluppi di cartografie ‘di stato’ nel ponente ligure cinquecentesco,” in *Carte e cartografi in Liguria*, ed. Massimo Quaini, exhibition catalog (Genoa: Sagep, 1986), 68–77, esp. 70. See also chapters 36 and 34 in this volume.

39. Karol Buczek, *The History of Polish Cartography from the 15th to the 18th Century*, trans. Andrzej Potocki (1966; 2d ed., reprinted with new intro., notes, and bibliography Amsterdam: Meridian, 1982), 49–51; see also Michael J. Mikos, “Monarchs and Magnates: Maps of Poland in the Sixteenth and Eighteenth Centuries,” in *Monarchs, Ministers, and Maps*, 168–81, esp. 169–74.

40. Harald Köhlin, “Georg von Schwengeln and His Work, 1620–1645,” *Imago Mundi* 6 (1949): 67–72, esp. 68.

41. See p. 1805 in this volume.

42. See chapter 60 in this volume. For contemporaneous developments in Spain, see Felipe Pereda and Fernando Marías, eds., *El Atlas del rey planeta: La “Descripción de España y de las costas y puertos de sus reinos” de Pedro Texeira (1634)* (Madrid: Nerea Editorial, 2002), and Rocío Sánchez Rubio, Isabel Testón Núñez, and Carlos M. Sánchez Rubio, *Imágenes de un imperio perdido: El Atlas del Marqués de Heliche* ([Mérida]: Presidencia de la Junta de Extremadura, [2004]).

from 1648 (de facto from 1609), the United Provinces of the Netherlands comprised the seven northern provinces of the Low Countries that had broken away from Habsburg Spain in the final decades of the sixteenth century. These were ruled, by the seventeenth century, through a delicately balanced States General in coordination with a sometimes powerful *stadhouder* (state-holder or lieutenant), the latter generally embodied by the prince of Orange. In many regards leading cultural patrons in early modern Europe, the members of the House of Orange played a relatively minor role in the history of Dutch cartography. Meanwhile the States General, made up of the disparate delegates drawn from the provincial assemblies, also lacked a central apparatus for cartography, especially when compared to their neighboring (and centralizing) monarchies. Thus, the job of producing geographic wares fell overwhelmingly into the hands of commercial mapmakers, who thrived nowhere more than in Antwerp (until 1576) and later in Amsterdam. “Official” cartography as it existed tended to lean heavily on commercial resources; Dutch mapmakers, working for what might be considered “state” institutions, manufactured their products preeminently for the open market. (Much the same free-market system also distinguishes the patronage patterns of Dutch painting; court painting quietly coexisted with production for the market.) This may be best illustrated in the field of colonial cartography. Mapmakers for the privately traded, yet States General–supported, overseas companies came from, and generally also continued to produce for, what might anachronistically be termed “the private sector.” The Blaeu firm made maps for the directors of the VOC, and they also used VOC-generated data for their publicly sold products. More generally, because no single princely or governmental power exercised control over cartography, the making of maps flourished almost exclusively as a commercial enterprise. Dutch mapmakers made products of considerable quality and quantity, depicting the provinces of the Netherlands no less than the realms of Europe—cartographic wares that became the envy of rulers across Europe, who sometimes had to rely on producers in the Netherlands for renderings of their own domains.⁴³

In the case of early modern England, while official cartography did exist and even flourished at times, it had to compete with other cartographic entities in ways that suggest a somewhat more ambiguous relationship between statecraft and mapmaking than existed in parts of the Continent. To be sure, state-sponsored cartography got underway in England later than in Italy or Iberia—as did other Renaissance trends—and had a somewhat fitful history over the course of the sixteenth century. Henry VIII is the first English monarch known to have made use of maps for defensive purposes (this by the 1530s), and, starting in the 1550s, the English government, with an eye

toward colonization, played a leading role in the mapping of Ireland.⁴⁴ Otherwise, though, royal support for any number of cartographic enterprises tended to be indirect. Only in the reign of Elizabeth I (r. 1558–1603), and then owing primarily to the influence of William Cecil, Lord Burghley, secretary of state and lord treasurer, were maps incorporated into the regular business of state. Cecil demanded and obtained more accurate maps and employed them for a variety of defensive and administrative purposes: assessing taxes, establishing boundaries, and planning routes. In the 1560s, Cecil also sought to involve the crown in a detailed geographical survey of England and Wales, but this project, entrusted for a time to John Rudd, was never completed. In 1573, Christopher Saxton was appointed to survey both England and Wales “by speciall direction & commandment from the Queenes Majesty.”⁴⁵ Over the course of the next decade, Saxton produced a series of county maps and, in 1583, a large wall map of the kingdom. Yet the crown’s actual involvement in this project was minimal, limited essentially to giving Saxton official passes, grants of land and offices, and various subsidies. Indeed, close study of the Saxton maps suggests the complex layers of patronage for official mapping—royal, aristocratic, mercantile—and the intensive cartographic struggles that could take place, quite literally, on the map. On balance, the Tudor monarchy was, as Barber explains, more of a consumer than a producer of maps, and things did not change dramatically under the Stuarts.⁴⁶ Only in 1671 did Charles II manage to create the office of geographer royal, which he granted to John Ogilby, a former dance master turned poet. Ogilby produced Asian and American atlases pirated from Dutch originals and a cartographic survey of English and Welsh roads meant to form part of a never completed, if

43. Dutch cartography is surveyed by C. Koeman in *Geschiedenis van de kartografie van Nederland: Zes eeuwen land- en zeekaarten en stadsplattegronden* (Alphen aan den Rijn: Canaletto, 1983), and K. Zandvliet, *De groote waereld in 't klein geschildert: Nederlandse kartografie tussen de middeleeuwen en de industriële revolutie* (Alphen aan den Rijn: Canaletto, 1985). See chapters 43–46 in this volume, all with updated sources.

44. On the mapping of Ireland, see J. H. Andrews, “Geography and Government in Elizabethan Ireland,” in *Irish Geographical Studies in Honour of E. Estyn Evans*, ed. Nicholas Stephens and Robin E. Glasscock (Belfast: Queen’s University of Belfast, 1970), 178–91.

45. Quoted in R. A. Skelton, *Saxton’s Survey of England and Wales: With a Facsimile of Saxton’s Wall-Map of 1583* (Amsterdam: Nico Israel, 1974), 8. See also Ifor M. Evans and Heather Lawrence, *Christopher Saxton, Elizabethan Map-Maker* (Wakefield: Wakefield Historical Publications and Holland Press, 1979).

46. The political context of these maps is surveyed in Peter Barber, “England II: Monarchs, Ministers, and Maps, 1550–1625,” in *Monarchs, Ministers, and Maps*, 57–98, esp. 73–77 and 84; see also the seminal essay of Richard Helgerson, “The Land Speaks: Cartography, Chorography, and Subversion in Renaissance England,” *Representations* 16 (1986): 50–85.

ambitiously planned, English atlas (the first part was published under the general title *Britannia* in 1675).

