1

Introduction

BENJAMIN Z. KEDAR AND MERRY E. WIESNER-HANKS

This volume deals with the main processes that furthered cultural, commercial, and political integration within and between various regions of the world from the middle of the first to the middle of the second millennium CE. This span of time – which may be called "the Middle Millennium" – overlaps with the phase in European history commonly known as the Middle Ages, but our decision to consider it as a distinct era, far from displaying a Eurocentric sentiment, is based on the conviction that this millennium amounts to a meaningful period in the history of all main political divisions of the eastern hemisphere.[1] In addition, although the middle of the first millennium is generally not a sharp dividing line in the history of the western hemisphere, the middle of the second millennium certainly is. And in both hemispheres, similar processes occurred during this period: trade networks expanded and matured, interactions among cultures intensified, and, toward the period's end, incipient contacts between the two hemispheres came about.

Contemporary views of the known world: cartography

True world history is a modern phenomenon: no one who lived before 1500 could have had even an approximate notion of both of the globe's hemispheres, nor did any inhabitant of the western hemisphere have even a vague idea of its shape and extent. In the eastern hemisphere however, some people did attempt to form a view of the known world in its supposed entirety, but restricted in reality to major parts of that hemisphere. Important testimonies to such endeavors are the so-called world

The editors wish to thank the Israel Institute for Advanced Studies, Jerusalem, for its support of an invaluable workshop for the authors in 2011, at which draft chapters were discussed and inter-relationships explored.

1 See Johann Arnason's detailed discussion in Chapter 18 below.

maps. Their geographical distribution and chronological evolution are illustrative of wider developments.[2]

Kwŏn Kŭn, the Neo-Confucian scholar who watched over the making of the Korean world map of 1402, exclaimed that by looking at it "one can indeed know the world without going out of one's door!"[3] His pride was justified, for the map attempts to represent the entire area from Korea and Japan in the east to Africa and the Iberian peninsula in the west: two of the westernmost places marked on it are *Ma-li-xi-li-na* (that is, Marseille) and *Da-la-bu-luo-si* (Tarābulus [Tripoli], Libya). The world map was based on imported maps of China and Japan, as well as on a detailed map of Korea; the depiction of the Arabian peninsula, Africa, the Mediterranean and Europe evidently depended on maps from the Islamic realm that had been brought to Mongol-ruled China and helped there to shape maps whose copies made their way to Korea. The map of 1402 has its flaws: for instance, Korea is larger than Africa, Japan faces southern China, and India and China are amalgamated into a single land mass (see Figure 1.1). Kwŏn Kŭn was right to observe that "it is indeed difficult to achieve precision ... in compressing and mapping [the world] on a folio sheet several feet in size." And yet this map was a unique Korean achievement that not only corroborated Kwŏn Kŭn's conviction that "the world is very wide" but also offered a rough overview of the main components of the world's eastern hemisphere.

Such maps did not exist in East Asia before the advent of the Mongol trans-Eurasian state in the thirteenth century and appear to have remained rare after its demise. Information on the layout of the Islamic realm reached China, but was not integrated into the imperial, Sino-centric cartography. Thus the two famous Chinese maps engraved in 1136 on two sides of a stele – one of them equipped with a grid that allows for the calculation of distances and areas – are almost exclusively focused on China, depicting its coastline and river systems with a remarkable accuracy; the term *Dashi* (realm of Islam), however, figures merely in an annotation beyond the western margin

2 For a detailed examination of the maps of all pre-modern civilizations, see J. B. Harley and David Woodward (eds.), *The History of Cartography*, 3 vols. in 6, Chicago and London: University of Chicago Press, 1987–2007; for cartography under Mongol rule see Thomas T. Allsen, *Culture and Conquest in Mongol Eurasia* (Cambridge University Press, 2001), ch. 13; for a longitudinal study of Sino–Muslim relations based on cartography, written texts, and archaeology, see Hyunhee Park, *Mapping the Chinese and Islamic Worlds. Cross-Cultural Exchange in Pre-modern Asia* (Cambridge University Press, 2012).

3 For this and the following quotations of Kwŏn Kŭn (also transliterated as Gwon Geun), see Gari Ledyard, "Cartography in Korea," in Harley and Woodward (eds.), *The History of Cartography*, vol. II, bk 2, 245.

