brief discussion is crucial.

Although since the 1940s sporadic research has been done on the role of maps as propaganda and on maps as tools of persuasion, in recent years the power of maps has become a popular topic with Brian Harley's and Denis Wood's work especially. Monmonier, who has been involved in many cartographic ventures, has taught cartography and map use, and is aware of the working cartographer's problems, has a different approach than Harley to the subject of map bias. Monmonier is more interested in educating the public than in blaming the cartographer. Although in the epilogue he discusses the cartographer's role, it is again more educational than censuring.

Rarely do books written by cartographers reach the shelves of mainstream bookstores. Historians or journalists usually write the few cartography books that can be found there (John Noble Wilford's The Mapmakers, for example). Monmonier, however, has managed to pull off the conjurer's trick of writing a book that is both scholarly (ample citations and bibliography) and readable. The writing is lively, personal, and clear; he is knowledgeable, insightful, and entertaining. This is a formidable combination.

But what about readers of Cartographic Perspectives and cartography students? Will we find this book too simplistic, telling us things we already know? While some tales may be familiar, doubtless not all are, even those which are familiar have some thought-provoking twists and information detail. There is excellent material here for lively seminar discussions, and some chapters open the door to further research.

Monmonier has told a series of intriguing tales and told them well; I recommend the book to cartographer and layperson alike.

BOOK REVIEW

Mapping the Renaissance World: The Geographical Imagination in the Age of Discovery.

Frank Lestringant. Translated by David Fausett from L'atelier du cosmographe. Berkeley and Los Angeles: University of California Press, 1994. xvii + 197 pp., illus., index. \$38.00 Hardbound.

(ISBN 0-520-08871-9)

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The scope of this book is at the same time narrower and broader than its title might suggest. It is broader in that it is an examination of the general role of New World myths on European Renaissance literature. In other words, the "mapping" in the title is used both metaphorically and literally, and therefore it means something much broader than "cartography." Yet, the book's scope is limited by the fact that the theme is seen mainly through the eyes of one French cosmographer, André Thevet of Angoulême (1516-92). Fortunately, Theyet left most of his unfinished cosmographical manuscripts intact, "with the creative untidiness of its tools and materials, both unusual and ridiculous: maps of islands by the hundred, draft copies of his last unfinished books, representing up to four distinct stages of his work, and meticulously annotated mariner's charts. This Wunderkammer lacks only the monsters and prodigies that Thevet collected in what he called his 'most precious cabinet.'" One of the best known parts of his collection of Americana includes the Codex Mendoza and fragments on the religion of the Tupinamba Indians and Aztecs, which nourished his Cosmographie universelle (1575).

Readers of Cartographic Perspectives are likely to find two chapters of particular interest: chapter 1 "The Cosmographical Model," and chapter 5, "Cartographics: An Experience of the World and an Experiment on the World." If they venture into the other sections of the book, especially those dealing with the issues of the symbolism of the New World's influence on sixteenth-century literature, they will find themselves in the unfamiliar and sometimes bewildering land of literary criticism. As this review will reveal, the emphasis in this book does not lie in the traditional history of cartography, but it provides a very valuable context for the meaning of "cosmography" in the sixteenth century and its association with European mapmaking. In order to achieve this, Lestringant has provided an appendix with extracts from a previously unpublished manuscript of Guillaume Le Testu's Cosmographie universelle and a bibliography of works by André Thevet. The work also seems to have been well served by its translator, David Fausett.

The original French title was L'atelier du cosmographe-"The workshop of the cosmographer." The cosmographer, as we have seen, is Thevet, cosmographer to Henri III, the last of the French kings in the House of Valois. He entered the Franciscan order at the age of ten, and this monastic status later allowed him to travel, study, and write. His first voyage was to the Levant from 1549 to 1552 and resulted in the Cosmographie de Levant. But it was a second voyage to "Antarctic France"-founded on an islet in the Bay of Rio de Ianeiro-that made his name. Based on ten weeks "among the most savage men of the universe," Thevet fashioned his book, the Singularitez de la France Antarctique. His exploration narratives came under severe attack by his contemporaries, Catholic and Protestant

alike. He was known as a plagiarist and liar of the first order, particularly by Jean de Léry, his rival commentator on the New World and a Protestant pastor.

