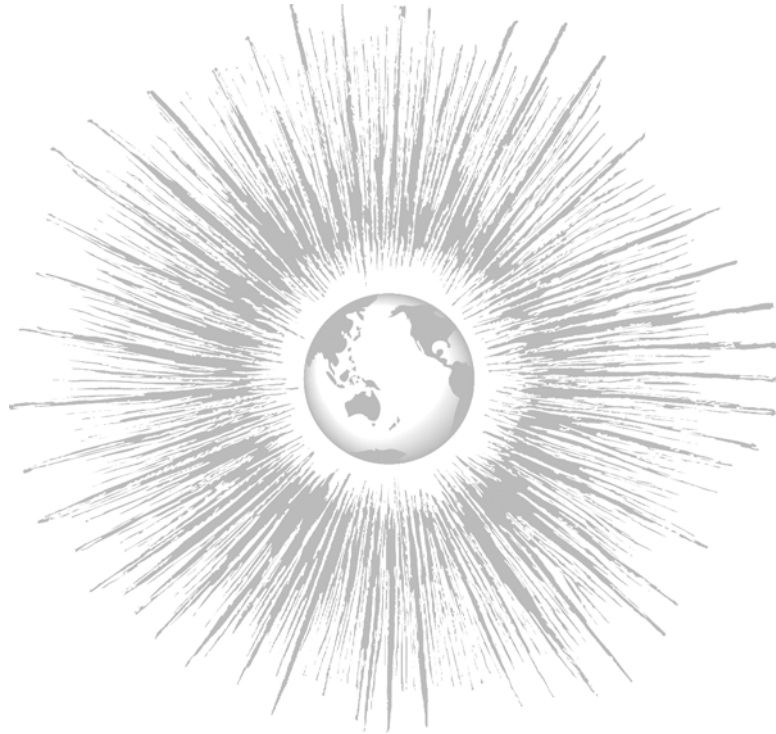


THE STATUS OF THE FAR EASTERN CIVILIZATION/ WORLD SYSTEM: EVIDENCE FROM CITY DATA*

David Wilkinson



ABSTRACT

T. Chandler's city data are used to inquire whether, and when, East Asia was a world system in itself, or part of a larger Old World world-system; and whether, and when, the east end of the Old World oikumene was more "advanced" than the west end. On the available data, (1) A.G. Frank's thesis of a single Old World world-system is less well supported

than the thesis of a long coexistence of a plurality of world systems, including a separate Far Eastern system; (2) Frank's thesis of the general economic lead of "China" over "Europe" is supported; (3) there is evidence of an interesting medieval outrunning of the "west end" by the "east end" economy, which begs further investigation.

INTRODUCTION

Andre Gunder Frank's *Re-Orient* and *Centrality of Central Asia* raise several interesting issues of a potentially empirical character, some of them relevant to our current topic of "city systems in East Asian civilization." Did a separate Far Eastern civilization/world system ever coexist with some others in the Old World, loosely united by a single trading network or oikumene? Or were Old World cities always a single "world-system" so strongly integrated as to be part of a single social process? And whatever the degree of organization of the Old World cities, as loose trading oikumene or tightly bound social system, was that collective entity always, sometimes, or never Sinocentric?

Frank would, I believe, defend the answers (a) that all the Afro-Eur-Asian civilizations/world-systems were tightly bound into a single system and process, through a linkage in Inner Asia (as we shall call it for the purposes of this paper); and (b) that at least for some time before the 19th century the single world-system into which they were bound was Sinocentric, or at least not Eurocentric, and specifically not Eurocentric for the 16th, 17th and 18th centuries.

One set of data that may bear on these questions, and serve at least in part as a source of answers, is to be found in Tertius Chandler's pioneering collection of city size data estimates (1987). Chandler's table set titled "Tables of World's Largest Cities: The Largest 75 Cities, 2250 B.C.–1975" (1987: 460 ff.) seems rel-

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evant and useful here. Evidence bearing on the empirical “centrality of Central Asia,” upon the integration through Inner Asia of the Old World oikumene as a world-system, and conversely upon the individuality of its various components, should be present in the answers to the questions, How many of the largest cities were Inner Asian; and, What relation is there between the population of the largest Inner Asian cities, and that of the largest Old World cities? When and if Inner Asian cities were many, and large by comparison with outlying cities of what I have labeled (1987, 1992–93) “Central Civilization” (mostly found in Southwest Asia, North Africa and Europe), “Indic Civilization,” and “Far Eastern Civilization,” both the integration of an Old World world-system and the “centrality of Central Asia” become more plausible propositions than when Inner Asian cities are few and relatively small.

Chandler’s tables for 2250 BC (only 8 cities @ a threshold of circa 30,000) and 2000 BC (9 @ 25K) show no cities east of present Iran (see the maps for these years). At these dates, on these data, there is no evidence of an Old World-wide world-system.

An Indic city appears in the 1800 BC table (10 @ 20K), and there is at least one Indic city from 1200 BC (15 @ 24K) on. Far Eastern cities appear in Chandler’s tables for 1360 BC (16 @ 24K) and thereafter. Furthermore, the populations of the largest Far Eastern cities (e.g. Sian, Loyang, Lintzu) and, to a lesser degree, the largest Indic cities (e.g. Ayodhya, Hastinapura, Kausambi), become comparable to those of the largest cities—Egyptian Thebes and Memphis, Mesopotamian Babylon) of what I have labeled “Central Civilization” (the polycultural fusion of Egyptian/Northeast African with Mesopotamian/Southwest Asian Civilization after c. 1500 BC). For these times, then, an Old World world-system is conceivable.

However, no cities appear in Inner Asia in Chandler’s tables for 1800 BC, 1600 BC (11 @ 24K), 1200 BC, 1000 BC (14 @ 25K), 800 BC (17 @ 25K), 650 BC (20 @ 30K), or 430 BC (51 @ 30K). This seems consistent with a reading which finds separate Central and Far Eastern (and Indic) world systems coexisting at these times.

From 200 BC on (55 @ 30K), however, Inner Asian cities begin to be found in Chandler’s tables. An Inner Asian convergence and joining of the three major world systems becomes possible, and should be explored in appropriate detail.



200 BC

One city in western Inner Asia, Balkh, appears, as the easternmost urban extension of what I would call Central Civilization; the simultaneous appearance of Peshawar, a city on the northwest Indic frontier, and the absence of any

other Inner Asian city, suggests that the trade nexus here does not include the Far Eastern Civilization. Balkh is 1/4 the size of the largest Central system city, Alexandria; Peshawar is 1/9 the size of the largest Indic system city, Patna. I would accordingly incline to view Balkh and Peshawar as parts of the semiperipheries of two world systems/civilizations, each of which is growing toward the other along a linking trade route.

AD 100 (75 @ 30K)

Now a collection of Inner Asian cities appears in Chandler’s list: Merv and Balkh; Peshawar; plus westward extensions of the Far Eastern system, Tunhuang and Kanchow. Peshawar, the Kushan capital, is the largest Indic city, but Balkh is 1/10 the size of the largest Central city (Rome), and Kanchow 1/9 the size of the largest Far Eastern city (Loyang). I would therefore interpret this distribution as the further extension eastward of the Central semiperiphery, the beginning of a matching extension westward of the Far Eastern semiperiphery, and a noteworthy northward movement of the Indic core.

AD 361 (50 @ 40 K)

All the Inner Asian cities listed AD 100 turn up missing. This is not just an artifact of the shrinkage of the list (75 to 50) and rise of the threshold (30K to 40K): had the same restrictive criteria been applied to the AD 100 list, only Tunhuang would have dropped out. The “rimland” world-systems seem to have pulled their semiperipheries back from Inner Asia.

AD 500 (50 @ 40K)

Merv and Balkh have returned. They are 1/9 the size of the largest Central cities, Constantinople and Ctesiphon. There is no matching extension of the Indic city set northward, or of the Far Eastern westward. I would therefore read this as evidence that Central Civilization is extending its semiperiphery into western Inner Asia.

AD 622 (51 @ 40)

Merv remains; Samarkand replaces Balkh; Kashgar appears, soon to be a target of the T’ang Far Eastern state. Merv is 1/10 the size of the largest Central city, Ctesiphon, Kashgar 1/8 the size of the largest Far Eastern city, Changan. Because of its trade connections, Kashgar might be seen as a shared Indic-Far Eastern semiperipheral extension into Inner Asia now matching that of Central Civilization; but hardly more than that.

AD 800 (56 @ 40K)

In this table, Bokhara joins Merv and Samarkand; Jayapuram extends Indic northward; Lhasa complements Kashgar as an Indic-Far Eastern link. But Samarkand is 1/9 the size of the largest Central city, Baghdad (Merv and Bokhara are smaller), Lhasa 1/6 the size of Changan. Jayapuram is 3/5 the size of Kanauj, the largest Indic city. The Indic core seems to have shifted northward somewhat, the Far Eastern somewhat westward, but a bit less; Constantinople having declined precipitously, the Central core has also shifted eastward somewhat, though not to Inner Asia. If this movement were to continue, an Inner Asian confluence might ensue.