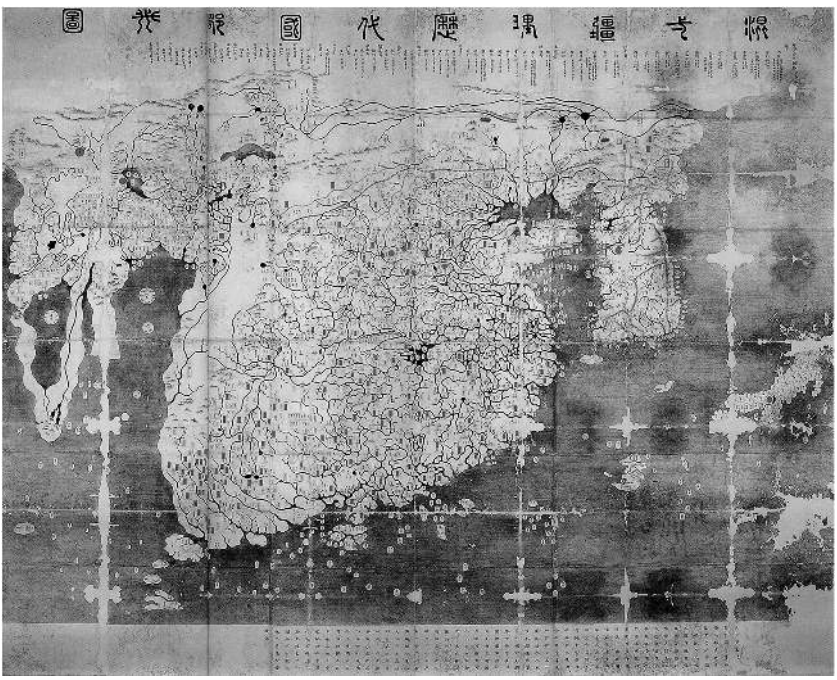

Figure 1.1 The Honköji copy of the 1402 Korean Kangnido map of the world / Pictures From History / Bridgeman Images

of the second map. Chinese Buddhist cartographers, aware of the foreign origin of their faith, did not place China at the world's center and prominently depicted India and Central Asia, but they, too, provided scant information on countries beyond them, marking *Dashi*, *Lumei* (or Rūm, that is, Byzantium) and *B'wâng-d'ăt* (Baghdad) near the western margins of their maps. Japan possessed general maps of the country as well as Buddhist drawings that focused on a five-partite India, with Turkestan, Japan, China, and Ceylon marked near the margins. The maps of Vietnam prepared in the late fifteenth century were likewise restricted to that country. In pre-Columbian America, maps represented smaller sections of territory: the Aztecs prepared way-finding maps that showed rivers, ranges and localities, and district maps that recorded property ownership, while the Incas carved stone landscapes that appear to have represented actual regions.

The Mongols were different. Keen to form a view of their unprecedentedly far-flung empire and of the lands adjoining it, they not only collected maps of the countries they conquered but also initiated vast cartographical

projects in which Muslim scholars played a major role. Thus, the Bukharan astronomer Jamāl al-Dīn (in Chinese transcription, Zha-ma-lu-ding) prepared in 1267 a terrestrial globe for the Grand Khan Qubilai (Kublai, Khubilai) and endeavored in 1286 to prepare, with a Sino–Muslim staff, a massive geographical compendium equipped with maps. As Jamāl al-Dīn put it in his memorandum to the Grand Khan, "Now all of the land from the place of sunrise to sunset has become our territory. And therefore, do we not need a more detailed map? How can we understand distant places? The Islamic maps are at our hands. And therefore, could we combine them [with the Chinese maps] to draw a [world] map?"[4] Jamāl al-Dīn's team completed its work in 1303, relying on Muslim maps deposited at the Imperial Library Directorate in Khanbaliq (Beijing) for the coverage of Islamic and probably also of other foreign countries. At some later date, Shansi (whose Arabic name appears to have been Shams al-Dīn) produced the "Map Book of the Western Countries." While none of these maps has come down to us, the "Map of the Countries of the Northwest" that the Mongol court issued in about 1330, and that focuses on Central Asia but marks also Damascus and Egypt, survives in a post-Mongol collection. The impact of Muslim mapmaking must have been evident also in Li Zemin's contemporaneous "Map of the Vast Diffusion of Resounding Teaching" that contained much information on the "Far West"; this map has not survived, but it surely influenced the depiction of the hemisphere's western part in the Korean map of 1402, because a Chinese map of 1541 that resembles it claims to be based on Li's work. Yet with the collapse of Mongol rule in China in 1368, and the rise of the Chinese Ming dynasty, government-sponsored efforts to utilize Islamic cartographical lore for a better visualization of the known world came to an end. The maritime voyages of Zheng He – the Ming dynasty eunuch admiral of Muslim origin – to Southwest Asia and East Africa in the years 1405–33 made use of knowledge gathered under Mongol rule and gave rise to the unique navigational chart of the route Nanjing – Straits of Singapore – Bay of Bengal – Persian Gulf – Aden – Mogadishu – Malindi (present-day Kenya). A Chinese coin dating from 1403–25, unearthed in 2013 on the island of Manda off the coast of Kenya, may well be a vestige of Zheng He's voyages. These were, however, abruptly discontinued and, to thwart their renewal, most of their documentation was destroyed.