In an introduction exploring the issue of the relative importance of the discovery of America to Renaissance European literature, Lestringant compares two interpretive models. The one model is teleological and asserts that the exotic myths of the New World developed from chaos into the Noble Savage. The other model argues that the reception of the discovery of America was relatively minor compared to the European preoccupation of the Orient, specifically the Turkish threat on the doorstep of Europe. Lestringant points out that both models fall short, largely due to their failures to account for different scales of activity: the "local" or Mediterranean arena, and the global arena.

These scale differences are also echoed in the comparison of the cosmographer's and chorographer's task-topics that Lestringant explores in the next chapter. The relationship among chorography, geography, and cosmography were common themes for discussion in sixteenthcentury descriptions of the world. They derived from Ptolemy's Geography, and no geographic encyclopedia in the Renaissance was complete without drawing the distinctions. Chorography was the representation (drawn or written) of local regions and tended to be qualitative in its treatment (i.e. the work of an artist). Geography, on the other hand, was the study of the Greek ges, or whole earth, and relied on the authority of the classical authors and travelers. It required knowledge of the size and shape of the earth and tended to be quantitative in approach. Cosmography was meta-geography, in which the mathematical issues of geography were cast not

only in an celestial framework of parallels and meridians but which also attempted to explain the creation of the world in metaphysical terms. Cosmography was thus not only a literary Wunderkammer of the earth's curiosities; its task was also to show how these strange facts fit into the broader scheme of things as created by God. Thevet's Cosmographie universelle (1584), issued in four volumes, with 228 woodcuts and four maps of the continents, reveals one schema.

Given the massive, global scale of the Cosmographie universelle, one might ask why the book that is the subject of the next chapter, the Cosmographie de Levant (1554), whose content was "local," merited the name of a "cosmography." The Cosmographie de Levant, published on Thevet's return from the near East, is structured on an itinerary that moves from Venice to Marseille by way of Constantinople, Egypt, and the Holy Land. Cosmographie de Levant was derived from several sources, particularly the Lectiones antiquae of Coelius Rhodiginus, first published in 1516. The book is not a travel account, but a geographical encyclopedia of the region gained as it were by a game of travel, or as Lestringant puts it, a "geographical goose chase." Its importance was far more as an emblem book of social and moral issues drawn from classical and medieval sources than a geographical description of the near East. As an example of Christian symbolism that fits into his cosmographical aims, he describes Antioch as a celebrated city of red lilies symbolizing Christian "martyrs and confessors."

In the next two chapters, Lestringant addresses the role of South American mythologies as he discusses "The Invention of Brazil" and "Amazons and Monarchs." These themes were the subject of Thevet's Singularitez de la France Antarctique (1557-58), which was translated into English as the New founde worlde in 1568. Although Theyet spent only ten weeks at Guanabara ("Gouffre [gulf] of the river of Guanabara or Janaire" or Bay of Rio de Janeiro), the book is largely devoted to this area that was part of "Antarctic France," an imperial dream that was officially abandoned in 1560. Brazil became the universal standard of symmetricality between north and south, east and west. For example, Thevet compares the similarity of the Amazon and Ganges rivers. He also builds two complicated myths: the warrior kings and the Amazons. The "king" myth is based on his description of Quoniambec, the naked warriorchief of the Tupinamba Indians with eminent qualities: "eight feet tall and able to carry a barrel of wine," as well as being able to simultaneously discharge an artillery piece from each shoulder. This physical prowess notwithstanding, Quoniambec was also capable of contrite prayer. Quoniambec was thus intended as a model of the Noble Savage, susceptible to the Christian faith and thereby becoming a dependable cog in the wheel of the European colonial enterprise. Instead, he became a target of Jean de Léry in his Histoire d'un voyage, who rightly scoffs at the "impostures" and "stork stories" by the "cosmographer by royal letters." De Léry, who had also spent time in Brazil, asserted that the Tupinamba culture functioned according to egalitarian principles, in which there were "neither kings or princes" but instead all of the warriors were "each almost as much a lord as the others."

