

THE FIRST ATLAS

[by John H. Lienhard](#)

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Today, we make maps into a user-friendly information system. The University of Houston's College of Engineering presents this series about the machines that make our civilization run, and the people whose ingenuity created them.

The atlas was a most peculiar invention. To see how it came into being, let's meet two Flemish friends. They were [Gerardus Mercator](#) and Abraham Ortelius.

[Mercator](#), born in 1512, was older by 15 years. He was an intellectual, a mathematician, and an innovator. He went on to become the great Renaissance mapmaker. He gave us the Mercator projection. He published a world map in that projection in 1569.

Ortelius trained as an engraver -- an artist/craftsman. In 1554 he went into business buying and selling maps. For Ortelius, maps were merchandise. He'd collect maps and redraw them. He'd decorate their borders and the empty reaches of land and sea. He'd mount them on silk and render them in color.

Mercator also saw the map as a work of art. His own map of the world was an artistic triumph as well as an intellectual one. He knew good work, and he had a very high opinion of Ortelius.

Mercator's world map had one nasty drawback. It was huge. It was meant to hang on a wall. Old maps were like that. For minor place-names to be readable, the map had to be immense.

Up-to-date maps were serious business for seagoing Netherlands traders. Finally, a trader named Hoofman came to Ortelius and said, in effect, "Can't you chop these bedsheets into two-foot squares and publish the map of the world in a book?"

Ortelius wasn't thinking in terms of books, but, with Mercator's help, he collected the best maps around. He created the book Hoofman had asked for. In 1570 he made the first atlas.

He didn't call it an atlas. He called it a Theatre of the Round World. It sold like hot-cakes and went into one improved printing after another. Praise followed it. People called Ortelius a great intellectual. Mercator himself praised Ortelius for "the faithfulness with which you bring out geographical truth."

It was 1585 before the aging Mercator published the first volume of his own world map in book form. By then Ortelius was the more famous of the two. Sir Francis Drake took his maps to sea. For a while, Mercator walked in his young friend's shadow.

Mercator, as much a theologian as a cartographer, titled his new book *Atlas, or Cosmographical Meditations upon the Creation of the Universe*. In his [engraved title page](#), he was first to summon the image of the mythical Atlas, condemned to carry the world on his shoulders.

Mercator may've given the atlas its name and much of its substance to boot. Yet we'd be foolish to forget Ortelius. You see, atlases came into being for a very modern reason. They were created when a trader simply hired a craftsman to recast crucially important information -- into a user-friendly form.

I'm John Lienhard, at the University of Houston, where we're interested in the way inventive minds work.

(Theme music)

Wilford, J.N., *The Mapmakers*. New York: Vintage Books, 1982. (See especially Chapters 5 and 6.)

Boorstin, D., *The Discoverers*. New York: Random House, 1983, Chapter, 36, Knowledge Becomes Merchandise.

Osley, A.S., *Mercator: A monograph on the lettering of maps, etc. in the 16th century Netherlands with a facsimile and translation of his treatise on the italic hand and a translation of Ghim's VITA MERCATORIS*. New York: Watson-Guption Publications, 1969.

See also the *Encyclopaedia Britannica* entries under Ortelius and Mercator.

I am grateful to Pat Bozeman, Head of Special Collections, UH Library, for pointing out to me the commercial origin of Ortelius's atlas. Special Collections at UH holds the following original, and fine facsimile, source material:

Ortelius, A., *Theatrum Orbis Terrarum*, Antwerp: Standaard Uitgeverij, 1970. Facsimile reproduction of the 1570 edition.

Mercator, G., Gerard Mercator's Map of the world (1569) in the form of an atlas in the Maritiem Museum "Prins Hendrik" at Rotterdam; reproduced on the scale of the original and issued by the Maritiem Museum "Prins Hendrik" and the editors of *Image mundi*, Rotterdam: 1961. (This facsimile of Mercator's map of the world has been reduced to atlas form for convenience. The original, of course, had not been.)

Mercator, G., *Historia mundi : or, Mercator's atlas ; containing his Cosmographical description of the fabricke and figure of the world. Lately rectified in divers places, as*

also beautified and enlarged with new mappes and tables; by the studious industry of Ivdocus Hondy (Tr. Wye Saltonstall), London: Printed by T. Cotes for Michael Sparke and Samuel Cartwright, 1635 [i.e., 1637]. (This is one of the later editions of Mercator's original atlas which, by the way, went to three volumes, the last of which was published after his death in 1594.)

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