The excellent contributions in this 800+ page volume show that premodern geography, just as its close relative, historiography, is a narrative genre, and not map-based. Second, the papers show that diagrammatic traditions arise later than the original texts, in commentaries and works with didactic or popularizing intent. Diagrams circulate independently, shaping ideas and creating further traditions in architectural and book decoration (ex.: orbis triquadrus: Europe, Asia, Africa), genealogical rolls (ex.: Heptarchy rosette: seven kingdoms of Old England). Beyond the scope of this volume, cosmography splits into descriptive and mathematical genres in the sixteenth century, when the illustrated book displaces the wall map as the more portable and easily amendable vehicle (see Surekha Davies’s pivotal Renaissance Ethnography and the Invention of the Human [2016], 296). While narrative geography is primarily an illustrated roll and codex genre, the volume also traces a parallel epistemology of spatial cosmography in legal and commercial contexts (Fermon, Serchuk). Other spatial devices include instruments, portulans, floor diagrams indicating direction of springs and window placement producing seasonal effects.

Richard Talbert, George Bevan and Daryn Lehoux (pp. 235-254) study a miniature Hellenistic “pillbox” sundial consisting of four coin-sized discs inscribed on each side with the name of a region, its city, and a typical six-hour and month scale. The disks were stacked in a closely fitted pillbox designed for use as a sundial, whose one side was a coin. A pinhole in the edge of the box, through which the sun shines, a moveable “hand,” and a wedge attached to a tiny post on the back of the box, for casting shadow, complete the device. It is inaccurate, as Talbert et al. explain, suggesting it worked symbolically to “own” the extent of the Empire. I wonder, could it also be used to estimate distances, seen as difference between the hour and place currently known, different from the hour and place inscribed on the dial? The authors avoid dating the dial, but provide relevant information: date of the coin that forms the box’s lid and references to other Roman pocket sundials.

Didier Marcotte (“Orbis triquadrus,” pp. 255-277) shows that the bipartite and tripartite models of the inhabited world -- Asia, Europe (Varro; Sallust, Jugurthine War; Lucan; p. 259) vs. Asia, Africa, Europe (model arising ca. 1 BC) were used simultaneously. Known Africa does not extend very far south in classical sources, making it not comparable in size to Europe and even less to Asia (Marcotte, p. 266). Orosius (ca. 400) still mentions the bipartite model and vestigial Africa.

Alfred Hiatt’s history of the Anglo-Saxon Heptarchy and the rosette diagram (pp. 689-714) shows how the fictional concept of “seven kingdoms” was created by historiographers shaping the island's past into a memorable story. These writers, like later Matthew Paris, an important popularizer of the Heptarchy diagram, were among the first generations of mixed Anglo-Norman heritage, and yet they were on the Norman side, an important vector of cultural hegemony of colonization. The Heptarchy diagram, a rosette, was then reproduced in genealogical rolls, and passed on through the premodern period. The loss of literacy in Old English, due to Anglo-Normans, and the resulting inability of their mixed descendant populations to examine historical sources in languages other than Latin, helped erase historical evidence that would put into doubt the existence and
and other aids to Nicolas of Lyra’s (1323-32) commentary on the Bible, the She offers a diagram comparison of different features in different ms families, p. 214, list of all illustrations in Catherine Delano-Smith works on plans, maps and illustrations, such as the scale drawings of the Ark, the Temple, Canaan.

Measuring trend lead to building exact mechanical clocks, including Richard of Wallingford’s (1292-1336).

Books of Hours often contain “the measure of the wound” of Christ and other simulacral measures and objects. The (p. 191). Souvenirs from Jerusalem include “gold thread the length of the Holy Sepulchre” (p. 192). Manuscripts and printed documentation. The same indulgences were granted to those who visited simulacral spaces as to the pilgrims to Jerusalem materials on calvaries, relics, and churches built on the plan of Jerusalem and its monuments, with voyages and their Margret Hoogvliet’s paper on “measuring and recreating the space of the Passion in Late Medieval France” brings together distances and routes to conventions in maps, descriptions, and diagrams in the cartographic tradition inherited from Antiquity.