MAPPING STATES

In the century or so between Saxton's great collection of county maps (1579) and Ogilby's road atlas, *Britannia* (1675), England transformed itself from an insular and relatively peripheral monarchy to one of the leading states on the European stage. Did maps have anything to do with it? On the Continent, cartography emerged in the late fifteenth century, along with other new devices of statecraft, as an essential tool of government. It played a role in the administration, taxation, juridical management, and defense of the early modern state. Cartographic know-how entered the political tool kit of the Renaissance court, and a new "mapping consciousness" seeped into government policies (and political vocabularies) in plainly recognizable ways. England certainly followed these trends—even if they tended to arrive in Albion somewhat later than in Italy or Spain, and even if London mapmaking never quite competed with that of Antwerp or Amsterdam. There is ample evidence of the use of geography and the place of maps in the practice of English government—especially in Henry VIII's court after 1530 and in the circle of Elizabeth I's loyal servant, Lord Burghley. Yet it would be hard to assign a causal role to cartography; maps reflected court practices and administrators' agendas more than they actually shaped them. That said, maps were used by the English court as a potent device to shape identities and enunciate national ambitions. Efforts to articulate the very space of England and the relative place of the crown therein took varying and often competing cartographic forms, and mapmakers from Saxton to Ogilby participated in this process of mapping out Englishness.

Official cartography, in England as in most other places in early modern Europe, played a concrete role in the exercise of statecraft as well as a more indeterminate role in the propagation of state, or "national," agendas. Christopher Saxton's county maps of England and Wales, as Helgerson has superbly demonstrated, bear in their forms the semiotics of nationhood.⁴⁷ In their various states and by their incorporation of various devices—the royal crest, the patron's arms, the engraver's title, the anything-but-decorative cartouches—the Saxton maps show how the surveyor and his sponsors all participated in the ideological production, or "fashioning," of English identity (fig. 26.1). Decades later, following a wrenching civil war and an unprecedented regicide and interregnum, Ogilby's geographic undertaking, if less commented on than Saxton's, once again took up the task of articulating Englishness, once again in cartographic form. The use of geographic forms to present national, or protonational,

arguments was not uncommon. It was a ploy used, moreover, both by the crown and those in its service and by those who would challenge the state. It was also a strategy as likely to come from the court as from the cartographer. In 1580, the English magus and mathematician, John Dee, met with Elizabeth I in an attempt to prove to his sovereign that for "a great parte of the sea Coastes of Atlantis (otherwise called *America*) . . . and of all the Iles nere unto the same . . . and Cheiflie all the *Ilands Septentrionall* [i.e., Greenland and the mythical island of Frisland], the Title Royall and supreme government is due and appropriate unto [her] most gracious Majestie."⁴⁸ Dee intended to sell the queen on his grand plans for a maritime empire and trotted out a series of historical claims dating back to the time of King Arthur to do so. He also laid the groundwork for a British imperial cartography by presenting to Elizabeth maps that showed those parts of Asia and America he wished to explore in her name. Dee's overarching idea was to write a four-volume book on the British monarchy, a kind of atlas-cum-history that would map out his plans for what he imagined as *Brytanici Imperii Limites*. Although her favor for Dee ran hot and cold, Elizabeth was certainly not immune to this brand of imperial cartography.⁴⁹ The commanding Ditchley Portrait (ca. 1592), attributed to Marcus Gheeraerts, shows the queen standing on a map of England, her towering presence bluntly taking in Wales and shading Scotland (plate 18). In this way Elizabeth's figure endorsed a cartographic image of her realms, firmly linking her royal authority to the land.

Ample further cases can be cited of what might be called "constructive cartographies": efforts to build a case for national aspirations, imperial expansion, religious orthodoxy, or political opposition through the use of maps and other geographic forms. The range of these constructions was broad in terms of their scale, purpose, and outcomes; they included maps that decorated palaces and amplified royal ambitions, maps that advertised the church's sway in the heat of religious conflict, maps that challenged the colonial reach of competing powers. Collectively, they demonstrate the myriad ways in which the tools of cartography could bolster the projects of states. Or of empires, because some of the most compelling samples of this sort of mapping derive from the Habsburg court of Charles V, an emperor for whom (or at least

47. Helgerson, "Land Speaks"; see also Richard Helgerson, *Forms of Nationhood: The Elizabethan Writing of England* (Chicago: University of Chicago Press, 1992), which amplifies the cartographic themes with evidence from other disciplines.

48. William H. Sherman, "Putting the British Seas on the Map: John Dee's Imperial Cartography," *Cartographica* 35, nos. 3–4 (1998): 1–10, esp. 3–4.

49. For Dee's cartographic concerns, see Sherman, "Dee's Imperial Cartography."



FIG. 26.1. CHRISTOPHER SAXTON, MAP OF SOMERSET, 1579. This map illustrates a competing menu of patrons and producers. The royal arms gain the preeminent position, displayed under the heavy canopy at upper left, while Thomas Seckford's arms are less conspicuous at bottom right. Saxton

placed his own name, discreetly, in the banner that runs behind the compass.

Size of the original: ca. 39.7 × 52.1 cm. Photograph courtesy of the BL (Maps C.7.c.1).

around whom) several notably ambitious cartographic projects were undertaken. The political symbolism of an early map of Tenochtitlán (Mexico City)—generally, but erroneously, attributed to Hernán Cortés, in whose letters from Mexico it was first printed (Nuremberg, 1524)—is stunningly forthright.⁵⁰ The map itself is an amalgam of cartographic bits and pieces, assembled from at least three different sources. First, an image of the city shares space with a coastal map of the Gulf of Mexico, which specifies the general region where Tenochtitlán lies. The sheet includes, second, a map of Lake Texcoco, emphasizing, as did most maps of the period, the lake's coastline and the towns perched along its edge. Superimposed on this map is a third image, a perspective view of the Aztec capital, with its houses, causeways, and waterworks. In the middle, and sufficiently out of scale to demonstrate its importance, is a plan of the old temple precinct. Elements

of this central section of the map, which point to various aspects of Aztec religious practice—notably a twin-stepped, pyramid-shaped temple with an image of the sun and skull racks—have been attributed to an indigenous hand. Yet they are juxtaposed with other elements—a cross on top of the temple and a decapitated idol—that suggest, symbolically at least, how native rites had lately been vanquished. Whether or not this subtle religious message comes through, the political message is plainly emblazoned in the upper left cartouche, which contains the arms of the emperor and a Latin inscription that translates, roughly, “a commonwealth that was once powerful and a realm of the greatest glory . . . He [Charles V], is

50. Barbara E. Mundy, “Mapping the Aztec Capital: The 1524 Nuremberg Map of Tenochtitlan, Its Sources and Meanings,” *Imago Mundi* 50 (1998): 11–33.

truly outstanding. The Old World and the New [now] belong to him, and another is laid open to his rule.”⁵¹ The rhetoric is imperial. So, too, is the map, which presents Tenochtitlán—another new world—as the latest jewel in Charles’s imperial crown.