4 Quoted by Park, *Mapping the Chinese and Islamic Worlds*, 103.

The Mongol recourse to Islamic maps and geographical lore is not surprising, both because the cartographic achievements in the realm of Islam were remarkable and because the Mongols conquered much of it. Since this realm bordered on all other major civilizations of the eastern hemisphere – those of China, India, Byzantium and Latin Europe, as well as on sub-Saharan Africa – it produced world maps far more accurate than the Korean one that depended on them. Back in the tenth century, members of the Balkhī school of geographers represented the earth in repeatedly copied sets of charts, which consisted of a world map, maps of the Mediterranean and Caspian seas and the Indian Ocean, and maps of seventeen regions of the Muslim world, all displaying geographic forms in a linear, abstract fashion. A much more realistic presentation appears in the circular map that the Muslim cartographer al-Idrīsī prepared in the mid-twelfth century at the court of King Roger II, ruler of the Norman Kingdom of Sicily (see Figure 1.2).

This map purports to show the entire inhabited world, from China (*al-Sīn*) to Morocco (*al-Maghrib al-aqsā*), from Poland (*Balūniya*) to Sofāla (in present-day Mozambique), with an oversize island of Sri Lanka (*Sarandīb*) marked south of a non-triangular India and with Tibet (*al-Tubbat*) among the mountains north of it. As on the earlier maps of the Balkhī school, the inhabited world is surrounded by the Encompassing Sea, and a huge Africa extends all the way from its western to its eastern extremity, thus coming close to China; the latter feature reveals the influence of Ptolemy (*fl.* 150 CE), whose manual for map-makers, the *Geography,* was translated from Greek into Arabic in the ninth century. Yet these achievements were followed by relative stagnation and thus al-Idrīsī's circular world map resurfaced, with no notable changes, in Ibn Khaldūn's *Book of Advice* of the late fourteenth century.

In Byzantium, on the other hand, a breakthrough occurred around 1300, when Maximus Planudes used the instructions in Ptolemy's *Geography* to prepare a world map as well as twenty-six regional ones. His map of the world has a rectangular frame, with the inhabited area placed on a conic graticule whose straight meridians were to merge well beyond the upper, northern frame, and whose parallels were drawn as arcs of circles. The Mediterranean, Europe, the Black Sea, the Persian Gulf and Southeast Asia are depicted far more accurately than on the twelfth-century circular map of al-Idrīsī, yet the two maps share an indistinct China, an oversize Sri Lanka (here called *Taprobane*) and an eastern extension of Africa that ultimately joins with China, thus rendering the Indian Ocean a closed sea.

Kwŏn Kŭn observed in 1402 that "by looking at maps one can know terrestrial distances and get help in the work of the government." Two