Neoplatonism did not align with Persian beliefs, as Dan’s table shows, contrasting myths of creation and scientific principles in four traditions: Pseudo-Aristotle’s De mundo; Basil the Great’s Hexamaerion; Persian Bundahishn; and Solutiones (p. 593). Irreconcilable epistemological differences would explain the return of the philosophers to Greece in 532, under Justinian’s "eternal peace treaty" that, in fact, was short-lived (532-538).

Medieval readers of Solutiones conflated its author, Priscian of Lydia, with Christian-approved grammarian, Priscian of Cesarea, whose Institutionum grammaticalium libri, Constantinople, ca. 500, was a standard text, especially the last two books, 17-18, part of the core curriculum in thirteenth century Paris. Priscian was known to every educated medieval man. Dante places him in sixth circle of Hell, with the Sodomites. Thanks to the conflation of the two Priscians (only unraveled in 1718, Dan, p. 606), Solutiones became a vehicle of Neoplatonic thought before the thirteenth century rediscovery of Aristotle, as witnessed by five manuscripts (two as early as the ninth century) and numerous mentions in the circle of John Scotus Eriugena (815-877).

Dan’s section on the transmission of Aristotle and Greek literacy in ninth-century Italy, Ireland, Laon (Eriugena), and Corbie leads from Eriugena to Vincent of Beauvais’s vastly popular Speculum (1184-1264) and later to Marsilio Ficino, who translated another work by the Lydian Priscian (pp. 595-606). This paper on the role played by Persia-related text in the transmission of Greek literacy and Aristotelian tradition from Eriugena to Vincent of Beauvais before the thirteenth century is an important improvement to the stories of Christian (Athens-Alexandria-Byzantium-Paris) and Arab (Alexandria-Antioch-Baghdad-Toledo; p. 605) circulation of Greek and Aristotelian traditions. It shows that work on intellectual traditions beyond the Mediterranean is crucial.

François Bougard’s iconographic study of early medieval illuminations, reliefs and frescoes of Maiestas Domini holding a round object between two fingers or in the palm of his hand shows that rather than a host, it is the world that the Creator holds.

Dominique Poirel analyzes Hugues de St. Victor’s description of space and objects in the world. Diachronic variance is arrested in a synchronic "state of eternity" in the objects of “this world,” thereby worthy of description, diagramming, modeling, and study.

Barbara Obrist works on locations of hell from Honorius Augustoduniensis to Michael Scot. Some are detailed: Hell is supposed to be exactly 3514 miles from Earth’s surface, resembles a bread oven (clibanus), and can be found in Sicily, or in the North. Such variance is important to the epistemology of both racial prejudice and cultural relativism.

Jean-Pierre Rothschild’s article on Hebrew sources in Europe, medieval to 1800, analyzes descriptions of the world and the Holy Land. Including an itinerary of premodern Jewish European intellectual history, it resonates with issues mentioned elsewhere in the volume: the etymology of Africa from enter, “hell,” p. 109; Khazars, p. 115; the Canaries, p. 121.

Felicitas Schmieder shows that maps, similar to plant or animal repertories, combine realistic and symbolic features as an aid to memorization and experimental science. They are not, as casual readers might think, examples of medieval naïveté.

Marcia Kupfer discusses the cosmic vision of Saint Benedict and his sister Scholastica in speculo, i.e., from the watchtower or belvedere, and in speculo, i.e., in the mirror, or mirror image or “the catoptric trick.” The two topoi, watch-tower and mirror, are sometimes combined, ex. on the ivory backing of mirrors representing towers. The paper, spanning iconography, material culture, music, and philosophy suggests to me that the watch-tower topos reflects a meditation practice that, as much as Christian, is a remnant of stoical and Neoplatonic practice: a spiritual exercise that uses aerial perspective and optics to encourage a moral distance from worldly concerns.

Michele Campopiano analyzes Franciscan depictions of the Holy Land (fourteenth to sixteenth centuries) that compare actual distances and routes to conventions in maps, descriptions, and diagrams in the cartographic tradition inherited from Antiquity.