The Tenochtitlán map circulated a Habsburg case for an overseas empire in the form of a printed text, conveying a confidently imperial message to all readers of Europe’s New World literature. In other instances, the emperor addressed an audience closer to home—the court—enlisting other genres that showed, in painted, woven, or even tiled forms, a map of Habsburg might. One particularly striking form of this cartographic rhetoric appears in a series of tapestries commemorating Charles V’s 1535 conquest of Tunis, his most celebrated military victory and one that he personally commanded. Although the tapestries were commissioned in 1546 by Charles’s aunt, Mary of Hungary, the emperor was already aware of the propagandistic value of his enterprise when he invited several historians and an artist, Jan Cornelisz. Vermeyen, to accompany him to North Africa. The ornate tapestries ultimately designed by Vermeyen were woven between 1549 and 1554 in the Brussels workshop of Willem de Pannemaker. Subsequently placed on display for important state occasions—royal baptisms, marriages, funerals—the tapestries were central to the Habsburgs’ imperial rhetoric for almost 150 years. In twelve related panels they offer a narrative in the form of a visual history of the emperor’s victory. And maps play a prominent part. Much in the way that Julius Caesar opened his account of the Gallic Wars with a description of the land, the first panel of the tapestries sets the geographic stage for the drama with a map of the western basin of the Mediterranean, apparently the work of Vermeyen himself. With North Africa at the top and Europe at the bottom, this “prologue” also includes views of Barcelona, Genoa, and Naples, all of which figured in the expedition.⁵² Other panels provide panoramic views of Barcelona and Valletta on the island of Malta, cities central to the Habsburg triumph. Geographical description was not, of course, the chief aim of these tapestries. They sought rather to celebrate Charles’s *imperium*, a theme woven into the borders of each tapestry, which displayed the ruler’s famous device, the Pillars of Hercules, with his motto, *Plus ultra*. The maps advertised the extent of the emperor’s rule, which now encompassed not only the Mediterranean (not to mention the Americas and Asia) but Africa as well.⁵³

Other European rulers constructed cartographies in similar ways, if on smaller scales. Indeed, the ambitions of the maps generally reflected the ambitions of the rulers more than the extent of their realms. Though generally not considered “imperial” sovereigns, strictly speaking, the Medici grand dukes of Tuscany, beginning with Cosimo I and continuing into the seventeenth century, set

maps to the task of promoting their regime. The grand dukes were exceptionally map savvy; they turned to cartography eagerly and often in an effort to bolster their somewhat shaky status as dukes in a former republic and to articulate their expansive hopes to enlarge their domains. (And the dukes used maps as but one strategy in a broader offensive of images, as Biagioli has shown with reference to scientific emblems.)⁵⁴ Cosimo I began this process with *vedute* of Florence and other Tuscan cities painted by Giorgio Vasari for several rooms in the Palazzo Vecchio, the fortress that Cosimo I turned into a palace and symbol of Medicean magnificence (fig. 26.2). Toward this end, he also had Egnazio Danti, *cosmografo del Serenissimo granduca*, transform the palace’s Sala de Guardaroba into a map room, which eventually housed fifty-seven maps featuring Florence, Italy, and the world’s continents. The project was conceived with some scientific purpose, inasmuch as the commission instructed Danti to decorate the room with oil-painted maps, “each one precisely measured and amended in accordance with the new authors and accurate navigation maps.”⁵⁵ What has come to be known as the Sala delle Tavole Geografiche also had a political aim, though, inasmuch as it displayed to all visitors the global aspirations of the patron. Cosimo I’s sons and successors, Francesco and Ferdinand I, followed suit, prominently incorporating imperial rhetoric in their numerous cartographic commissions. Francesco kept a series of artists and cosmographers busy making views of Florence, *vedute* of the Medici countryside villas, and various maps. These cartographic commissions culminated under Ferdinand I, with Giuseppe Rosaccio’s *Carta di Cavallo* (1609), a new map of the region that projected the message of the greater Tuscany to which the grand dukes aspired. This message circulated widely: all of the Medicean maps and views were either published or prominently placed on public display in an effort to promote the grandeur of the Medici reign.

The notion of mapping “grandeur” was widely embraced by rulers and regimes of the period. Cartographers complied by plotting realms in ways that expressed the glory of the monarch or republic, trying to outdo one another—and to awe the potential viewer—with their rep-

51. Cited in Kagan, *Urban Images*, 67. We have also benefited from Catharine Wilkinson-Zerner’s thoughtful observations on this map.

52. The Mediterranean Basin is plate 22 in this volume.

53. The tapestries are discussed and illustrated in Hendrik J. Horn, *Jan Cornelisz. Vermeyen: Painter of Charles V and His Conquest of Tunis*, 2 vols. (Doornspijk: Davaco, 1989).

54. Mario Biagioli, “Galileo the Emblem Maker,” *Isis* 81 (1990): 230–58, and, more generally, idem, *Galileo, Courtier: The Practice of Science in the Culture of Absolutism* (Chicago: University of Chicago Press, 1994).

55. Jodoco Del Badia, “Egnazio Danti: Cosmografo, astronomo e matmatico, e le sue opere in Firenze,” *La Rassegna Nazionale* 6 (1881): 621–31, and 7 (1881): 334–74.

