

California Science Center exhibit highlights Muslim science contributions throughout history

June 30, 2011 | Corey Moore | KPCC

Innovations from the Muslim world during a millennium of discovery and invention are on display until the end of 2011 at the California Science Center in Exposition Park. Some very eager kids recently dropped by the "1001 Inventions" exhibit.

For the third and fifth graders of Theodore Alexander Science Center School, there was so much to see and so little time. Eric Jones and several classmates fidgeted with as many electronic doodads, interactive games and touchscreens as they could.

"It was, let me see," Jones said as he took a moment to decide which invention he enjoyed the most. "The one where you put water in it and it floats like pipes."

That's the model of a six-cylinder water-pumping engine an Ottoman engineer created centuries ago. We have that inventor to thank every time we fill up our gas tanks.

Guadalupe Romero, 11, loved the replica of a 9th-century darkroom that, to her, resembled outer space. By waving her hand, she could match objects hidden among the stars. That was fun – and she also understood the lesson it taught.



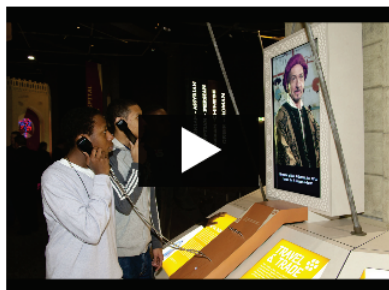
Courtesy 1001 Inventions

"A child studies a globe at the "1001 Inventions" exhibit on Muslim scientific contributions throughout history. The traveling exhibit runs at the California Science Center through December.

Web Resources

["1001 Inventions - Discover The Muslim Heritage In Our World" official site](#)

[Photo gallery: "1001 Inventions" exhibit](#)



"That camera act the same as your eyes," said Romero as she pointed to the demonstration.

A Middle Eastern scientist invented that darkroom model over 1,000 years ago. These days, we call it the "camera obscura" – there's one along Ocean Avenue in Santa Monica. The mechanism helped people figure out how optics work.

Curators of this traveling exhibit say they'll enlighten visitors with show-and-tell displays of many more mechanical devices from a

golden age of Muslim civilization – from simple items we take for granted like soap, perfumes, hand creams and coffee to grandiose artifacts like a model of a Chinese ship the size of a football field.

Or a 20-foot-high replica of the Elephant Clock. Muslim engineer Al-Jazari designed that water-filled timekeeper during the 12th century.

One question the museum show doesn't clear up is why it's taken hundreds of years for historians to figure out who these innovators were.

"It's a very difficult thing to answer," said author and educator Maurice Coles, who organized the "1001 Inventions" exhibit. "It's only recently that we understand that [the Arab scientists] that worked to translate into Latin and then from Latin into the various European languages and so on and so forth, and yet it hasn't been acknowledged."

California Science Center coordinator Diane Perlov offers another theory about why Western scholars overlooked Eastern scientific contributions for thousands of years.

"The Middle Ages was always considered the Dark Ages of Europe," Perlov stated. "But while it was the Dark Ages of Europe, there was a flourishing of arts and sciences in this part of the world and people don't know about it."

That's one reason Mimi Al Mazroui from Dubai is excited about working with the exhibit and a related IMAX movie screening next door. She thinks both will help people reconsider some of their preconceptions about the Muslim world. "When you get to know people from the Middle East, I think that will help a lot to change the way people think and to break the stereotypes."

That includes stereotypes that portray Islam as a violent religion. Curators say the exhibit attempts to correct that notion by emphasizing facts about Muslim culture, religion and history.

During its stops in London, Istanbul, New York and other cities, more than a million people have toured the "1001 Inventions" exhibit. Visitors to the California Science Center will be able to see it through late December.