AD 900 (61 @ 40K)

Bokhara, Samarkand, Kashgar and Lhasa remain; Jayapuram and Merv are gone; Balasaghun is added. Again comparing the largest Inner Asian extension of a civilization to its largest city, Bokhara is 1/9 the size of Baghdad, Kashgar 1/10 the size of Changan; Indic has no northward extension. The Indic core has shifted south again, as has its semiperiphery; the Far Eastern core has shifted east again. In the net, the rimland world systems have moved apart, losing all the ground gained in the previous table.

AD 1000 (70 @ 40 K)

A larger clustering of cities appears in western Inner Asia: Bokhara, Samarkand, Kashgar, Balasaghun and Lhasa continue; Ozkend (Far Eastern), Ghazni (Central) and Thaneshwar (Indic) are added. But Bokhara and Samarkand are 1/6 the size of Cordova, Ozkend 1/6 the size of Kaifeng; Thaneshwar is 3/5 the size of Kanauj. The situation seems to repeat AD 800, with a bit more emphasis: the lost ground has been more than made up, the rimland systems are flowing toward each other again.

AD 1100 (70 @ 40K)

Bokhara, Samarkand and Balasaghun remain; Lahore replaces Ghazni; Ozkend, Thaneshwar and Lhasa are gone. Bokhara is now 1/3 the size of Constantinople, Balasaghun 1/10 the size of Kaifeng. Central Civilization has continued to "flow" eastward, but Indic and Far Eastern have pulled back.

In any series of snapshots taken at intervals, intervening transitory events are lost. I did not map Chandler's table for AD 1150 (nor his later tables at less than hundred-year intervals). But AD 1150 may have been Inner Asia's chance for true centrality: in that table, Seljuk Merv equals Constantinople as the world's

largest cities. But this amounts to a core shift eastward in central Civilization: no comparable core shift toward Inner Asia is shown for either Indic or Far Eastern civilizations, and Merv's size will soon decline again.

AD 1200 (73 @ 40K)

To Merv, Bokhara, Samarkand and Balasaghun, this table adds Herat and Ghor. Afghanistan-based Islamic conquerors of Delhi have momentarily erased the boundary between Central and Indic civilizations. Balasaghun is 1/6 the size of Hangchow, Bokhara 1/3 the size of Fez. What is implied is some net movement since 1100 of the Central and, to a lesser degree, the Far Eastern semiperipheries towards each other. Unification of the Old World world-systems seems nearer in sight than ever. But....

AD 1300 (75 @ 40K)

All of the Inner Asian cities of AD 1200 have vanished. This is one consequence of the Mongol destruction of the Khwarezm state (Khorasan), an Inner Asian semiperipheral extension of Central Civilization. (The Mongol destruction in Inner Asia, and the failure of their invasions of India, incidentally restore the autonomy of Indic civilization, as well as its relative isolation.) Two westward extensions of Far Eastern civilization are seen, Turfan and Kashgar, the latter 1/9 the size of Hangchow.

AD 1400 (75 @ 45K)

Only Samarkand is found in Inner Asia, 1/3 the size of Cairo; as Tamerlane's capital, its size reflects a real power shift, but his invasions of India have eliminated Delhi and forced Indic civilization even farther from any Inner Asian convergence. Ming-Mongol wars have also removed the westward extensions of Far Eastern Civilization, so the Inner Asian linkage is even weaker than in AD 1300, indeed the weakest since the AD 361 table.

AD 1500 (75 @ 50K)

There has been a partial recovery in Inner Asia: to Samarkand add resuscitated Bokhara and Turfan. But Samarkand is only 1/7 the size of Cairo, and Turfan but 1/11 the size of Peking. The wounded Central and Far Eastern civilizations have resumed their expansion towards a juncture; so, but to a much lesser degree, has Indic, where Delhi reappears. The move toward fusion is about where it was AD 622.

AD 1600 (75 @ 60K)

Of Inner Asian cities, only Bokhara makes this list, 1/7 the size of Constantinople. A powerful linkage is indeed being established—I would by this time judge that the Indian subcontinent has probably been recruited into the Central world-system; but the linkage is overseas, reflected in the appearance in this table of Goa. No Indic or Far Eastern Inner Asian city outpost appears. Inner Asian linkage is back to about the AD 500 level.

AD 1700 (75 @ 60K)

Bokhara continues, at 1/9 the size of Constantinople. No Far Eastern city-outpost is found in Inner Asia. If an Indic world-system persists, it has a significant northward extension in Srinagar, 1/3 the size of Ahmedabad. (I have however not previously treated Srinagar, which appears in Chandler's lists in 430 BC, 200 BC, AD 100, AD 361, AD 500, AD 622 as an "Inner Asian" link city, but as a dead end of a north Indic route.)

AD 1800 (75 @ 77K)

Bokhara is gone; Peshawar replaces Srinagar; again, no Far Eastern city-outpost is found in Inner Asia. The Indian subcontinent is by now certainly integrated into the Central system; the second largest British city is Lucknow.

AD 1900 (75 @ 350)

An enormous Eurocentric growth in city numbers and sizes has left Inner Asia completely off the list. Even assuming that a Far Eastern world-system persists—I would suspect that it too has by now been absorbed into the Central system—its connections are in seaports like Tientsin, Shanghai and Canton.

CONCLUSION

I would conclude that Chandler's data are more consistent with the interpretation that there were several Old World world-systems, the three largest of which merged after 1500 mainly as a result of European states' overseas imperial, especially trade-imperial, expansions, than with the interpretation that finds only one Old World world-system, with a strong continental connection through Inner Asia. Assuming the Old World world-systems were indeed many, not one, till a modern date, there remains Frank's other issue: was the real-world history of these world-systems in some sense "Sinocentric," requiring a "re-Orienting" of our history-writing?

The Chandler data may have a bearing on the "empirical Sinocentricity"

Table 1 – Which Had the Largest City?

	Europe	China
1360 BC		Ao
1200 BC		Anyang
1000 BC		Sian
800 BC		Sian
650 BC		Lintzu
430 BC		Yenhshiatsu
200 BC		Changan
AD 100	Rome	
AD 361	Constantinople	
AD 500	Constantinople	
AD 622		Changan
AD 800		Changan
AD 900		Changan
AD 1000	Cordova	
AD 1100		Kaifeng
AD 1200		Hangchow
AD 1300		Hangchow
AD 1400		Nanking
AD 1500		Peking
AD 1600		Peking
AD 1700	Constantinople	
AD 1800		Peking
AD 1900	London	

issue. As a first approximation, we may ask, at any moment, which competing party had the largest city, implying the largest political extraction of, or industrial exchange for, surplus food production. One could see this as a comparison between the claims of "Europe" and "China" for the status of "most advanced society." However, neither "Europe" nor "China" seems to me to be genuine world-systems; I will therefore give the question more gradations, and ask it for Central and Far Eastern world-systems as well; and not omit Indic.

As no "European" or "Chinese" city does appear, and no "Central" city could appear, before Chandler's 1360 BC table, we shall begin this follow-up inquiry at that time. For each date thereafter, the largest city in either "Europe" or "China," and the largest in either Central, Indic, or Far Eastern civilizations, is named in Tables 1 and 2, in its appropriate column; ties are reflected by multiple entries. (Note that "Thebes" is the Egyptian city, not the Greek city.)

Table 2 – Which Had the Largest City?

	Central	Far Eastern
1360 BC	Thebes	
1200 BC	Memphis	
1000 BC	Thebes	Sian
800 BC	Thebes	Sian
650 BC	Nineveh	
430 BC	Babylon	
200 BC		Changan
AD 100	Rome	
AD 361	Constantinople	
AD 500	Constantinople	
AD 622	Ctesiphon	
AD 800	Baghdad	
AD 900	Baghdad	
AD 1000	Cordova	
AD 1100		Kaifeng
AD 1200		Hangchow
AD 1300		Hangchow
AD 1400		Nanking
AD 1500		Peking
AD 1600		Peking
AD 1700	Constantinople	
AD 1800		Peking
AD 1900	London	