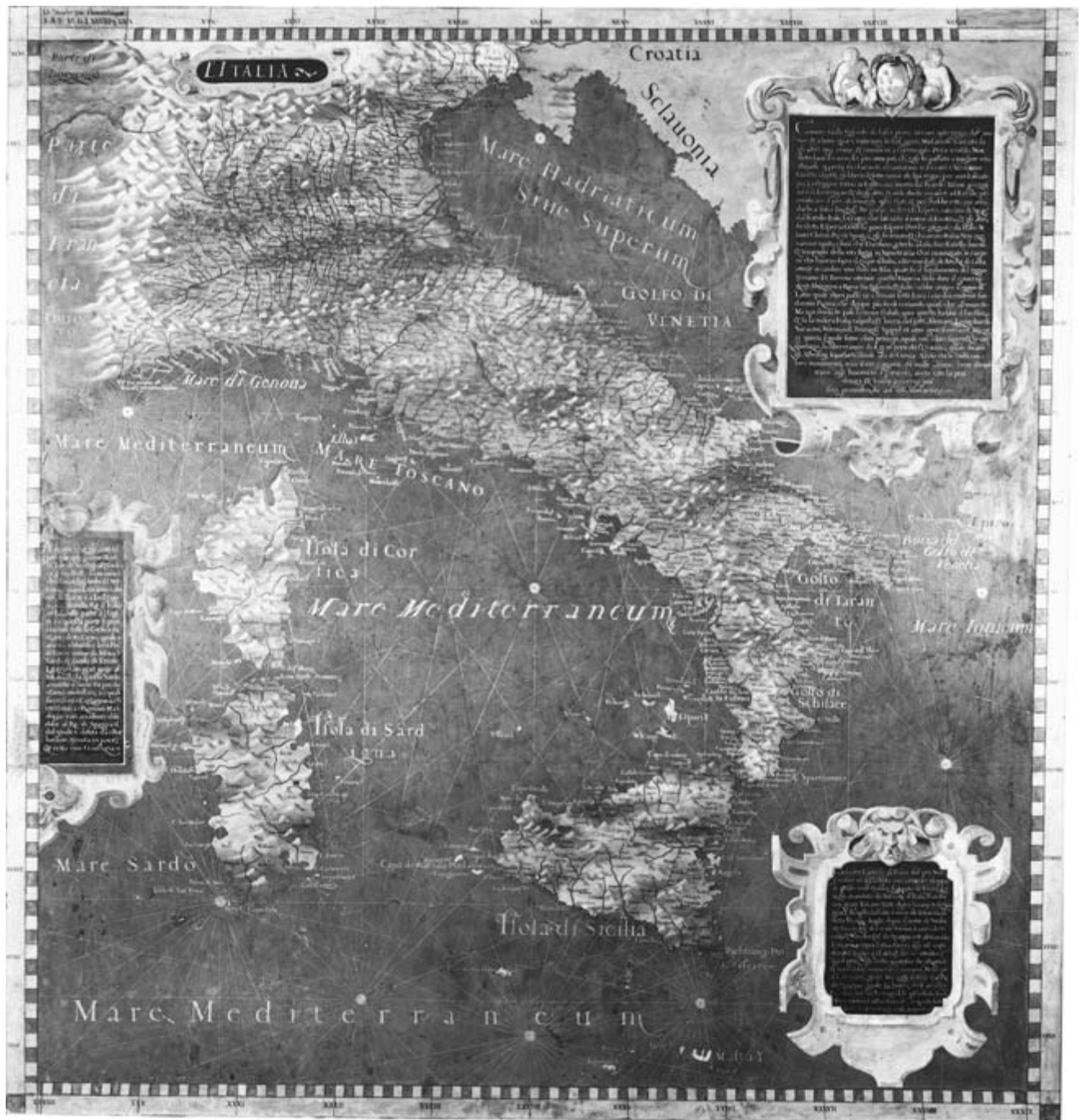


FIG. 26.2. EGNAZIO DANTI, MAP OF ITALY, SALA DELLE CARTE GEOGRAFICHE, PALAZZO VECCHIO, CA. 1563–67. This map figured among the fifty-seven different cartographic images featured in the “cosmography” that Cosimo I de’ Medici incorporated into the Palazzo Vecchio.

The work of the grand duke’s official cartographer, the maps incorporated into this room were prepared for both instructional and celebratory purposes.

With permission from Fototeca dei Musei Comunali di Firenze.

representations of the state. In Poland, King Stefan Batori made his promotional aims apparent when, shortly before his death in 1586, he planned to publish, with the assistance of the royal cartographer, Matthias Strubicz, a map of Poland “to the glory of this kingdom and the

memory of his victories.”⁵⁶ Tilemann Stella, who served the court of Duke Johann Albrecht I of Mecklenburg-

56. Cited in Buczek, *History of Polish Cartography*, 52. The map in question is likely to have been the one completed by Strubicz in 1582.

Schwerin from the mid-sixteenth century, also labored on a grand survey of the Holy Roman Empire (never published), for which imperial privileges were granted in 1560. His purpose, as described in a petition to Ferdinand I, was explicitly to “glorify” the German nation as the head of Christianity—and, naturally, to praise God and the emperor. In this Stella would have echoed other contemporary and even competing maps—such as Christiaan Sgrooten’s wall map of Germania (ca. 1566), produced for the Castilian monarch, Philip II, to exalt an empire that the king’s father, Charles V, had granted to his uncle (see fig. 42.31). Philip himself was keenly aware of how maps could help to consolidate his rule in Spain: maps might burnish a monarch’s image and impress his subjects. Writing around 1560, Felipe de Guevara, adviser to the king, urged Philip to display on the walls of his palace a large “description of Spain.” Guevara’s justifications for the project are telling:

Although it is certain that there are many things for which Your Majesty can be justly proud and that will perpetuate your name and fame, none of these human achievements can begin to compare with the magnificence and precision that can be seen [in this map]. . . . Other princes may need to avoid displaying a detailed map of their provinces, so as not to reveal the weakness of their territories, the lack of population, and the ease with which they can be invaded; but with Spain it is just the opposite, because a [map] will frighten [*pone horror*] [viewers when they see] such a large province, surrounded by the sea except for a small part where the Pyrenees marks [the boundary].⁵⁷

In the end, Philip declined to follow Guevara’s advice, although, in an effort to demonstrate the extent of his kingdom, he did manage to display large paintings featuring panoramic views of the major cities over which he ruled.⁵⁸

As Guevara rightly pointed out, other princes had more to fear than the Spanish monarch, and mapmakers in other realms adjusted their sights accordingly. In late sixteenth-century France, where religious disunity prevailed, Maurice Bouguereau had a somewhat different agenda when he presented his *Le theatre francoys* (1594) to Henri IV (r. 1589–1610). The atlas included maps originally produced by private initiative, but political and religious considerations came into play when Bouguereau and his collaborator, the engraver Gabriel I Tavernier, collected and published the sheets as an integrated atlas. Conceived during the French Wars of Religion and at a time when the Catholic League, sponsored by Philip II of Spain, threatened Paris, both Bouguereau and Tavernier (a Protestant exile from Flanders) looked to Henri IV to restore peace and, in the process, the territorial and religious unity of France. Indeed, the theme of national unification served as *Le theatre*’s leitmotiv, as the dedication to the monarch makes clear: “Let the Heavens send us

peace under [Henri IV’s] reign, for all to have only one God, one King, one Faith, and one Law.” In this respect, *Le theatre*, though privately printed, fit the rubric of official cartography. It also anticipated the creation of a unified France that did not yet exist.⁵⁹

In Sweden, by contrast, the religious reformations of the day—the state went over to Lutheranism in 1527 along with its king, Gustavus I—took on a different meaning in Olaus Magnus’s *Carta marina*, published in Venice in 1539. Magnus, who remained faithful to the Catholic Church and served as the nominal (and exiled) archbishop of Uppsala from 1544, also composed a parallel text published in Rome in 1555, the *Historia de gentibus septentrionalibus*. The two documents have complementary, while also competing, agendas: although they are mutually dedicated to the peoples and places of the “north,” they simultaneously illustrate the glory and gains of the kingdom of Sweden (at war, as it would be for many years, with Denmark) and the recent losses suffered by the Roman Catholic Church in Scandinavia, where the forces of Protestantism were ascendant.⁶⁰ As in the case of the Bouguereau atlas, Magnus’s map cannot strictly be called “official cartography.” Yet, in much the same way as *Le theatre francoys*, the *Carta marina* participated in an important debate on the shape of the Renaissance state and its religious coherence.