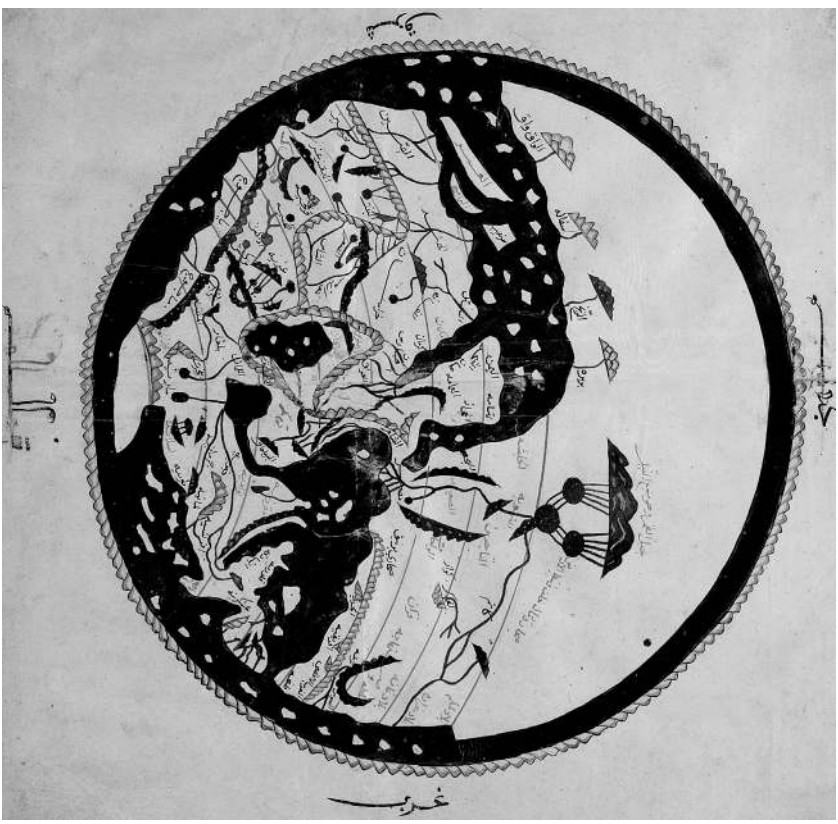

Figure 1.2: Al-Idrīsī's world map, twelfth century, rotated (Bodleian Library, Ms. Pococke 375, fols. 3v–4a)

centuries earlier, the Chinese courtier-turned-teacher Zhang Ruyu observed that "maps of the Empire are of the greatest use to states. At the time when states are first established they are of use in pacification. After the territories are consolidated, they are of use in defence. And during times of restoration, they are of use in the recuperation of lost territories."[5] This utilitarian approach was surely shared by the people who endeavored to prepare

5 Quoted by Hilde De Weerdt, "Maps and Memory: Readings of Cartography in Twelfth- and Thirteenth-Century Song China," *Imago Mundi* 61.2 (2009): 148. The author argues that after the loss of northern China to the Jurchen in 1141, maps of the no-longer-existing unified empire – many of them printed– served in Southern

reliable maps of the Chinese Empire that were based on measurements, by the Mongol rulers who collected and commissioned maps, as well as by Vietnamese and Muslim map-makers. In western Europe, on the other hand, an important aim of world maps was to provide information about major events in sacred history, thus presenting time as well as space, or time superimposed on space, in a manner that recalls local maps produced in other civilizations. As the Franciscan friar Paolino Veneto put it in the early fourteenth century, "I would say that without a world map it is not just difficult but impossible to imagine, or conceive in one's mind, what is said of the sons and grandsons of Noah and of the Four Monarchies and of other kingdoms and provinces, both in theological and secular writings."[6] Consequently, on European world maps one sees Adam, Eve, and the serpent in a Paradise located in the east, or busts of the Apostles at sites where they were said to have been buried, and so on. Physical accuracy was not a major aim, with an oversize Holy Land figuring near the maps' centers. Yet at least one map-maker chose to highlight the area in which he himself lived. This was Stephanus Garsia of the monastery of St Sever in Gascony, who in the mid-eleventh century prepared the most detailed Latin world map of that age that has come down to us: it shows Europe prominently, with a Mediterranean whose northern and southern shores are almost straight, a slim India, and a still more slender China stretching south of the Garden of Eden. On this world map Stephanus not only represented his monastery with a building as big as that symbolizing Constantinople, the largest city in Christendom, but also marked six small places in the monastery's vicinity, while leaving Paris and Marseille unmentioned.

When the First Crusade left for Jerusalem in 1096, many Islamic world maps were significantly more accurate than their European counterparts; Europe had no school of geographers, nor any standardized set of maps. Consequently, a Muslim of that age looking at a world map prepared in the realm of Islam could have obtained a much more realistic idea about the shape of Italy, for example, than a contemporary Latin Christian contemplating the most detailed European map.

