Columbus and the Flat Earth Myth

Perhaps it is not the people of the Middle Ages who should be accused of clinging to erroneous beliefs, Mr. Singham suggests.

BY MANO SINGHAM

CAN we all agree to bury that resilient myth that it was Columbus' journey to the New World that proved that the world was round? In the excellent November 2006 issue of the *Kappan,* which dealt with education about Native Americans, one of the guest editors uses the Columbus story to argue that "a study of American history must include the history of those whose lineage can be traced back hundreds of years before European seafarers began to wonder if ships might *not* fall off the edge of the world."

Similarly, in *The World Is Flat*, Thomas Friedman repeats the error when he writes, "Columbus reported to his king and queen that the world was round, and he went down in history as the man who first made this discovery."

Well, no, he didn't. Thomas Kuhn in *The Copernican Revolution* showed clearly in 1957 that the idea of a flat Earth was rejected very early in recorded history. There are references to the measurement of the Earth's circumference that appear in the writings of Aristotle (384-322 BCE), but the first complete record of this measurement comes from Eratosthenes (276-194 BCE), the librarian of Alexandria, who arrived at a figure that was off by only about 5% from present-day measurements.

The belief in the sphericity of the Earth, even back in those early days, was based on careful observations and solid reasoning. The fact that the hulls of ships moving away disappeared before their masts; the fact that, if you were on high ground, you could see more of the ship than when you were at sea level; the circular edge of the shadow of the Earth on the Moon during lunar eclipses — all were convincing arguments against a flat Earth, and educated people as early as Classical times accepted them as conclusive. Even the idea of sailing westward from Europe to reach India was originally proposed by geographer Strabo, who was born around 63 BCE.

Aristarchus (310-230 BCE) and others in the third century BCE even made sophisticated measurements of the sizes of the Moon and the Sun and the various distances between them. And these things were not secrets. All were widely known among educated people.

So how did this notion arise that Europeans of the late 15th century were ignorant of one of the basic and most certain pieces of knowledge that had been deduced almost two thousand years earlier? Understanding that puzzle provides interesting insights into how myths can grab the imagination of people and retain their power in the face of overwhelming evidence to the contrary.

It is true that Columbus faced

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strenuous objections from the Spanish court to his proposed venture, but this opposition had nothing to do with fears that his ships would fall off the edge of the Earth, since the educated people of Spain knew very well that the Earth was a sphere. Rather, they suspected that Columbus, showing a level of political cunning that would have impressed today's strategists, had cherry picked and fudged the available data to suit his purposes and had come up with a dubious calculation that projected the length of his trip to be only 20% of the actual distance. Thus he made his trip appear more viable than it was.

His opponents argued (correctly) that his numbers were wrong and that he and his crew would not be able to carry enough provisions to reach India. And they did not want to gamble their ships and crew on what seemed like a reckless venture.

Why would Columbus advocate such a foolish thing, since he was risking his own life in the bargain? The answer is not clear. Perhaps, being the adventurer he was, he was also a gambler who had set his mind on making this voyage and then had fallen prey to that all-too-human trait of trusting only the data that justified his desired course of action and rejecting anything that argued otherwise.

Whatever the reason, Columbus managed to finally persuade the Spanish government to underwrite his voyage, which would have certainly ended in disaster but for the existence of America. His arrival in America did not save him from falling off the edge of the Earth; it just saved him and his crew from starvation and death.

In his excellent book *Inventing the Flat Earth: Columbus and Modern Historians* (Praeger, 1991), Jeffrey Burton Russell examines the origins, pervasiveness, and durability of this Columbus myth and finds that it arose

as late as the 19th century as a result of a combination of several factors.