New states—or would-be states—also took part in these debates. Though Philip II drew on Dutch and Flemish specialists for many of his cartographic works, the Dutch, throughout their revolt against Habsburg Spain (1566–1648), also took recourse to maps to bolster their case for independence. This occurred in several different ways. In provinces breaking away from Spain, regional cartography took off precisely in the years of their politi-

57. Felipe de Guevara, *Comentarios de la Pintura*, in *Fuentes literarias para la historia del arte español*, 5 vols., ed. F. J. Sánchez Cantón (Madrid, 1923–41), 1:147–79, esp. 174.

58. On this commission, see Richard L. Kagan, ed., *Spanish Cities of the Golden Age: The Views of Anton van den Wyngaerde* (Berkeley: University of California Press, 1989).

59. For this important atlas, see François de Dainville, “Le premier atlas de France: *Le Théâtre françois* de M. Bourguereau—1594,” in *Actes du 85^e Congrès National des Sociétés Savantes, Chambéry-Annecy 1960, Section de Géographie* (Paris: Imprimerie Nationale, 1961), 3–50, and Mireille Pastoureau, *Les atlas français, XVI^e–XVII^e siècles: Répertoire bibliographique et étude* (Paris: Bibliothèque Nationale, Département des Cartes et Plans, 1984), 81.

60. On Magnus and his monumental geohistorical enterprise, see the edition (with an extensive introduction and biographical detail): Olaus Magnus, *Description of the Northern Peoples, Rome 1555*, 3 vols., ed. Peter Godfrey Foote, trans. Peter Fisher and Humphrey Higgens, with annotation derived from the commentary by John Granlund (London: Hakluyt Society, 1996–98). For the *Carta Marina*, see Elfriede Regina Knauer, *Die Carta marina des Olaus Magnus von 1539: Ein kartographisches Meisterwerk und seine Wirkung* (Göttingen: Gratia, 1981). See also chapter 60 in this volume.

cal secession—the final decades of the sixteenth century through the middle of the seventeenth century. Some of this mapping was done for the “enemy”: Joost Jansz. Bilhamer’s map of North Holland (1575) was commissioned for military purposes by the duke of Alba, leader of the Spanish army. Yet many other specimens demonstrate a provincial pride and local expression, in cartographic terms, of politics and place. More forthrightly, the multiple versions of the famous *Leo Belgicus* maps announced the political arrival of the Dutch Republic in the form of a heraldic lion superimposed on the outlines of the seven now-liberated provinces of the north. Again, a qualifier: there are many versions of the lion also covering all seventeen of the original Habsburg-ruled provinces (the political message in those goes the other way), and there is even a *Leo Hollandicus* by Claes Jansz. Visscher, which was produced to commemorate the role of the leading province in the struggle against Spain (ca. 1610 and, in later states, 1633 and 1648, the latter to mark the Treaty of Münster).⁶¹ Yet the cartographic brief, whichever side argued it, remained the same. The symbols of maps articulated the forms of nationhood—in this case quite literally, if also competitively, with both sides of the Netherlands conflict resorting to cartographic emblems to argue their point (plate 19). (A variation of the seventeen-province map appeared—preeminently in a nostalgic vein, one suspects—in Jan Vermeer’s *The Art of Painting*.)

In the cartographically rich Netherlands, maps both supported and challenged power and thus present a useful corrective to those who would couple cartography exclusively with hegemony. In fact, maps offered a relatively accessible means to make a case for or against a state. An interesting counterexample to the *Leo Belgicus* maps promoted by Dutch patriots are the many wall maps that occupy the background of Dutch paintings, quite a few of which show the full seventeen provinces of the Habsburg Netherlands. The most famous of these may be the Claes Jansz. Visscher *Nova XVII Provincia* that graces (and dominates) Vermeer’s dramatic meditation on art and history, *The Art of Painting* (fig. 26.3).⁶² Within the context of Vermeer’s panel—an elegantly costumed painter is at work in front of a model posed as Clio (the muse of history), the large wall map filling the background—the map might be read at least two ways. On the one hand, it suggests a nostalgic view of the pre-revolt Netherlands, a wistful glance into the past before the curtain came down on the once truly united provinces of the Low Countries. On the other hand, the Catholic Vermeer (he converted as an adult) may have had a more subversive view of the division of the Low Countries into two new nations, one predominantly Protestant in the north and the other overwhelmingly Catholic in the south, now under Spanish rule. In either reading, though, the map plays

a pivotal role and suggests the ways in which cartographic texts could pose critical questions regarding the status quo. The multiple readings of these painted maps, moreover, indicate the multivalent quality of cartographic devices.

Maps, that is to say, could challenge those in power just as easily as they could support a reigning regime. Northern European samples of what might be called “contra cartographies”—maps constructed to be antagonistic to an official perspective—proliferated in the early modern period, just as commercial, non-state-controlled mapping flourished north of the Alps. Pieter van der Beke’s map of Flanders printed in 1538 appeared just one year before the city of Ghent revolted against its Habsburg governor, Mary of Hungary, and its content reflects such contrary politics (fig. 26.4). By strategic inclusion of heraldic shields of the Flemish counts, a long genealogical table of the province’s leading families, and emblematic bears representing the home-grown aristocracy, the mapmaker conveyed the rising spirit of independence openly flaunted by Flanders. The mere production and patronage of the map might be seen as a declaration of provincial pride, if not quite independence.⁶³ A map printed by Gerardus Mercator only two years later (1540; see fig. 43.11)—one year following the uprising—is, by contrast, dedicated to Charles V and carefully deletes all provocative elements in an effort—largely successful, one suspects—to appease the Habsburg ruler. In an altogether different national context, one can follow the diminution of dynastic insignia in the county maps of England and Wales produced by Christopher Saxton, John Norden, William Camden, and John Speed over a period spanning the final decades of the sixteenth century and the first few decades of the seventeenth. During these years, royal reputations generally sagged in Britain, and the variously manufactured maps illustrate the cartographic battles being waged over the representation of British power. Naturally, not all “contra” mapping was successful. A late sixteenth-century Scottish project to survey the land, undertaken by Timothy Pont and supported, most likely, by the newly reformed and increasingly powerful Church of Scotland, may represent one of the most comprehensive carto-

61. The *Leo Belgicus* map may be approached through R. V. Tooley, “Leo Belgicus: An Illustrated List,” *Map Collector’s Circle* 7 (1963): 4–16, and H. A. M. van der Heijden, *Leo Belgicus: An Illustrated and Annotated Carto-Bibliography* (Alphen aan den Rijn: Canaletto, 1990); see also Catherine Levesque, “Landscape, Politics, and the Prosperous Peace,” *Nederlands Kunsthistorisch Jaarboek* 48 (1997): 223–57, esp. 227–47.

