

Science in culture

The Story of Time

An exhibition at the National Maritime Museum, Greenwich, and an accompanying book (£25)

J. L. Heilbron

The National Maritime Museum's millennial exhibition opens this week at the Queen's House in Greenwich, where the world's day begins. The display of hundreds of costly books, pictures, instruments and other artefacts was underwritten by *The Times*, Parmigiani Fleurier (makers of fine timepieces) and, primarily, J. P. Morgan, the round-the-clock bankers.

Time is more than money. The exhibition offers five major themes — the creation, measurement, depiction, experience and end of time — with examples from everywhere and everywhen. The section on creation includes drawings from *Genesis*, a tenth-century BC Babylonian clay tablet, an Aztec stone god from about 1500 AD, a magnificent Navajo sand painting dated 1966, bronze and clay statuettes of the Hindu god Shiva from the seventeenth and eighteenth centuries, and a nineteenth-century Maori wooden door lintel.

The section on time measurement enlarges the coverage to Islam (represented by eleventh- to thirteenth-century brass astrolabes), Japan (ivory zodiacal animals, nineteenth century), ancient Rome (Mithraic marble personifying time, second to third centuries) and China (Father Time (pictured) in jade and porcelain, seventeenth and nineteenth centuries).

The Story of Time, the lavishly illustrated book of the exhibition, describes 400 items — two-thirds Western European and the rest from a variety of other cultures. The book reflects the structure of the exhibition: it is a visually appealing, culturally varied, imaginative, multimedia hotchpotch. The director of the Royal Greenwich Observatory, Kristen Lippincott, who conceived and curated the exhibition, wants it to deliver the message that “the watch is not the truth”. She means not only that the division of time into hours and minutes is arbitrary, but also that clock-time embodies concepts and experiences peculiar to the modern, European-dominated world. Lippincott hopes to open new vistas — and perhaps also new truths — to her visitors. She is most persuasive. Visitors intent on catching a particular train home, however, will find it convenient to retain their belief in watch truth.

Interspersed in the catalogue are 23 essays on time in art, chronometry and history. On the arts side are



Time, Chinese-style: the wooden strips above form one half of a calendar for the year 63 BC, while the mirror to the left is decorated with cosmological symbols.

essays about portraits, nineteenth- and twentieth-century art, music and *vanitas* images, filled with skulls and other reminders of life's transience. On the technical side are essays on calendrical principles, horology and the concept of time in different cultures — among geologists, for example, and Inuits. All these accounts are valuable, though not all make good use of the images around them and

some may be too compressed to be fully accessible to general readers.

Three essays call for special mention, two because their authors, Umberto Eco and E. H. Gombrich, appear on the title page, and the third, by Felipe Fernández-Armesto, because it is a particularly elegant

response to a difficult assignment.

Eco's purpose, in his essay called “Times”, is to point out “some areas of confusion” faced or created by analysts of time. What was God doing before Day One? Is the future before or behind us (“the weeks ahead”, “the weeks to follow”)?

Do we imagine the past spatially to our left or to our right?

How long will the world last?

Eco might have

added: “How did Joshua

tell the time while the Sun stood still?”

Most people will be more concerned with the pressing question of the longevity of the Universe. *The Story of Time* gives three different answers computed from the same Hindu recipe. Perhaps none is right. This much is sure, however: the world will be full of pitfalls no matter how long it lasts. Eco falls into one himself. He writes, “For millennia, the only reliable clock was the cock's crow.” Is this not Euro- or even Mediterraneo-centrism? As John MacDonald observes in his excellent essay “Innuity time”, the Inuits — who live much of their lives in the dark and do not keep chickens — use the orientation of the circumpolar stars, the wake-up cries of their infants and the pressure in their bladders to

reckon the start of the day to within rooster accuracy.

Gombrich originally composed “The history of anniversaries” in 1974, for the centenary of the philosopher Ernst Cassirer's birth. He calls attention to the historical ingredients in the concept of centennial: a widely disseminated and long-lived calendar, a

corporate memory, and agreement on things worth celebrating. Recognizing that years ending in two zeros are worth noticing required the division of history by century and a consensus that 100 years is a good period for stock-taking. The first century turn that met these criteria was 1800.

Fernández-Armesto's assignment was to discuss “Time and history”. His answer: “time is history's subject matter and history [is] time's diet”. This cannibalism has had three forms: a cyclical one, in which nothing singular can happen, since everything will happen again, and no one bothers with dates; a linear one, in which the story has a beginning, an end and dates in between; and a chaotic one, characteristic of our time, in which historians have embraced “the counter-factual, the self-reflexive, the representational, the random, the causeless, the unverifiable, the liminal and the implicit”. If so, the end of history has come before the end of time.

Although the exhibition might best be described as fitting the chaotic view of history, it is well worth the visit. Its venue is a monument of architecture. Its artefacts are handsome and well presented. Its catalogue is attractive and informative. Together, they indicate the excellence achievable at the end of our century by up-to-date museology inspired by good ideas, enriched by good scholarship and enabled by just plain money. J. L. Heilbron is at Worcester College, University of Oxford, Oxford OX1 2HB, UK.