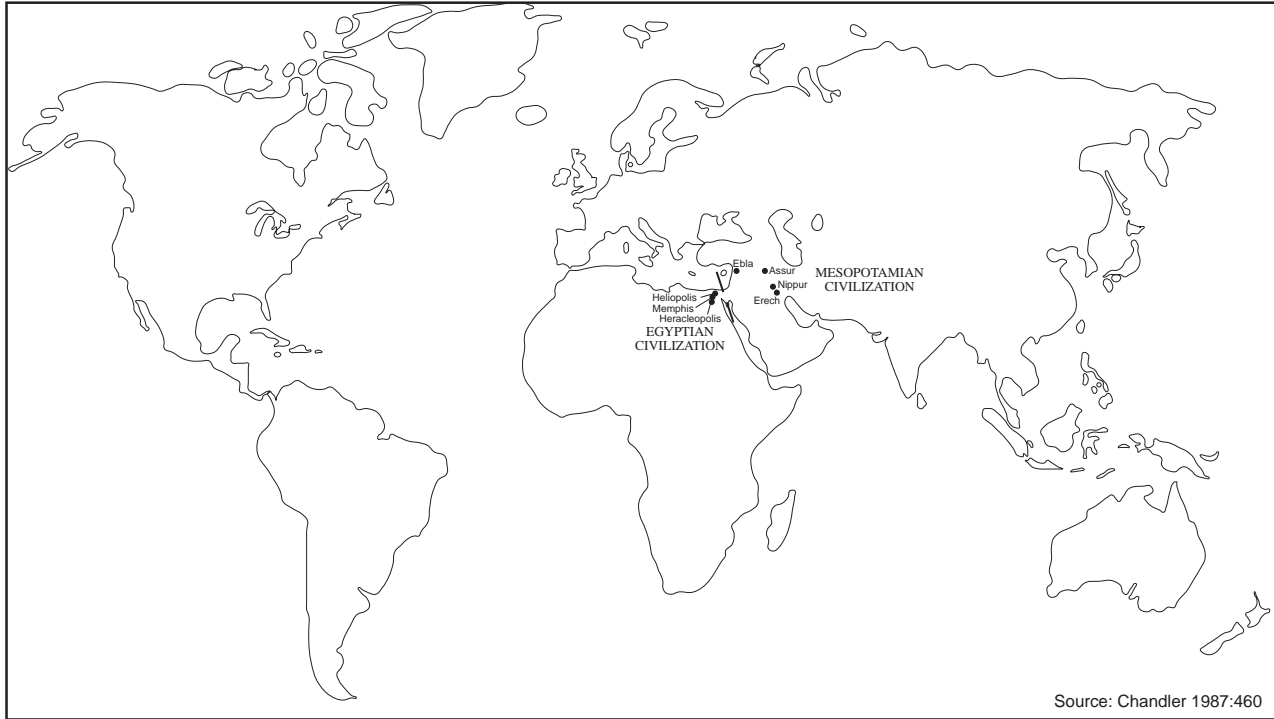
In this set of comparisons, “China” generally outperforms “Europe.” However, Central Civilization (which is usually non-Eurocentric) generally outperforms Far Eastern (which is usually Sinocentric) until late in the Northern Sung dynasty, when the balance radically shifts for 600 years. Both facts are interesting: given the greater antiquity of the Central system, it is the shift that perhaps should seem surprising. There was a noteworthy economic reform struggle in the late Northern Sung. Has inadequate attention hitherto been given to the competitive merits, at the civilization/world-system scale, of the reforms of Wang An-shih (fl. 1069-1074)?

This inquiry by no means exhausts the interesting questions raised by Frank’s arguments, nor indeed has it exhausted the data potentially relevant to such

questions in Chandler’s collection. The relative weight of the easterly and westerly ends of the Old World oikumene could be further explored, for instance, by looking at more urban data than only primate city sizes; perhaps a decentralized, multistate, multipolar system will show better on that measurement. Evidence bearing on the empirical Sinocentrism of the history of the oikumene may, for instance, be present in the answer to the question: what proportion of the largest cities, in each snapshot year, was Far Eastern (as a fraction of the whole collection, and also vs. Central or Indic)? What proportion of the total population of the largest cities was Far Eastern?

And of course Chandler’s tables are hardly the last word on city sizes. Historical and archaeological progress will revise such data (cf. e.g. Chandler 1987 vs. Chandler and Fox, 1974), and any conclusions therefore drawn are as tentative as necessary. Normal science may well revise data and theories at a rate proportional to the number of workers in the field (Wilkinson’s Law of Obsolescence?). Ask any astronomer how it feels to find that “Everything you know is wrong”; some are exhilarated, some depressed. Pending future exhilaration and depression—much of both are to be expected from Inner Asian archaeology—we use what there is.

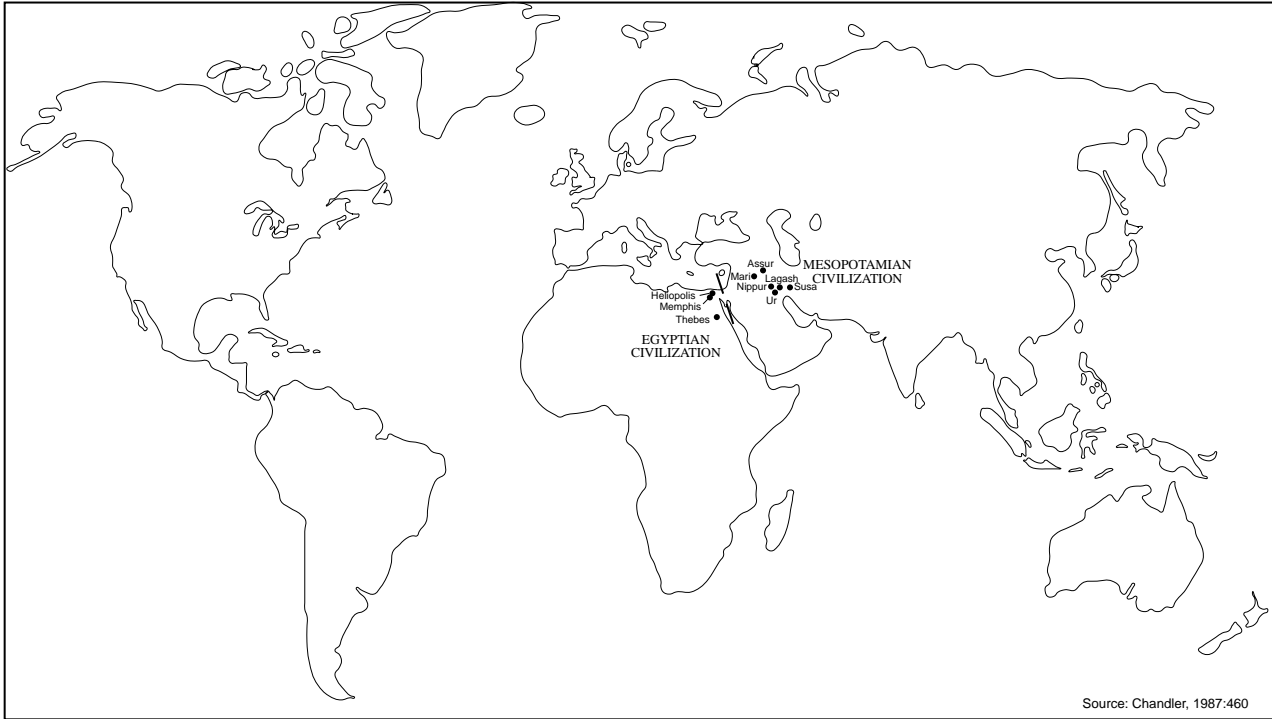
In this necessarily tentative manner, we would conclude, at this point and on the available data, that (1) Frank’s thesis of a single Old World world-system is less well supported than the thesis of a long coexistence of a plurality of world-systems, including a separate Far Eastern system; (2) Frank’s thesis of the general economic lead of “China” over “Europe” is supported, if one accepts these as genuine systemic entities; but even if one does not, as I do not, (3) there yet remains evidence of an interesting medieval outrunning of the Central by the Far Eastern world-system, which begs further investigation.



Cities and Their Civilizations in 2250 B.C.

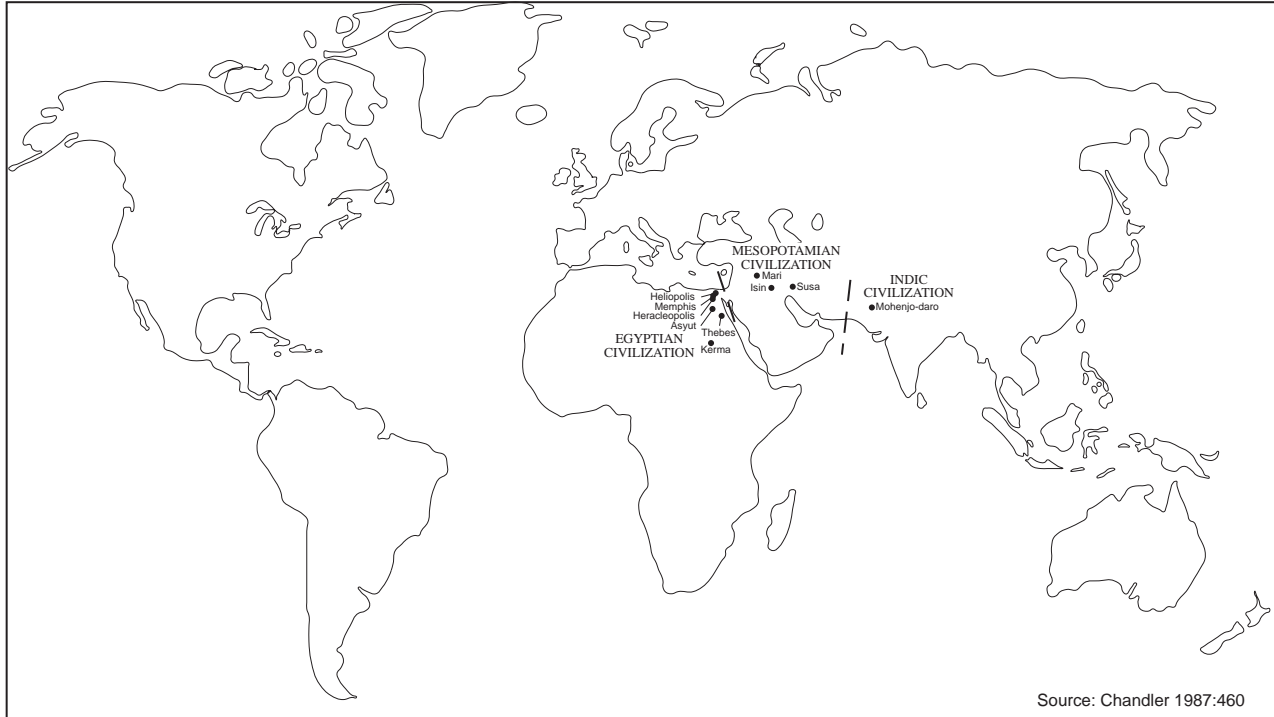
• = Largest cities, threshold c. 30 thousand, 8 total in table, 7 on map (no location posted for Agade), derived from Chandler's list (1987) via Wilkinson (1992-1993). Map shows only those civilizations which had cities on this list.