62. On Vermeer and mapping, see James A. Welu, “The Map in Vermeer’s *Art of Painting*,” *Imago Mundi* 30 (1978): 9–30.

63. See the discussion in J. B. Harley and K. Zandvliet, “Art, Science, and Power in Sixteenth-Century Dutch Cartography,” *Cartographica* 29, no. 2 (1992): 10–19.



FIG. 26.3. JAN VERMEER, *THE ART OF PAINTING*, CA. 1662–65. Surprisingly intimate in its proportions, Vermeer's masterpiece shows a domestic scene of national proportions, a superb wall map of the seventeen provinces virtually draping the lovely figure of Clio (history). The stunningly rendered

map, which competes with the figure of the artist and his muse for the viewer's attention, was produced by Claes Jansz. Vischer in the first decades of the seventeenth century.

Size of the original 120 × 100 cm. Photograph courtesy of the Kunsthistorisches Museum, Vienna (GG inv. no. 9128)

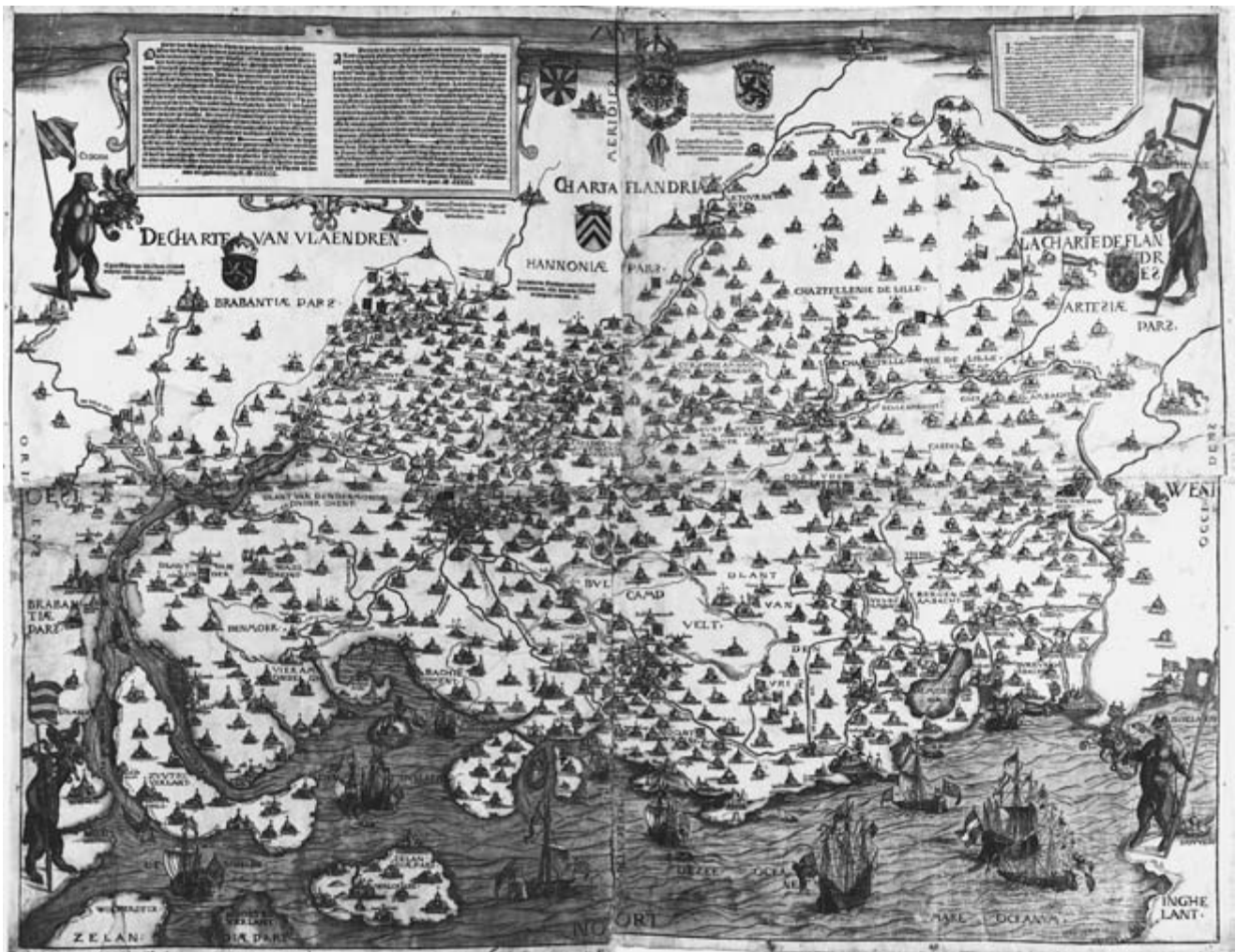


FIG. 26.4. PIETER VAN DER BEKE, FLANDERS, 1538. Four sheets, woodcut, printed on vellum. Only one copy known. Completed at a moment of simmering unrest, this map depicts the wealthy province of Flanders, which found itself at this moment under the control of the powerful Charles V. The decorative elements of this cartographic image, especially the

heraldic bears, emphasize the aspirations of the local Flemish aristocracy, who had lately bridled under the rule of the Habsburg governor, Mary of Hungary.

Size of the original: 73 × 97 cm. Photograph courtesy of the Germanisches Nationalmuseum, Nuremberg (La 181–84, Kapsel 1056 d).

graphic efforts of any early modern state. Yet Pont's mapping came to naught as an ideological text in the crucial sense that his manuscript drafts lay unpublished for over half a century, appearing only in Joan Blaeu's *Atlas novus* (1654) and then much revised. Whether they "enhanced the creation of national identity" seems open to question, because they never circulated widely or in any official form.⁶⁴

Successful or not, maps like Pont's do register as celebrations—of state, of church (in this case), and perhaps of "nation." They provide graphic representations of the land, generally boast telling symbols of power, and tend to invoke local pride. Quite a bit of official cartography in early modern Europe was simply celebratory, and, whether or not ideological traces can be detected, these

materials might be seen in the context of other Renaissance cultural forms devised for similar ends. Displayed in halls of state and corridors of power, maps were designed to impress; like pageants or princely festivals, maps marked occasions of state and became in and of themselves symbols of the state and its power. Inventories register maps hanging at Hampton Court and in the Privy Gallery in Whitehall, in the latter case including scenes of famous Tudor victories, such as "the discription of the

64. See pp. 1686–92, quotation on 1686; Ian Campbell Cunningham, ed., *The Nation Survey'd: Essays on Late Sixteenth-Century Scotland as Depicted by Timothy Pont* (East Linton: Tuckwell, 2001); and Jeffrey C. Stone, *The Pont Manuscript Maps of Scotland: Sixteenth Century Origins of a Blaeu Atlas* (Tring, Eng.: Map Collector Publications, 1989).

siege and wynnyng of Bolloigne”—Henry VIII’s version of imperial expansion.⁶⁵ The French king displayed maps in Fontainebleau, and painted maps throughout the castles of Spain recorded the triumphs of the vast Habsburg empire. A grand wall map *Germania*, published in 1547 and probably owned by the leading Catholic nobles of the Holy Roman Empire, glorified the role of the emperor in leading the Catholic armies to victory in the Schmalkaldic War. And an even more ambitious mosaic of the world adorned the Burgerzaal (great central hall) of the Amsterdam town hall, confidently expressing the city’s imperial reach.⁶⁶ Maps both announced and commemorated great feats of state, and in doing so, they further solidified the gains made by the ruler or head of state.