Margret Hoogvliet’s paper on “measuring and recreating the space of the Passion in Late Medieval France” brings together materials on calvaries, relics, and churches built on the plan of Jerusalem and its monuments, with voyages and their documentation. The same inducements were granted to those who visited simulacral spaces as to the pilgrims to Jerusalem (p. 191). Souvenirs from Jerusalem include “gold thread the length of the Holy Sepulchre” (p. 192). Manuscripts and printed Books of Hours often contain “the measure of the wound” of Christ and other simulacral measures and objects. The measuring trend lead to building exact mechanical clocks, including Richard of Wallingford’s (1292-1336).

Catherine Delano-Smith works on plans, maps and illustrations, such as the scale drawings of the Ark, the Temple, Canaan. She offers a diagram comparison of different features in different ms families, p. 214, list of all illustrations in Postilla, p. 230, and other aids to Nicolas of Lyra’s (1323-32) commentary on the Bible, the Postilla, a text that “became a standard text book”
Stéphane Lebreton analyzes the *Expositio totius mundi et gentium*, possibly based on a fourth-century model (p. 286). Lebreton ingeniously diagrams the narrative that starts from Syria, and then has two more starting points: Cilicia and up to Hellespont and Thracia; and Cappadocia, Galatia and Phrygia, then back to Cappadocia and up to Armenia and Paphlagonia. Since Syria is the center, it is said to have the best, "temperate" climate, while Northern Europe, on the margins of the known and inhabitable world, is described as inconveniently freezing (p. 299).

Francesco Frongia's paper on representations of Caucasus and Tartarus in classical and medieval maps (pp. 319-345) includes Eratothenes (late third century BC), Pomponius Mela (ca. 43 CE), Orosius (ca. 400), a 12th c. manuscript of Jerome's (ca. 400) *Liber locorum/De situ*, Beatus of Liebana (late twelfth-century manuscript, the BL ms add 10049 for 64v, two Tournai maps), Vat. lat. 6018 fo 63v-64, known as the "Vatican T-O," adjacent in the volume to Isidore's *Etymologiae* (eighth century), Sawlay (ca. 1110, part of *Imago mundi*, with hundreds of manuscript copies), Cottonian (probably Canterbury, 1025-1050, first relatively accurate depiction of the British Isles, based on a Roman model), Map of Theodosius II or Ripoll Map (1055-56, Vat. Regin. lat. 123, fo 143v-144r, from Santa Maria de Ripoll in Catalonia), "Orosian-Isidorian map," so called because it has the characteristics of a twelfth century world map, anachronistically to "illustrate" Isidore's seventh century text (Bayerische Staatsbibliothek, clm 10058, fo 154v), P. Gautier Dalché's diagram based on Hugh of St. Victor (1096-1141), who supposedly taught geography from a giant wall-size map, "easily the size of Ebstorf Map," according to Marcia Kupfler; its fragments were still present at the St. Victor abbey in the fourteenth century.

Jacques Desanges maps the different places described in Greek as "Metagonion/ötes," Corrado Zedda and Raimondo Pinna focus on Sardinia and the Caligari castle, Robin Seignobos focuses on the Western source of the Nile in Latin and Arab geographers and maps (Sawley, Hereford), and Marica Milanesi discusses the "real Ganges" in sources from 1400s to Mercator (1559) and beyond.

Paul Fermon analyzes several fifteenth- and sixteenth-century views of St. Omer, showing how the purpose determines the features of the city's portrait, with excellent reproductions that show well-known landmarks of the city intentionally foregrounded at the expense of realism.

A related paper by Camille Serchuk discusses a map created in 1540 for the purpose of adjudicating land disputes. All parties to the court case signed off that the representation is accurate, even as they complained that the map was too expensive and not particularly accurate (p. 461). The inclusion of a grid serves to visually signify the map's authenticity (p. 456), which would help explain the presence of grids on crusader propaganda maps. Another interesting detail is the inaccurate representation of Paris landmarks, "expos[ing] the painters as provincials rather than urban sophisticates" (p. 460).

Shoichi Tato's paper on Childeric's exile in Thuringia (pp. 456-463) establishes links between Thuringia and its European and Byzantine allies.

Natalia Lozovsky's paper on three early vitae of St. Gall (d. ca. 650) discusses the links between St. Gall and Reichenau, and the tops of the far-flung travels of a saint.