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Cities and Their Civilizations in 2000 B.C.

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Cities and Their Civilizations in 1800 B.C.

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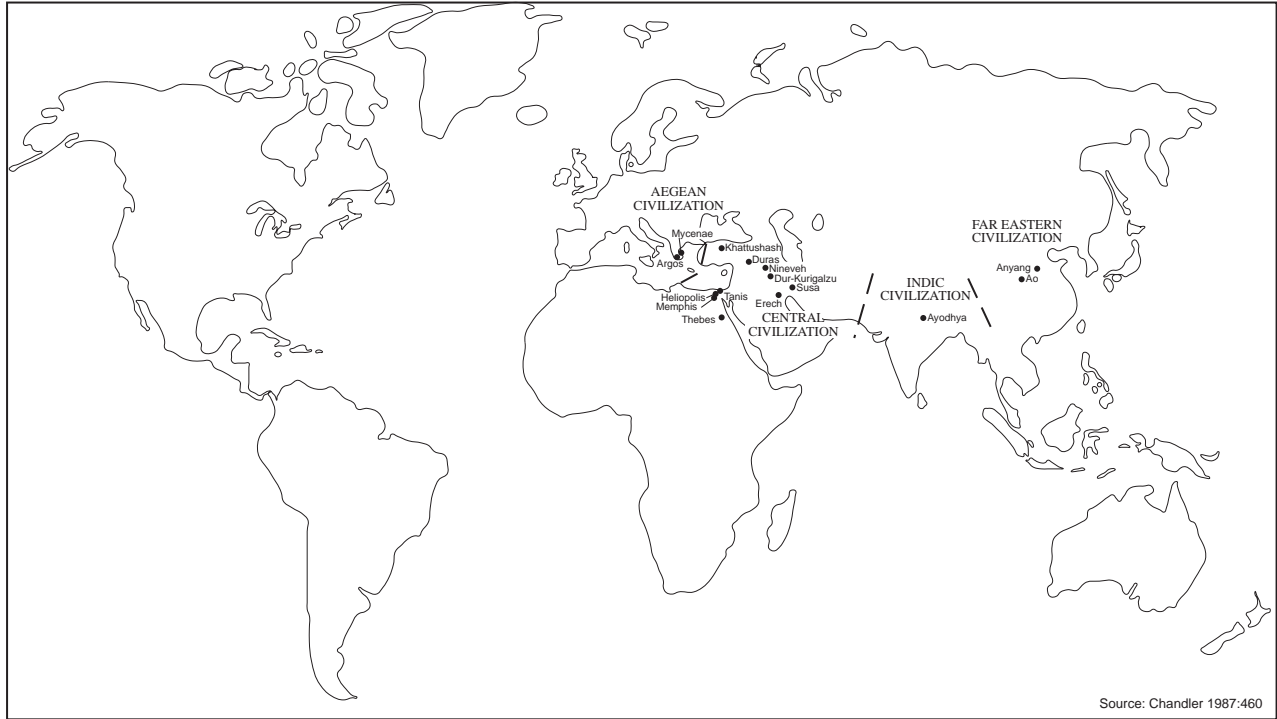
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Cities and Their Civilizations in 1600 B.C.

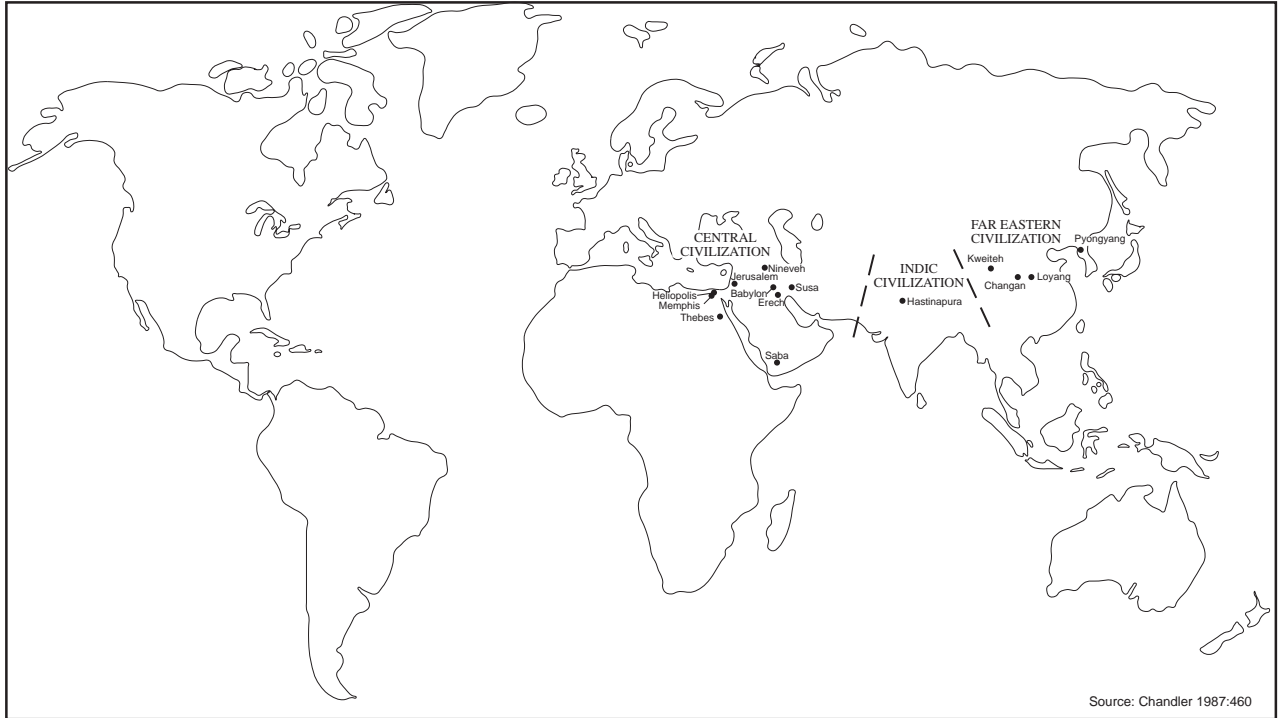
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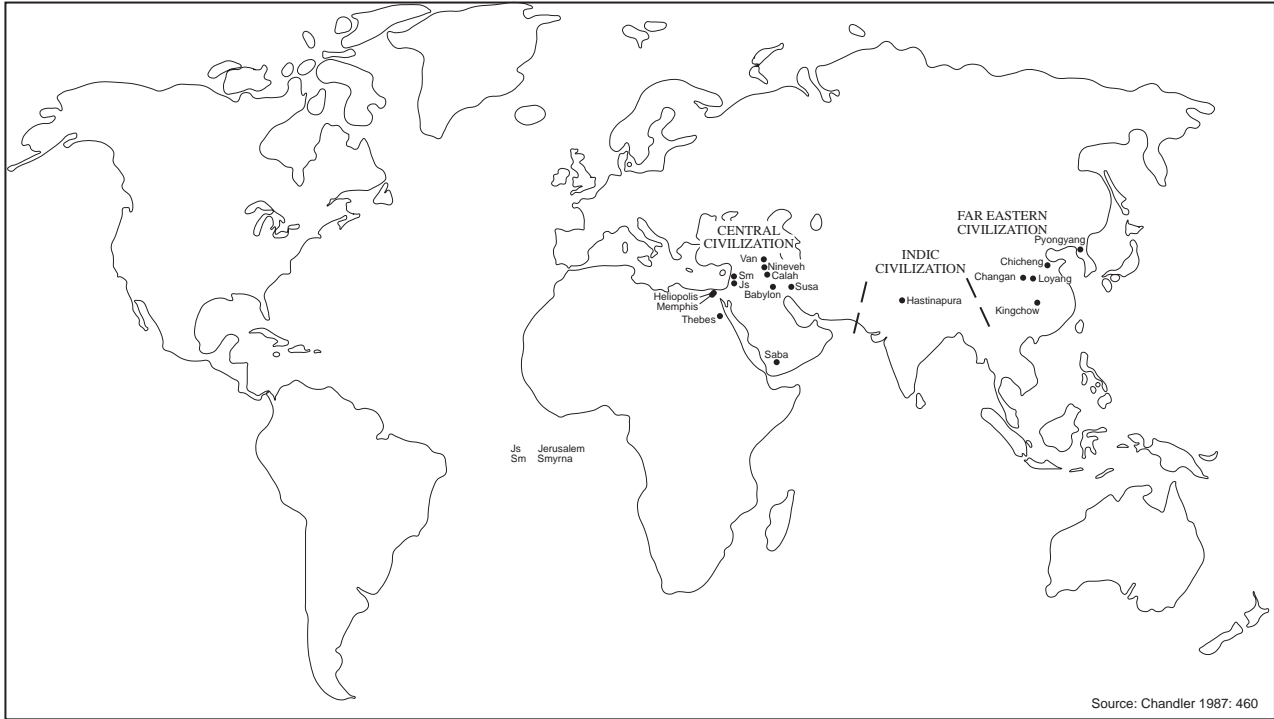
Cities and Their Civilizations in 1200 B.C.