Yet this was to change. In the thirteenth century Europeans began to draw portolans – that is, marine charts – that showed very accurately the coastlines

Song China as potent reminders of China's dismemberment as well as of the yearning for its reconstitution.

6 Latin text edited in Anna-Dorothee von den Brincken, "Mappa mundi und Chronographia. Studien zur *imago mundi* des abendländischen Mittelalters," *Deutsches Archiv für Erforschung des Mittelalters* 24 (1968): 127.

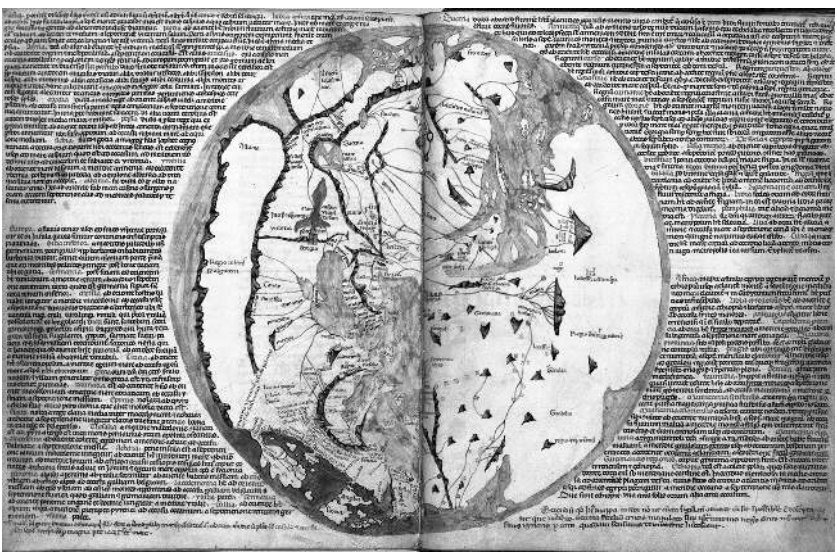

Figure 1.3 Pietro Vesconte's world map, *c.* 1321 (Bodleian Library, Ms. Tanner 190, fols. 203v–204r)

of the Mediterranean and Black Seas, and subsequently these coastlines were incorporated in various world maps. Map-makers gradually improved their craftsmanship, assimilating the best achievements of Islam and Byzantium, and adding information from other sources. The circular world map of the type first attested in al-Idrīsī's treatise must have become known in Italy, because the world map that the Genoese Pietro Vesconte drew up in 1321 is strikingly similar to it, although, thanks to portolan lore, the Mediterranean and Black Seas are far more exactly depicted (see Figure 1.3).

The Catalan Atlas, which the Jewish "Master of Maps and Compasses," Cresques Abraham, prepared in Majorca in 1375, reveals the impact of reports on Inner and East Asia during the Pax Mongolica by such travelers as Marco Polo, while the spotted, brightly colored horses depicted as traversing these areas are inspired by Persian models. Ptolemy's *Geography*, translated into Latin in about 1409, soon began influencing European world maps, as attested by the 1414 map by Pirrus da Noha. And the impact of Portuguese explorations along the western coast of Africa can be observed, for example, on the maps made in about 1450 by the Italian monk, Fra Mauro, and the Venetian cartographer, Giovanni Leardo (see Figure 1.4).

Thus, by 1500 European world maps were far more advanced than those of other contemporaneous civilizations and, after Europeans had reached the