“PLEASURE AND JOY”

However essential their practical uses, whether administrative, military, or propagandistic, maps also attracted early modern rulers for other more personal, sometimes purely aesthetic, reasons. Few heads of state expressed their enthusiasm quite as giddily as the early sixteenth-century Frisian collector Viglius van Aytta, who once promised a friend a toothsome Westphalian ham if he could “see to it that geographical maps, in which as you know I take great pleasure, come my way.”⁶⁷ Still, there is ample evidence to suggest that, starting at least with Charles V, rulers across Europe began to place maps and other cartographic products almost in the same category as pictures: precious objects whose possession was both a source of amusement and princely diversion—what Alonso de Santa Cruz astutely identified with “pleasure and joy.” This was certainly true for many of the monarchs examined in this chapter, who went to great lengths to enhance their cartographic holdings. Collections in Madrid and Vienna, London and Paris swelled in this period, reflecting the passions of Renaissance and Baroque rulers. Among the more accomplished assemblers of maps, Cosimo III de’ Medici, grand duke of Tuscany, personally journeyed to Amsterdam in the 1670s to purchase (among other things) cartographic stock from the Blaeu family, thereby adding to the Medicean collections maps that he otherwise found difficult to obtain. Further cases could be cited to make the very basic point that maps were rarely as coveted as they were in the courts of early modern Europe, where they were prized for the delight they brought to their princely owners.

The “pleasure” of maps—discreetly so identified, alongside their “utility,” by that great early modern counsel to the kings, Sir Thomas Elyot—plays a subtle, though highly significant, role in the history of official cartography.⁶⁸ Maps were plainly enjoyed by Renaissance rulers, who collected, exhibited, and sometimes even surrounded themselves with cartographic materials. Most

early modern princes took pleasure simply in placing portions of their map collections on public display. The origins of this particular custom derived, at least in part, from the knowledge that the Romans had decorated their palaces and villas with “descriptions” of various sorts. Pliny’s *Natural History* noted specifically how, in the days of Augustus, the painter Ludius introduced the “delightful style” of decorating walls with “representations of villas, harbours, [and] landscape gardens.”⁶⁹ Pliny did not explain why this particular art form was deemed “delightful,” but, as he was one of the most widely read and influential classical authors of the Renaissance, his observations helped popularize the notion that discerning patrons ought to adorn their dwellings with topographical representations—painted maps and city views, *vedute*, landscapes, globes, and so forth. What developed into a veritable craze for cartographic décor took off in late fifteenth-century Italy and then, by the early sixteenth century, moved north, inducing wealthy patrons across Europe to decorate their entrance halls and palace corridors with diverse maps and views. Some accentuated this design strategy by displaying the images in specialized map galleries and “city rooms”—as did Pope Innocent VIII in the Belvedere of the Vatican. In other cases, the very floors themselves could be done up as maps, as was the case in the Amsterdam town hall. By the seventeenth century, maps had also begun to make their appearance in middle-class and, occasionally, artisanal homes, not only in Italy and the Netherlands, where maps were plentiful and inexpensive, but even in Spain, where they were not.⁷⁰ John Dee, who covered an admirably wide swath of social ground in Elizabethan England, noted already in the 1570s how “some, to beautify their Halls, Parlors, Chambers, Galleries, Studies, or

65. Cited in Barber, “England I,” 43.

66. The *Germania* map, printed on twelve sheets and measuring about 120 × 130 cm., is analyzed in Peter H. Meurer, *Corpus der älteren Germania-Karten: Ein annotierter Katalog der gedruckten Gesamtkarten des deutschen Raumes von den Anfängen bis um 1650* (Alphen aan den Rijn: Canaletto, 2001), text vol., 279–82 and pls. 4.1.1–4.1.6. For the mosaic world map of the Burgerzaal, see Katharine Fremantle, *The Baroque Town Hall of Amsterdam* (Utrecht: Haentjens Dekker, & Gumbert, 1959).

67. Cited in E. H. Waterbolk, “Viglius of Aytta, Sixteenth Century Map Collector,” *Imago Mundi* 29 (1977): 45–48, esp. 45.

68. Elyot, *Book Named the Governor*, 23–24; cited in Barber, “England I,” 32.

69. Pliny the Elder, *Natural History*, 10 vols., trans. H. Rackham et al. (Cambridge: Harvard University Press, 1938–63), 9:347 (bk. 35, 115–17). The influential Roman architect Vitruvius made similar observations in book 2 of his *De architectura*; see Vitruvius Pollio, *Ten Books on Architecture*, trans. Ingrid D. Rowland, commentary and illustrations by Thomas Noble Howe (Cambridge: Cambridge University Press, 1999).

70. David Woodward, *Maps as Prints in the Italian Renaissance: Makers, Distributors & Consumers* (London: British Library, 1996).

Libraries . . . liketh, loveth, getteth and useth Mappes, Chartes, and Geographical Globes.”⁷¹

Dee’s comments demonstrate a fairly typical slippage from the enjoyment of maps as beautiful artifacts that a collector “liketh [and] loveth” to the more practical function of serving as cartographic objects that one “getteth and useth” for multiple ends. In truth, such fine distinctions between pure pleasure and practical purpose are often difficult to gauge in the world of early modern statecraft. Where does one place the learning that takes place in the best “Studies, or Libraries” visited by Dee—loci of both scholarly delight and tactical planning for the well-trained Renaissance prince? Scholarship, in any event, represents another of the “delights” that rulers associated with maps. This is evident from the tutorials enjoyed by Charles V with Alonso de Santa Cruz to the sessions conducted in the early seventeenth century for Prince Maurits van Nassau by the Dutch mathematician Simon Stevin. At the court rulers also could engage specialists in cartography, who might split their time between producing maps and guiding their patrons through the captivating and beguiling puzzles of cartographic representation. In this early stage of mathematical perspective, maps—again, in ways similar to those of paintings—were prized for the magical way they rendered three-dimensional space into two-dimensional boundaries. Maps provided learned diversion; they had the capacity, as Robert Burton noted in his *Anatomy of Melancholy* (1621), to charm: “A geographical map . . . insensibly charms the mind with the great and pleasing variety of objects that it offers and incites to further study.”⁷² Learning and delight, accordingly, could lead to that higher plane of human contemplation: curiosity and wonder.