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Cities and Their Civilizations in 1000 B.C.

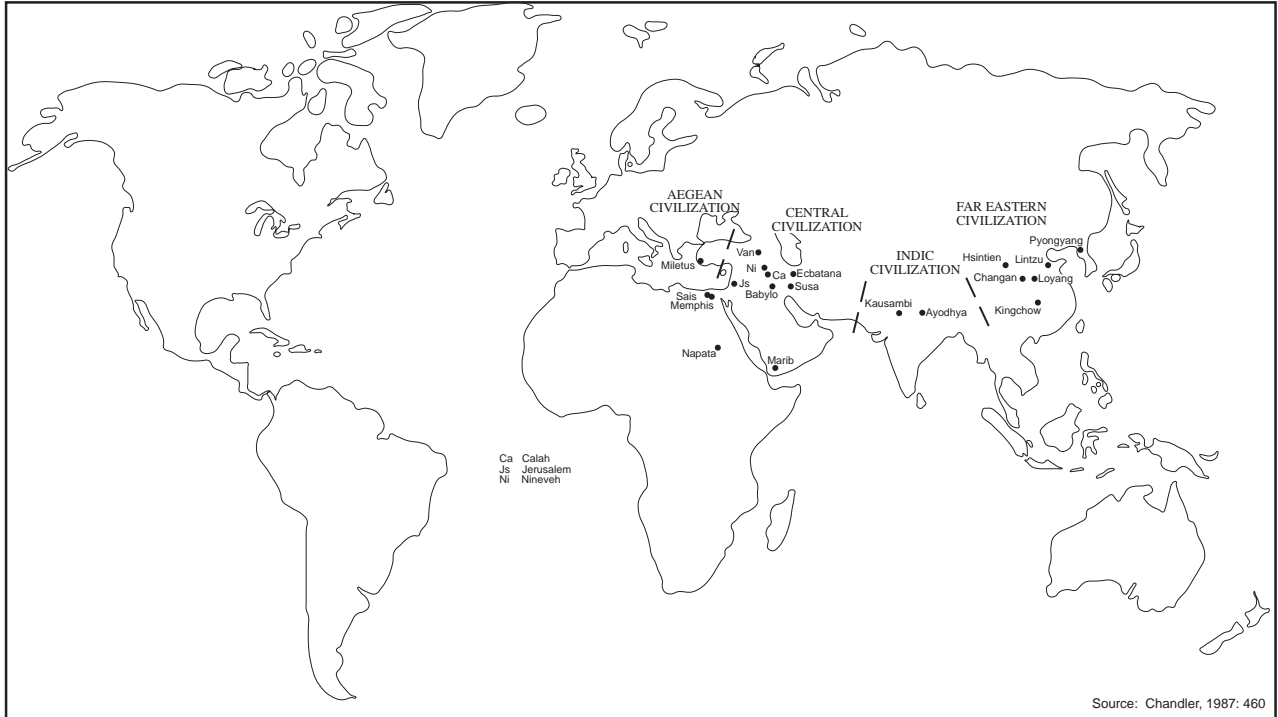
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Cities and Their Civilizations in 800 B.C.

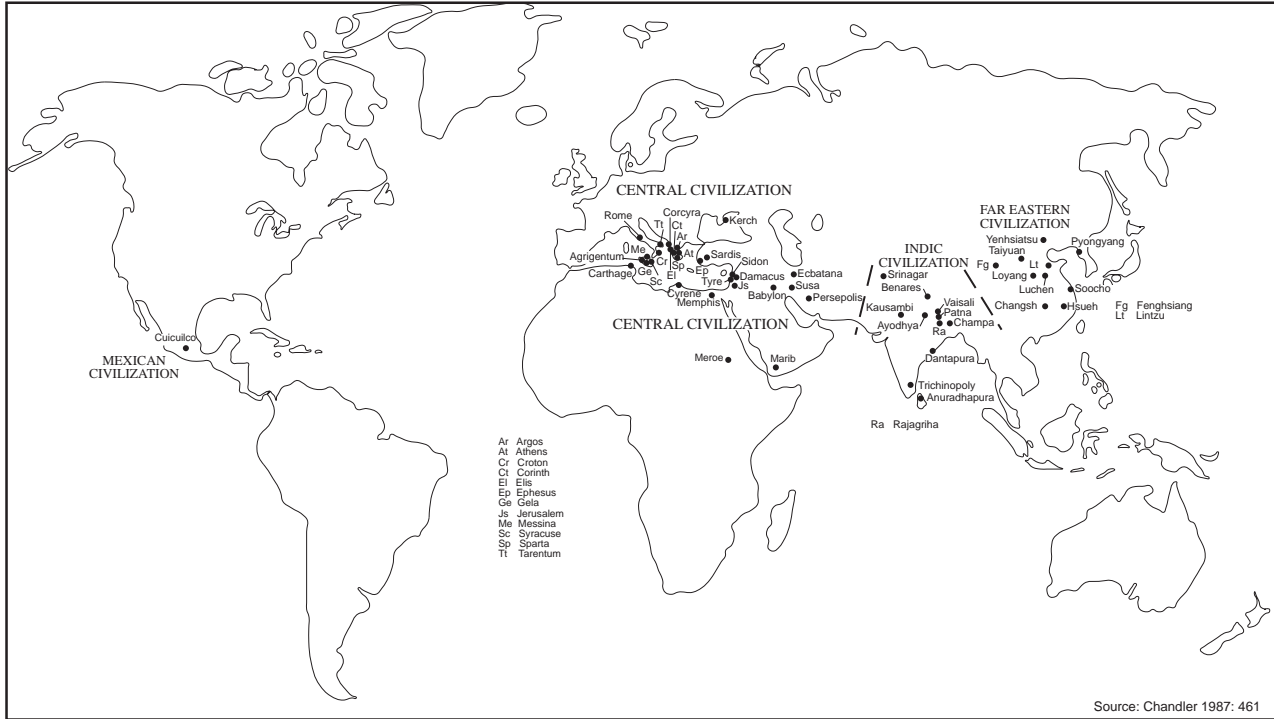
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Cities and Their Civilizations in 650 B.C.

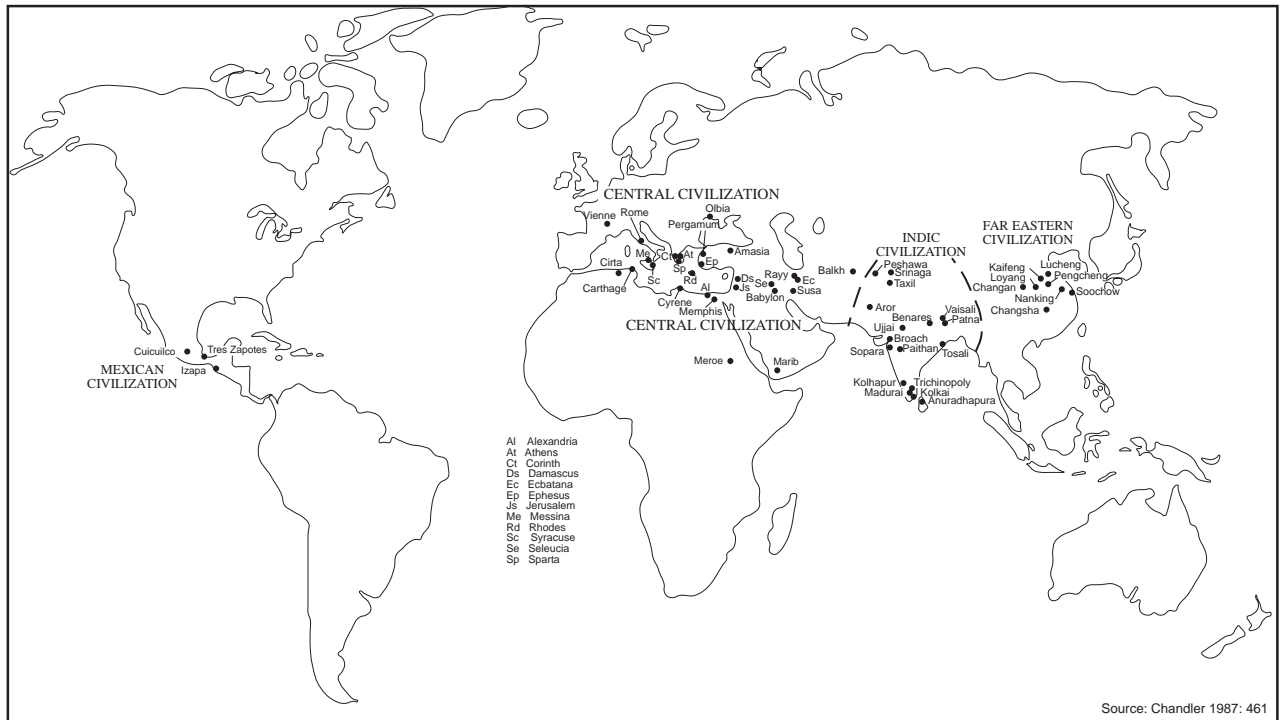
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Source: Chandler 1987: 461

Cities and Their Civilizations in 430 B.C.

