



# Trading Bronze Age technology

**Beyond Babylon: Art, Trade, and Diplomacy in the Second Millennium B.C.**

Metropolitan Museum of Art, New York  
Until 15 March 2009

Before the BlackBerry, before the iPhone, before e-mailing, texting and instant messaging, was an ivory-hinged boxwood writing board. Originally inlaid with wax, it was probably engraved with a ship's cargo inventory. The hand-sized board, now shrivelled and cracked, might also have carried messages between ancient Near Eastern courts, and sank to the bottom of the Mediterranean Sea at the end of the fourteenth century BC with its ship: a 15-metre-long vessel wrecked off the coast of southern Turkey.

The ship's contents, currently on display in New York in the Metropolitan Museum of Art's dazzling exhibition, *Beyond Babylon*, are a testament to the globalization of trade and mass communication that existed in the Bronze Age. The earliest seagoing vessel ever excavated, the ship carried 15,000 items from 12 different cultures, including Old Babylonian, Egyptian, Mycenaean, Assyrian, Canaanite, Nubian, Balkan and Baltic. The 17 tonnes of cargo included 10 tonnes of copper from Cyprus; 1 tonne of

tin, probably mined in central Asia; 350 kilograms of turquoise and purple glass ingots from Egypt; ebony from Nubia (now northern Sudan); and 150 Canaanite jars, many filled with resin from the terebinth tree, used in scented oils and as an antiseptic. Precious gifts included ostrich eggs, gold pendants, glass beads, hippopotamus teeth, spices such as coriander and cumin, and two delicately carved, duck-shaped ivory pots.

The quest for commodities such as copper and tin, the basic ingredients of bronze — and for exotic materials such as ivory and the semiprecious stone lapis lazuli — drove commerce between these kingdoms of the second millennium BC, and inspired a cross-border blossoming of art and technology. The influence of one culture on another is evident in the mélange of styles incorporated in the artefacts on show, which encompass a sumptuous array of gold diadems and scarabs, jewel-inlaid daggers, bronze deities (detail, pictured), carved seals and ceramic jars from sites stretching from the Mediterranean to the Indus River. Another duck-shaped container, from the reign of Egypt's Amenhotep III (around 1390 to 1352 BC), has carved ivory wings of Canaanite design, but the duck is held

in the outstretched arms of a lissom female swimmer with Egyptian features. A silver stag-shaped cup, from the Hittite empire of Anatolia in the fourteenth century BC, incorporates hunt scenes and is inlaid with a copper alloy used earlier in Middle Kingdom Egypt. The transfer of technology is also apparent in the blue glass ingots excavated from the shipwreck: coloured with cobalt, they are chemically similar to vessels made of blue glass from Amarna, Egypt, and to blue beads from Mycenaean Greece.

Artisans and scholars also moved across cultures. A fourteenth-century BC fragment of a cuneiform clay tablet from the ancient Hittite capital Boğazkale, now in modern Turkey, is carved with the Epic of Gilgamesh, the Mesopotamian saga that visiting professors circulated far and wide. Equally fascinating is 'The Game of 58 Holes', a board game similar to snakes and ladders that was found across Mesopotamia, Iran and Anatolia. The exhibition includes an ebony-and-ivory version etched with a palm tree and studded with ten dog-headed pegs; it was found in Egyptian Thebes and dates to 1981 to 1802 BC. It may not be an iPod, but even then, perhaps, tired traders on long trips found entertaining ways to break the monotony. ■

**Josie Glausiusz** is a journalist based in New York.  
e-mail: josiegz@earthlink.net

T. FARAJ

## Q&A: Helium walks into a bar...

Science comedian **Brian Malow** is a regular performer on the museum and conference circuit in the United States. He explains why he finds science funny, and how he uses comedy to gain the public's interest.

### How did you get into science comedy?

I used to be an astronomer, but I got stuck on the day shift. Actually, it was a gradual evolution.

### Are some topics funnier than others?

Anything that you can anthropomorphize is easy — such as insects and animals. And the more familiar I am with a subject, the easier it is. That's why I have a lot of physics and astronomy material. The other day, I had a frightening experience at a café when I noticed someone had put pasta and antipasto right next to each other.

### What do you do when a joke fails?

Sometimes I say, "That joke was endothermic — it required the addition of a little energy from you to make it work."

### Do science jokes go out of fashion?

Unlike politics or pop culture, basic science is evergreen. Gravity and laws of motion don't go out of style. Then there's always new

science to cover, such as the Large Hadron Collider. It has already proven science can get massive media coverage if it's rumoured it might destroy the planet.

### Is scientific jargon a source of humour?

Absolutely. I did some shows for the American Chemical Society and prepared by studying a glossary of chemical terms. There's a lot of pun potential in chemistry. They wondered if I could be off-the-cuff and I said, "I'm so spontaneous I have a negative  $\Delta G$ ."

### And that helium?

Right. So the bartender says, "We don't serve noble gases here." The helium doesn't react. ■

Interview by **Nick Thomas**, associate professor of chemistry at Auburn University at Montgomery, Alabama 36117, USA.

e-mail: nthomas@aum.edu

### Brian Malow: The Final Frontier?

Next show at the National Institute of Standards and Technology, Maryland

19 December 2008

www.sciencecomedian.com

J. GILBEY

I just wrote material that made me laugh, without worrying what other people would think. The challenge was to find the like-minded audience: the adenine to my thymine, the guanine to my cytosine.