Stefano Pittaluga analyzes space in twelfth- and fifteenth-century Latin comedies that do not follow the Aristotelian unity of space rule.

Mathieu Arnoux's (pp. 509-521) case study on the exceptional importation of Moroccan wheat during the famine of 1316 -- a load that, incidentally, was pirated when the ship carrying it was at anchor in the harbor of Sandwich, whence the detailed records of this case, necessary for the insurance negotiations -- highlights the economies, risks, modalities and documents relative to the commerce between North Africa, Genoa, and the Channel. An excellent introduction to the topic of maritime commerce in the fourteenth century, Arnoux's paper defines terms: a great cargo ship, a *dromon*, is also called a *cogg* (English) or *choggia tarida* and *galea* (Italian); the distinction between port and harbor, which are different from French, where port means a man-made dock and *havre* means any place, natural or man-made, where a vessel may hover, such as the sand bank outside a port, the place from which the grain was pirated in the 1316 case. "Spices and textiles," not grain, were the usual cargo of Mediterranean trade (p. 519); grain importation was "a symptom of crisis, not a sign of economic expansion" (p. 521).

Christiane Gadrat-Ouerfelli's paper on the letter by Jean de Montecorvino, the Franciscan who wrote about China where he lived from 1292-1328, brings to our attention the first of his three letters, often ignored because it is on India (1292), not on China, his final destination (letters of 1305 and 1306). Vasco Resende analyzes the European reach of the Portuguese printing of Marco Polo (1502).

Jean-Patrice Boudet summarizes the impact of the six different pre-1250 Latin translations of the Arabic translation and commentary, *Kitab al-tamara* (*The book of the fruit*), a direct translation of the Greek name of this work, *Karpos* by Abu Ja'far Ahmad ibn Yusuf (tenth-century Egypt) of the pseudo-Ptolemean *Centiloquium,* of interest to any scholars of the history of astronomy, astrology and divination. The six translations are: Adelard of Bath, 1116-20; Plato of Tivoli, Barcelona, 1136; based on the two former, an anonymous translation circulated in Herman of Carinthia's circle; Hugues de Santalla, contemporary of the two previous ones; anonymous twelfth-century translation, perhaps by Gerard of Cremona; and another, newly discovered translation.
Iolanda Ventura explores the medical tradition of Salerno in tenth through thirteenth centuries through its "best-seller," the twelfth-century pharmaceutical lexicon *Circa instans*, by discussing the readership of some of its manuscripts, showing three phases of distribution: twelfth to thirteenth centuries (England), thirteenth to fourteenth centuries (England, France; vernacular glosses), and fifteenth century (translations; 629).

Jean-Charles Ducène traces the "cartographic source of Ibn Sa'id al-Magribi's (d. 1286) *Kitab gugrafiya fi-l-aqalim al-sab'a*.

Nathalie Bouloux analyzes the mid-fifteenth-century Norman geographer of "Gaul," Simon de Plumetot, and in passing comments on Jean de Montreuil's (d. 1418) humanistic circle in the first decades of the fifteenth century. Montreuil was the first to attribute *De bello gallico* to Julius Caesar. Angelo Cattaneo follows the attribution (and the forgetting of it) to the once-famous geographer Fra Mauro (d. 1459/64) of the *mappamondo di San Michele* in the Murano convent, one of the most important, and the largest medieval map (ca. 1450, 240x240 cm). Emanuelle Vagnon focuses on the text and sources of BnF ms fr 2794, the beautifully illuminated portulan of the coastal Mediterranean (ca. 1504-1515) made for the future Francis I, showing that the roots of that king's Atlantic ambitions were planted before his accession. P.D.A. Harvey discusses maps "in mirror image" or "from a worm's point of view," i.e., from below the surface of the ground, rather than the "bird's viewpoint," not only as mistakes or maps prepared for printing that would reverse them, but also as an intentional intellectual game, a puzzle. Georges Tolias describes *Parallela geographiae* by Philippe Briet, a pedagogical mainstay of the 1600s. Briet has a relativist approach, for instance, pointing out that classical authors considered Germany a sterile, barbaric hinterland, while now it is considered a "fruitful" region (p. 768).