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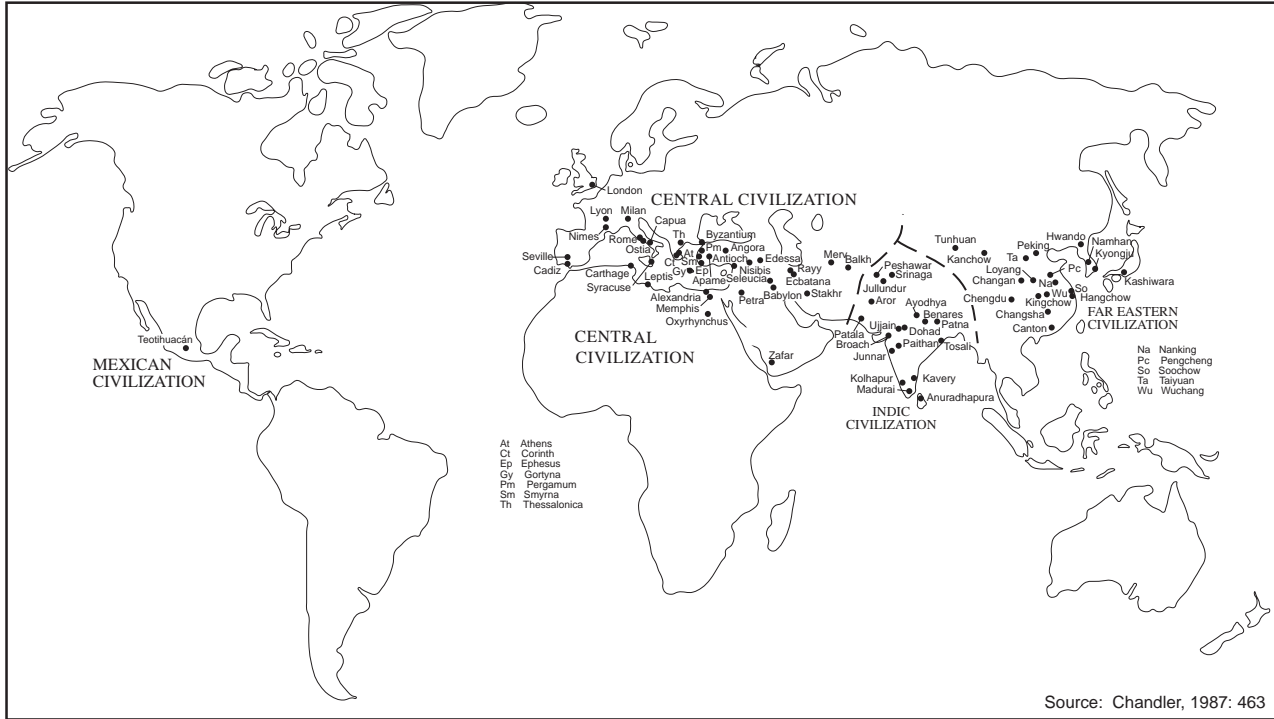


Cities and Their Civilizations in 200 B.C.



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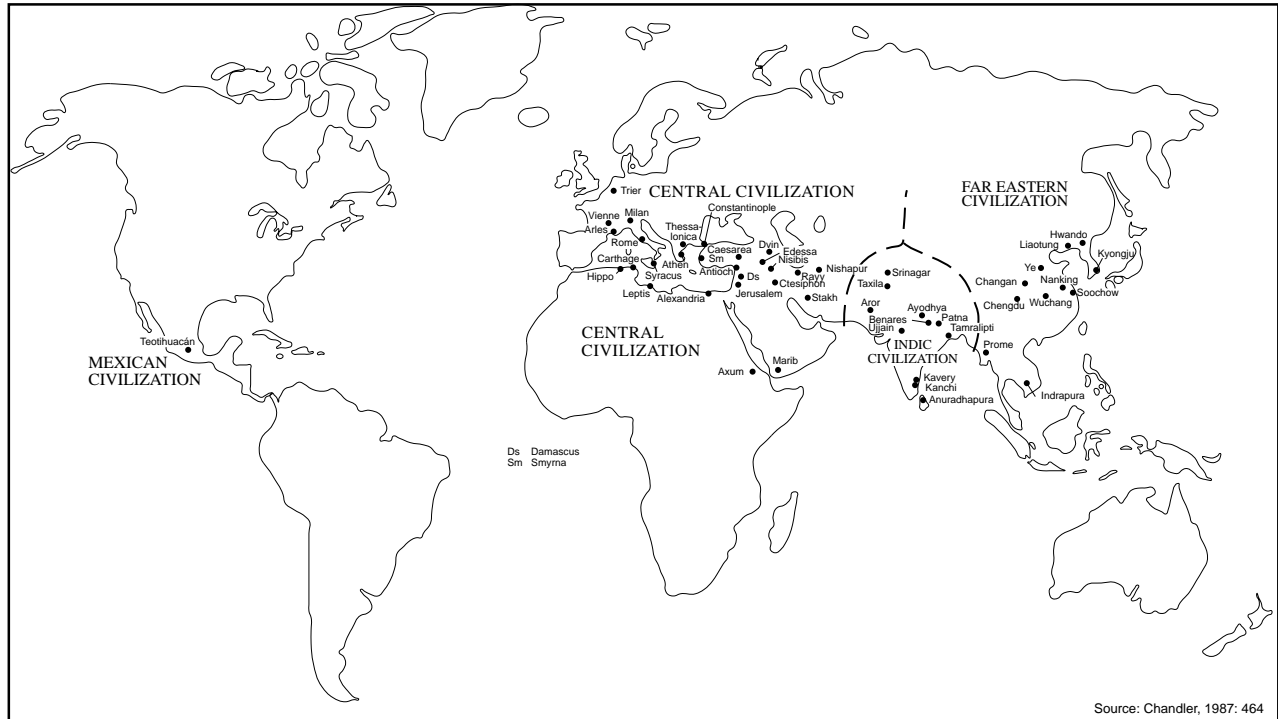
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Cities and Their Civilizations in A.D. 100