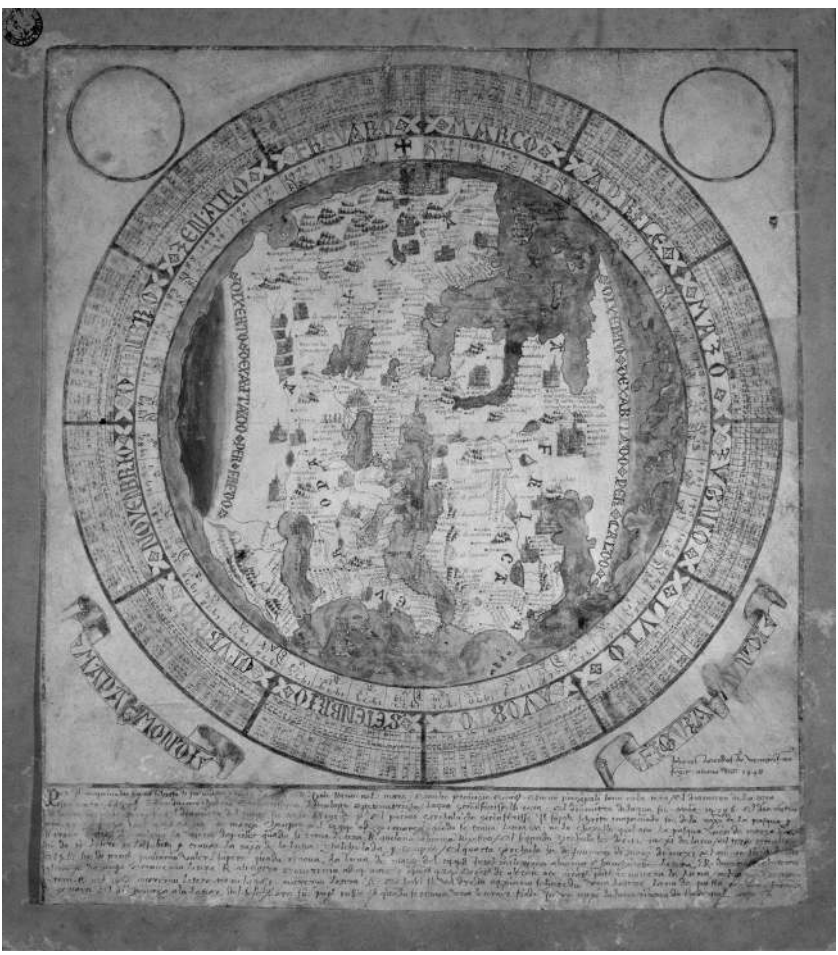

Figure 1.4 Giovanni Leardo's world map, 1448 (DEA Picture Library / Getty Images)

Americas, the New World, too, started to appear on them. In 1507 Martin Waldseemüller was the first to place the name 'America' on a world map: it is marked on the southern part of a slim, elongated continent separated by oceans from Africa and Europe to its east and Asia to its west.

This bird's-eye view of cartography during the Middle Millennium may serve as a simile for the fortunes of the main civilizations during that period: an inward-looking China that opens up under the impact of the Mongol

conquest; the realm of Islam, the true Middle Kingdom of the age, whose cultural apogee is followed by a plateau in most Arabic-speaking countries; Byzantium, a storehouse of breakthroughs attained in antiquity; Latin Europe, initially backward but gradually assuming a leading position; and the Mesoamerican and Andean civilizations, each following a distinct path with no habitual contact between them.

Contemporary views of the known world: written histories

Maps are apt to traverse civilizational boundaries with relative ease. Most people who have grasped the principle of using a series of symbols to represent three-dimensional territory on a two-dimensional surface are capable of deciphering a map even though it uses a different set of symbols and is accompanied by legends in an unknown script or language. This is why Korean map-makers were able to incorporate an imported map that showed the unknown lands of the "Far West," and why a Spanish conquistador could comprehend, and put to use, an Aztec cloth map that depicted a coastal region. In short, it is possible to figure out a map's rough meaning without having recourse to its language, or at any rate without mastering it. Hence the cross-civilizational flow of cartographic lore and the capability of situating on one's world map geographical information deriving from distant sources. On the other hand, historical accounts – inasmuch as they are language-bound – cross civilizational borders far less easily. This was one reason why our period witnessed a number of world maps but just one work that may be regarded as a world history of sorts. The other reason was the gap between the relatively widespread desire to form a view of the physical world in its entirety, and the sparse interest in the past of its diverse peoples.

Consequently, the countless records of the past written during the Middle Millennium, though pertaining to a vast variety of genres and revealing widely diverging depths of historical memory, share one fundamental characteristic: their authors focus on their own group or state or civilization, with other groups, states or civilizations mentioned only insofar as they have an impact on that to which the writer belongs. This is true of the Mesoamerican records of dynastic lineages, which may go back for just a few centuries; of China's Standard Dynastic Histories, which form a continuous sequence from pre-imperial times onward; and of Islamic, Byzantine and Western annals and chronicles, which, even when self-styled as universal, start with creation and humanity's legendary beginnings yet very soon converge on