One key factor, oddly enough, was the battle over the theory of evolution. Discovered jointly by Charles Darwin and Alfred Wallace and brought to widespread public attention with the publication of *The Origin of Species* in 1859, this theory immediately ran into opposition in Europe, primarily from members of the clergy. The conflict over evolution was showcased in the famous debate between Bishop Wilberforce and Thomas Huxley in 1860. (Edward Larson in *The Summer of the Gods* says that opposition to Darwin's ideas arose much more slowly in the U.S., not reaching high levels until 1920 or so. But, as we are all aware, the controversy has proved much more durable here, and evolution remains a controversial topic in the U.S. long after the rest of the world has accepted it.)

IT WAS WASHINGTON IRVING'S *HISTORY OF THE LIFE AND VOYAGES OF CHRISTOPHER COLUMBUS*, PUBLISHED IN 1828, THAT GAVE THE MYTH REAL LEGS IN THE POPULAR CULTURE OF THE U.S.

Russell argues that, in the battle over evolution, the forces of science successfully painted the clergy as hidebound dogmatists, clinging to scriptural explanations over the weight of empirical evidence. As part of this struggle over Darwinism, the advocates of science created a back story in which knowledge flourished in ancient Greece, was then lost or ignored in the darkness of the Middle Ages because of the triumph of religious dogma, and then flourished again later under the bright light of the new sciences. To be sure, religious dogma had opposed the Copernican revolution in the 16th century, but the flatness of the Earth was not an issue in that controversy.

For this narrative of knowledge found, lost, and found again to be used successfully in the evolution wars, it was necessary to portray the people of the Middle Ages as basically idiots willing to believe anything their priests told them, however nonsensical. And the idea of a flat Earth was as stupid an idea as one could think up. Even now, people who are dismissive of science are often derided as a "flat-Earthers."

Despite the fact that mainstream and influential religious scholars, such as St. Augustine (354-430), had long since accepted the notion of a round Earth, attention was instead focused on the writing of two fairly obscure people, Lactantius (c. 265-345) and Cosmas Indicopleustes (c. 540), who had both argued for a flat Earth on religious grounds. Although little evidence exists that many people in the 15th century had even heard of them, let alone taken their views seriously, the 19th-century proponents of science portrayed these two as representative of a hidebound religious world view that was in opposition to science, and their influence was overemphasized to give this story credibility.

Russell says that the second contribution to the Columbus myth came in the form of American chauvinism that wanted to believe that the world was pretty much steeped in ignorance before Columbus' voyage. Such a view enabled Americans to see the beginnings of modern America as coinciding with, and perhaps the cause of, a worldwide enlightenment.

But it was Washington Irving's *History of the Life and Voyages of Christopher Columbus*, published in 1828, that gave the myth real legs in the popular culture of the U.S. Although Irving claimed his book to be a carefully researched historical treatment, Russell says that he basically wrote it as a romantic novel with Columbus as the hero, inventing wholly fictional accounts of Columbus arguing passionately for a round Earth against the dimwitted clerics and philosophers of his time. These scenes not only appealed to those who wished to see Columbus as a heroic figure battling religious obscurantism, but they also tapped into the pleasure that people have in seeing experts proved wrong by "ordinary people" using common sense, a feeling that still persists.

So powerful is the appeal of the Columbus myth that people overlook an obvious and fatal flaw in the story. After all, since Columbus' westward journey stopped at America, he cannot even be claimed to have been the first to confirm *empirically* that the Earth was round. Even if the people of his time had thought the world was flat, Columbus' trip did not prove the contrary, and it is Magellan's crew, who circumnavigated the globe in 1522, who should get the honor. All Columbus' journey would have proved to doctrinaire flat-Earthers was that he had not yet reached the edge.

The myth of the flat Earth had become so well entrenched by the 20th century that even a respected scholar like Librarian of Congress Daniel Boorstin took it for granted as incontrovertible when writing his widely read book *The Discoverers* in 1983. Thus he cemented the story in the public's consciousness even further.

One can draw many lessons from the Columbus story and the myth of the flat Earth. Perhaps the best is one that Will Rogers realized years ago: It isn't what we don't know that gives us trouble, it's what we know that ain't so.