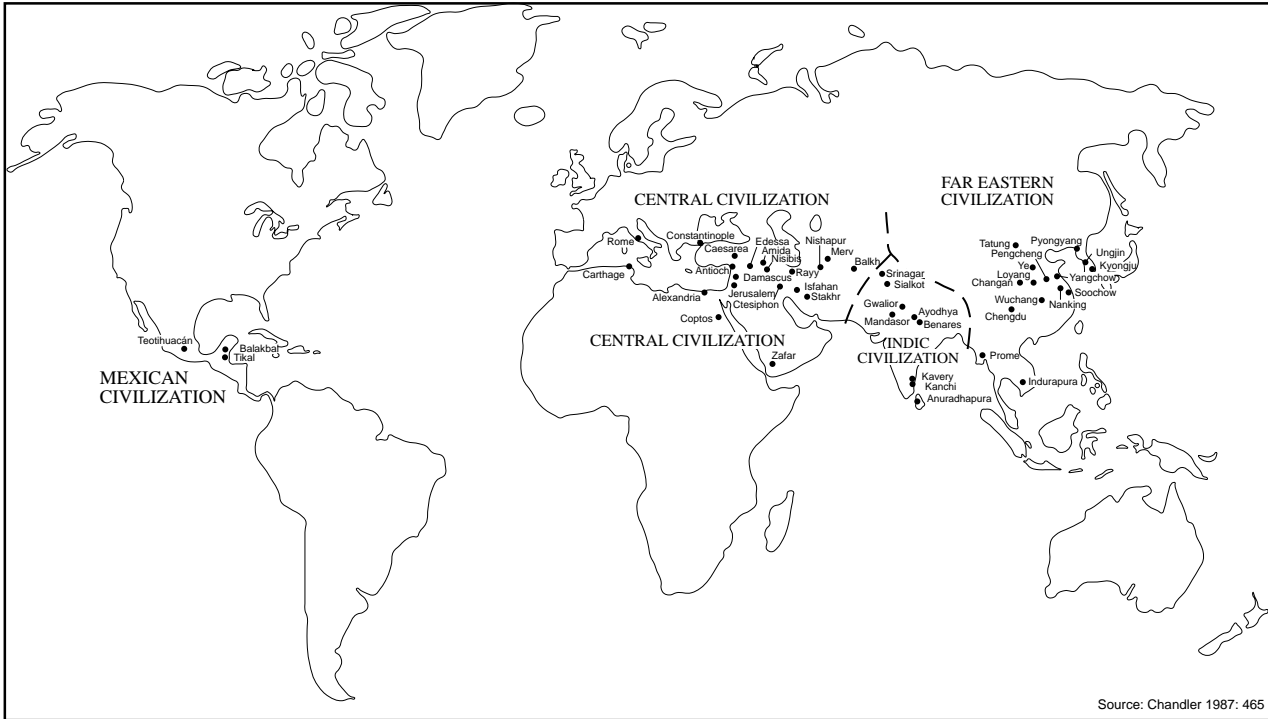
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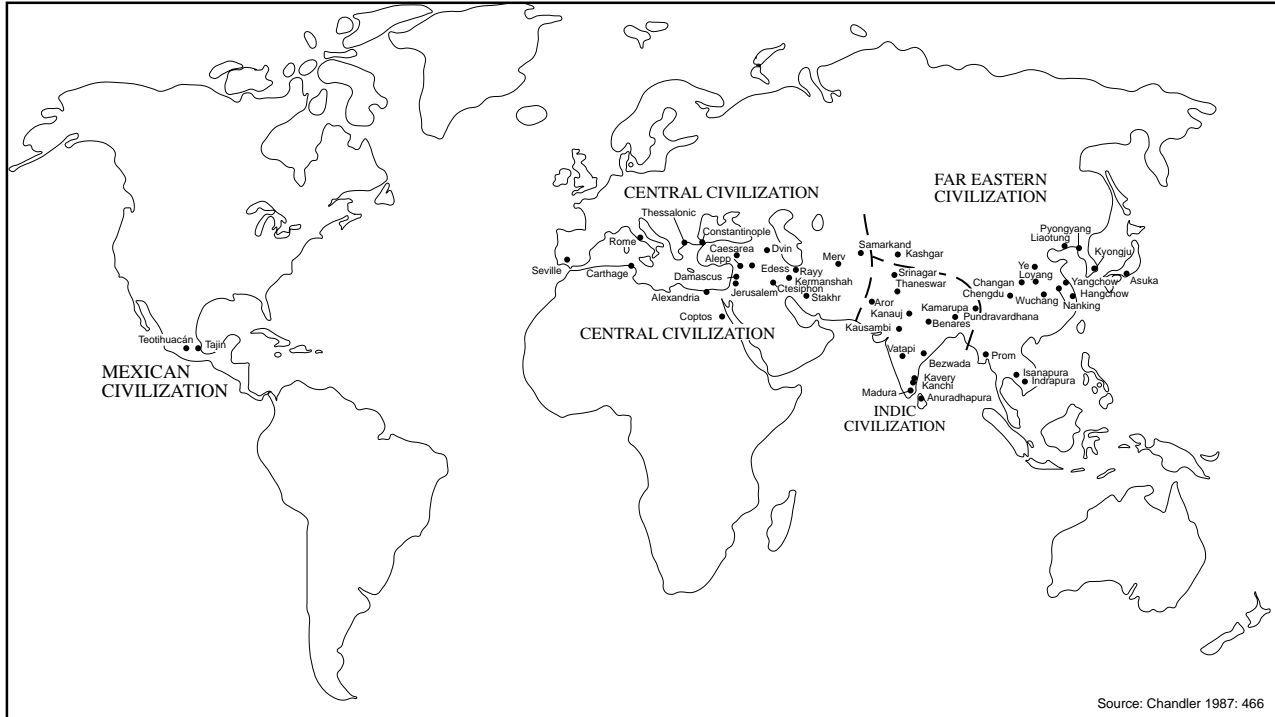
Cities and Their Civilizations in A.D. 361

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Cities and Their Civilizations in A.D. 500

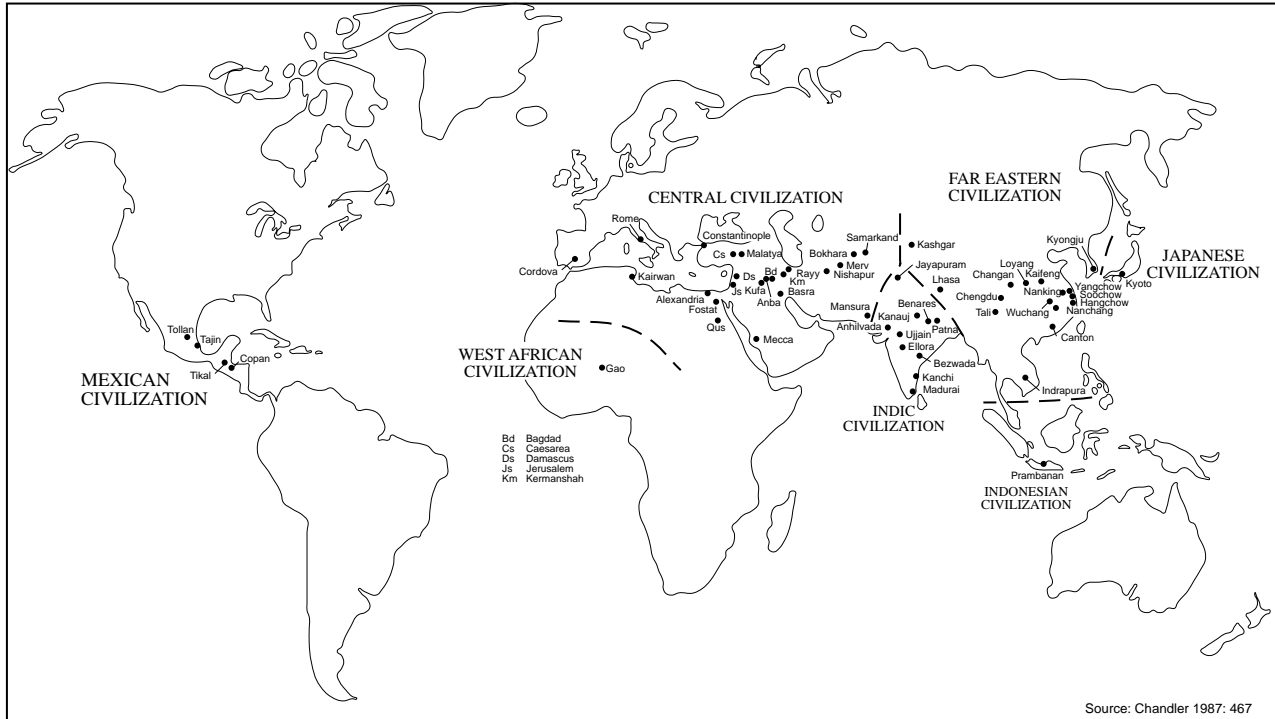
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Cities and Their Civilizations in A.D. 622

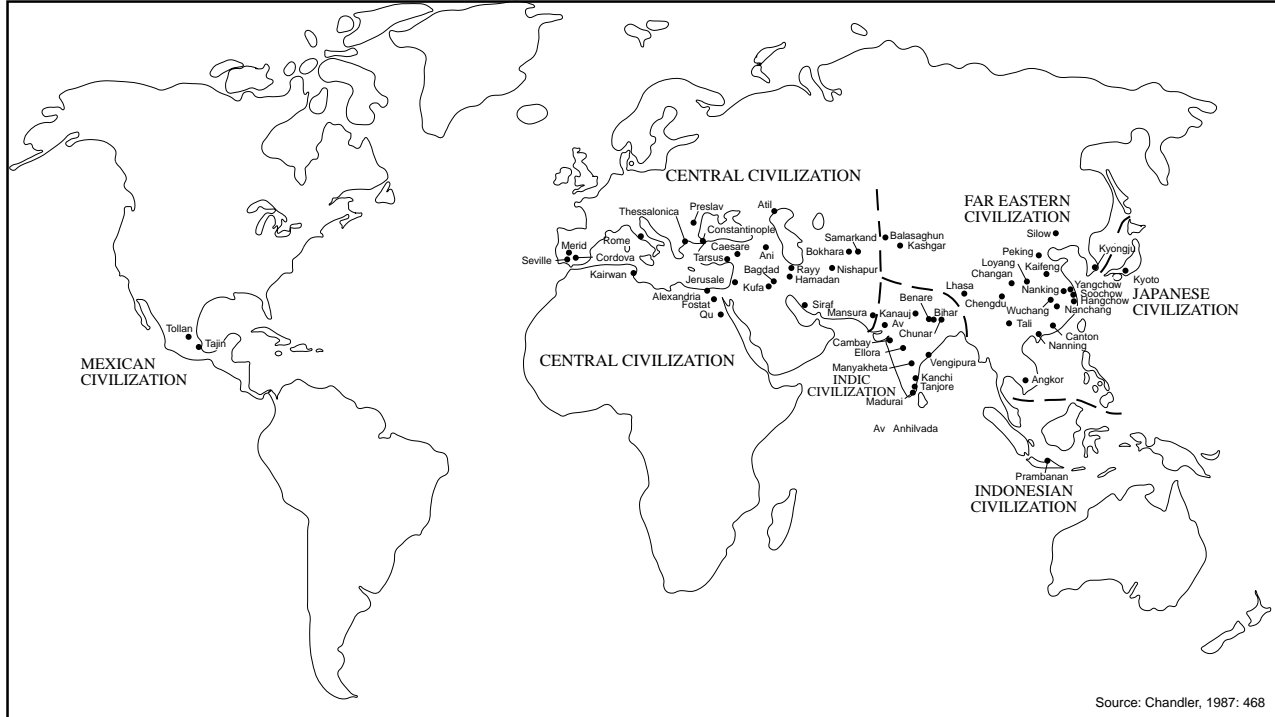
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Cities and Their Civilizations in A.D. 800