Thevet also develops the myth of the Amazon in considerable detail. To the three sorts of Amazons described by the ancients (African, Southeast European, and Asian there could now be added a fourth (the American).

This race of warrior women devoted themselves to all activities normally reserved for men, beginning with hunting and war, in which they conducted themselves with exceptional ferocity. Conversely, they despised housework and horticulture. They represented a "world upside down," a common theme in the popular literature and art of the sixteenth century. Here too, Thevet contributed to the tangled web of mythology by which the New World was depicted.

In chapter 5, "Cartographics: An Experience of the World and an Experiment on the World," Lestringant discusses the various cartographic projects of Thevet, noting that "Thevet, like Münster or Postel before him, considered himself as much a cartographer as a geographer." Maps are the part of his work that have been most consistently cited, particularly his famous, but unfortunately no longer extant, map of France. The "use value" of the maps decayed much more slowly than that of his text, which quickly became passé and outmoded. His largest cartographic project, the Grand Insulaire et Pilotage, a great pilot book and atlas of the world's islands, was unfinished and unpublished. All that remains of this huge project, modeled on the isolarios of Cristoforo Buondelmonti, Bartolommeo dalli Sonetti, Benedetto Bordone, and Tommaso Porcacchi, are two manuscript volumes with eighty-four individual copperplate maps inserted at the corresponding chapter headings. These manuscripts have been preserved in the Bibliothèque Nationale, Paris. Another manuscript, the Description des plusiers Isles (1588), also in the Bibliothèque Nationale, is a partial ordering of the Grand Insulaire dealing with islands in the North Sea, English Channel, and Atlantic.

The maps are a curious blend of the navigator's art and the cosmographer's science. Ostensibly geometrically projected, and graduated carefully in longitude and latitude, they nevertheless bear rhumb lines conventionally superimposed without regard for cardinal direction as though as to confirm-at least symbolically-the dual value of the maps for both navigator and cosmographer. In one example, illustrated as plate 9 in the book, the island of Newfoundland is depicted back to front, with the Newfoundland mainland to the north and Anticosti Island (proudly named "Isle de Thevet") and Nova Scotia ("partie de la Nouvelle France") to the east.

Thevet's brand of cosmography soon came to an end. The overarching encyclopedic goal was seen to be arrogant and-to the extent that the cosmographer took a "God's-eye view" of the worldeven blasphemous. It gave way to a splintering of the sciences-"the partial knowledges of the topographer, the historian, the botanist, the military engineer, and soon also the statistician." What was lost was a suitable general framework into which the bricolage of anthropological data-some outright mythological, some empirical-could be placed. Consequently, as Lestringant eloquently states, "it was only in the twentieth century that the cosmogony of the Tupinamba Indians or that of the ancient Mexicans, carefully tucked away in Thevet's Cosmographie universelle, would at last find adequate readers, in the persons of Alfred Métraux or Claude Lévi-Strauss . . ." It is here that Thevet can be seen to have been ahead of his time and where his work provides a fertile field for students of early modern history, anthropology, and Renaissance literature.

BOOK REVIEW

Mapping Hidden Dimensions of the Urban Scene. J. Szegö. Swedish Council for Building Research. Stockholm, Sweden: Ljunghlöfs. 1994. 266 pages. Paper. (ISBN 91-540-5651-9)

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Mapping opens by lifting the reader on a balloon ride at night over an unidentified city. The balloon uses a remote sensing device which monitors the movements of the residents of the city below. The device is sensitive enough to monitor minute levels human activity on the street and in buildings (it is even able to detect the birth of a baby in an ambulance). Fortunately, the device and the balloon ride are fictional; however, the questions Szegö poses are not. Szegő is interested in the daily movements of the city, particularly the daily flows of the city as its residents move from home to work and back home again. His primary questions are: What is the model of the city as it flows from day to evening and back again? How has this model of the city changed over time? How does this model help us plan our communities better? In exploring these questions Szegö's study focuses on the Swedish cities of Malmö and Lund and the surrounding communities.

Szegö models these cities using the concept of structural density (SD). He defines SD as a type of map algebra that adds together the density of residents (dweller density [DD]) and workers (worker density [WD]) in the city to create a three-dimensional model of a city. The usefulness of the model, Szegö suggests, is that