Add to these categories spiritual fulfillment. At least part of the satisfaction that derived from maps emanated from the religious messages embedded in them. In the sixteenth century—no less than during the medieval flourishing of sacred mapping—cartographic renderings of the world, independent of whatever utilitarian purposes they served, functioned as objects of spiritual contemplation. As Gibson has argued, sixteenth-century representations of *Weltlandschaften* (world landscapes) were deeply infused with the notions of the sacred and with concomitant ideas about the relationship between heaven and earth, God’s presence in nature, and man’s place in the universe. Gibson’s observations apply equally well to maps, especially to the *mappaemundi* coveted by princes, which were likened to devotional pictures. Both world landscapes and world maps were designed to draw the spiritual attention of their beholders and encourage them to focus on, and further ponder, the mysteries of divine creation.⁷³ It follows that the “delight” one early sixteenth-century humanist identified with “a painted picture [*pinax*] of the world or the depiction [*descriptio*]

of its parts”—cartographic images, in other words—was a sensory phenomenon that was as much spiritual as secular.⁷⁴

The wonder and delight evoked by maps could trigger multiple responses. These demonstrate, in turn, the multivalent qualities of cartographic sources in the context of the early modern state. The ability to grasp, at a single glance, the territorial expanse of a realm, the layout of a city, the contours of a particular plot or boundary line: all could please the early modern ruler—though for various reasons and according to varying circumstances. The wonder expressed by Cosimo I on seeing the perspective panorama of Florence painted by Giorgio Vasari in the Palazzo Vecchio around 1560 is a variation of astonishment, an emotional register of the image’s power to amaze: “Tell me, Giorgio, how did you do it?”⁷⁵ The satisfaction guaranteed by Sir Thomas Elyot to those rulers who avail themselves of maps and geographies has a less thrilling quality, pointing instead toward the quiet, if fulfilling, comforts of erudition:

For what pleasure . . . to behold those realms, cities, seas, rivers, and mountains that unneth [even] in an old man’s life cannot be journeyed and pursued; what incredible delight is taken in beholding the diversities of people, beasts, fowls, fishes, trees, fruits and herbs: to know the sundry manners and conditions of people, and the variety of their natures, and that in a warm study or parlour, without peril of the sea or danger of long and painful journeys: I cannot tell what more pleasure should happen to a gentle wit, than to behold in his own house everything that within all the world is contained.⁷⁶

Elyot’s prescription, intellectually gratifying though it promises to be, leans ever so subtly into the functional domain of governance: the prince who best knows his realms will best control them. Pleasure, once again, rubs up against practical purpose—*raison d’état*. In an era during

71. John Dee’s preface to Euclid’s *Elements of Geometrie*; cited in Morgan, “Cartographic Image,” 148.

72. Cited in David H. Fletcher, *The Emergence of Estate Maps: Christ Church, Oxford, 1600 to 1840* (Oxford: Clarendon, 1995), 3.

73. Walter S. Gibson, “*Mirror of the Earth*”: *The World Landscape in Sixteenth-Century Flemish Painting* (Princeton: Princeton University Press, 1989).

74. The quote is from Paolo Cortesi, *De Cardinalatu* (Castro Cortesio, 1510), a treatise intended for the prelates of Rome. See Kathleen Weil-Garris and John F. D’Amico, “The Renaissance Cardinal’s Ideal Palace: A Chapter from Cortesi’s *De Cardinalatu*,” in *Studies in Italian Art and Architecture, 15th through 18th Centuries*, ed. Henry A. Millon (Cambridge: MIT Press, 1980), 45–123, esp. 95.

75. See Giorgio Vasari, “Ragionamento quarto,” in *Le opere di Giorgio Vasari*, 9 vols., ed. Gaetano Milanesi (Florence: Sansoni, 1878–85), 8:174.

76. Elyot, *Book Named the Governor*, 35; cited in Barber, “England I,” 31.

which a ruler's importance was measured primarily by the number and extent of his possessions, "to behold those realms" was no innocent pastime. As the vehicle of Elyot's "delight," maps simultaneously functioned as symbols of status and power. As Francis Bacon observed at the start of the seventeenth century, "cards and maps" served as one of the principal measures by which the greatness of kingdoms could be observed.⁷⁷ The impressive selection of maps that adorned Philip II's throne room in El Escorial, mostly taken from the 1570 edition of Ortelius's *Theatrum orbis terrarum*, symbolized the geographical expanse and political power of this monarch. Likewise, during the 1570s Cardinal Alessandro Farnese incorporated views of Parma and Piacenza (together with a world map) into the Farnese palace at Caprarola as part of a larger decorative program intended to celebrate his family's deeds and broader importance.⁷⁸ From this perspective, it might appear as if much of the pleasure that early modern rulers drew from maps, especially those that depicted their own kingdoms, teetered on the edge of narcissism: looking at cartographic images, they were essentially looking at themselves.

In the end, of course, personal responses varied, and for the most part it is difficult, if not impossible, to understand the ways individual rulers felt about their maps. In general, however, princely attitudes toward maps, globes, views, and other cartographic devices seem to have experienced a profound change in the course of the two centuries or so surveyed in this chapter, a period marked by equally profound shifts in the production, distribution, and use of maps. In the late fifteenth century, maps were

still largely the handiwork of a few skilled practitioners. They were both costly and scarce, and consequently they were treated with a respect that bordered on the religious. Two centuries later, map production, ever on the increase, had been largely subsumed by specialized governmental offices or, at the very least, by individuals and agencies whose interests were often synonymous with those of the state. Technological advances also meant that maps were widely distributed, readily accessible, and easily transformed into quotidian objects. In the course of this process—what might be called the commodification of cartography—maps were relatively demystified, losing some of the spiritual qualities they had previously possessed. They moved from the king's *Kunstkammer* to the administrator's cabinet as they became integral components in the conduct of government. Indeed, having maps and using maps became part of the very process of running a state. By the end of this period, the old magic—Charles V's "pleasure and joy"—was gone, only to be replaced by a new magic that was, as this chapter has attempted to describe, closely related to emergent doctrines of state power and the cartographic invention of the nation-state.

77. Francis Bacon, "Of the True Greatness of Kingdoms and Estates" (1612), in *The Essays*, ed. John Pitcher (Harmondsworth, Eng.: Penguin, 1985), 147–55, esp. 148. See also Morgan, "Cartographic Image."

78. See Mario Praz, *Il Palazzo Farnese di Caprarola* (Torino: SEAT, 1981), and Loren W. Partridge, "Divinity and Dynasty at Caprarola: Perfect History in the Room of Farnese Deeds," *Art Bulletin* 60 (1978): 494–530.