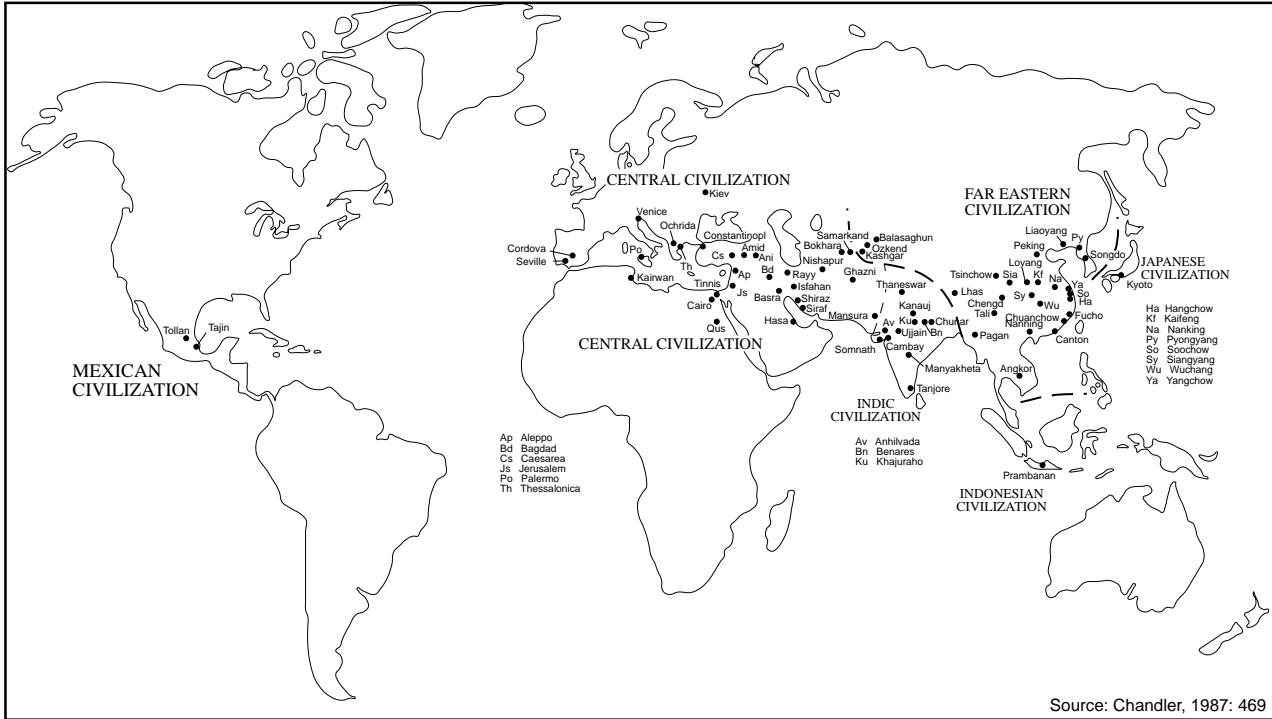
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Cities and Their Civilizations in A.D. 900

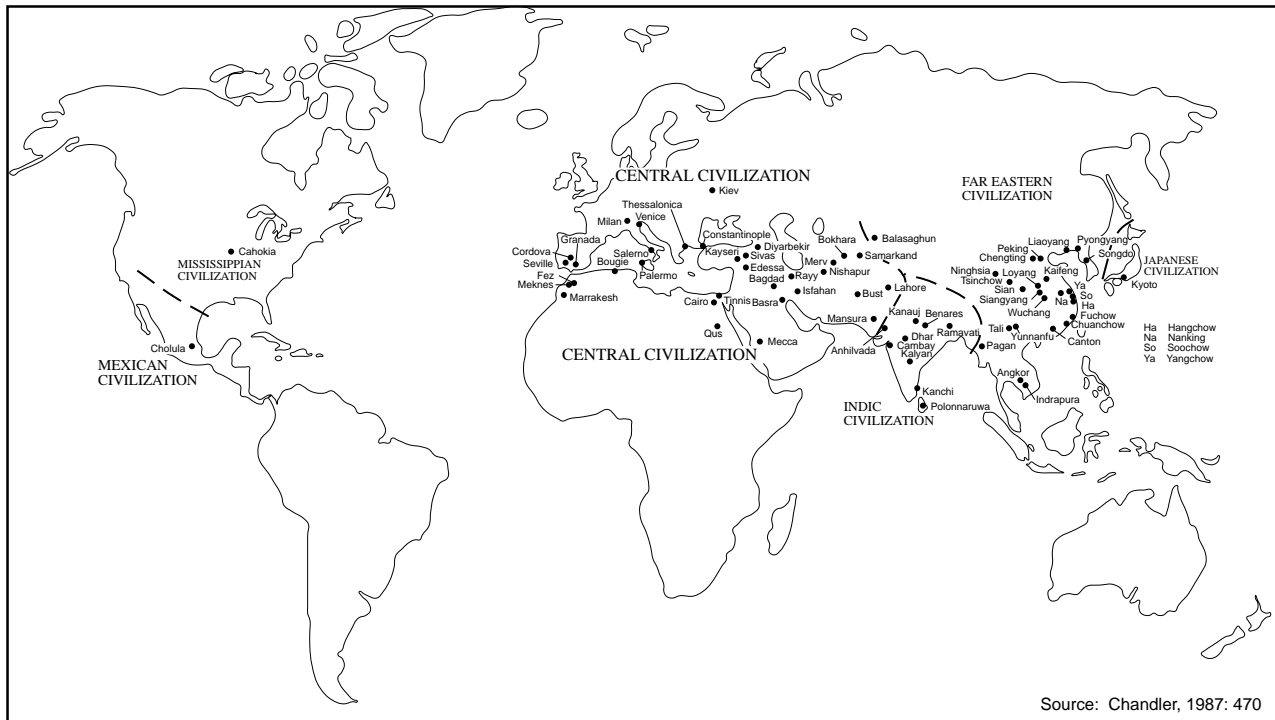
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Cities and Their Civilizations in A.D. 1000

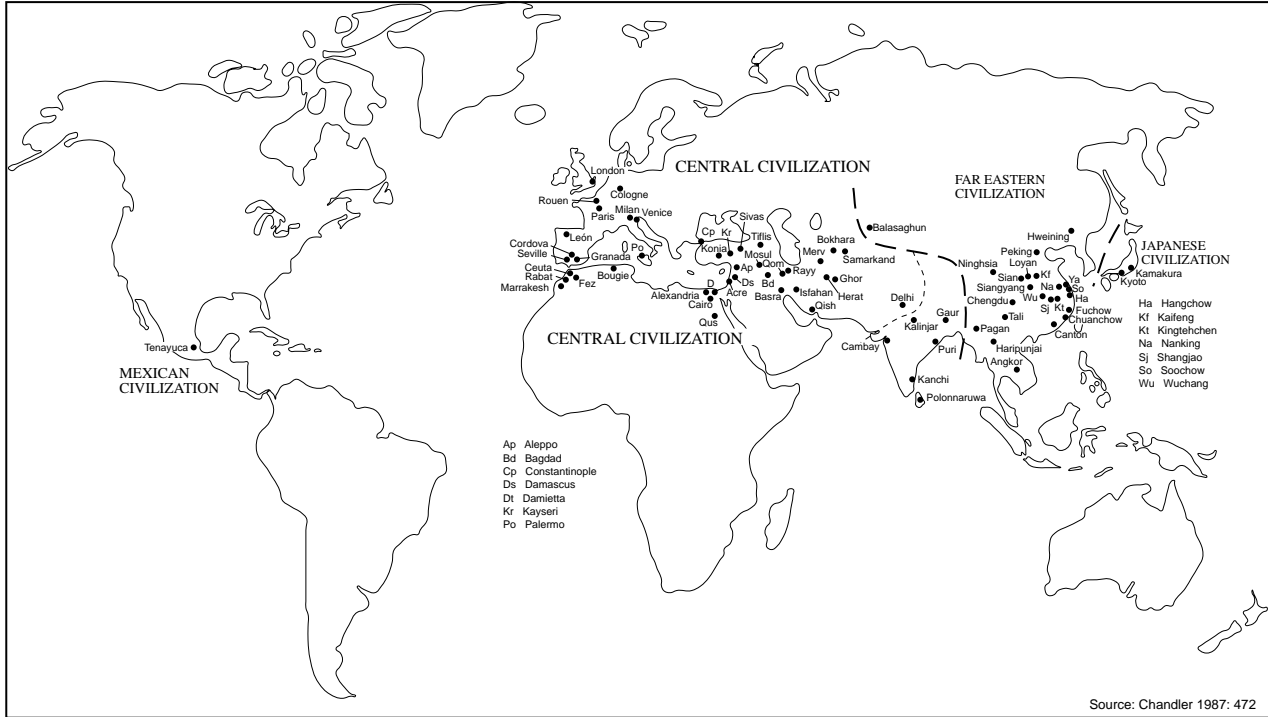
● = Largest cities, threshold 40 thousand, 70 total, derived from Chandler's list (1987) via Wilkinson (1992-1993). Map shows only those civilizations which had cities on this list.
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Cities and Their Civilizations in A.D. 1100

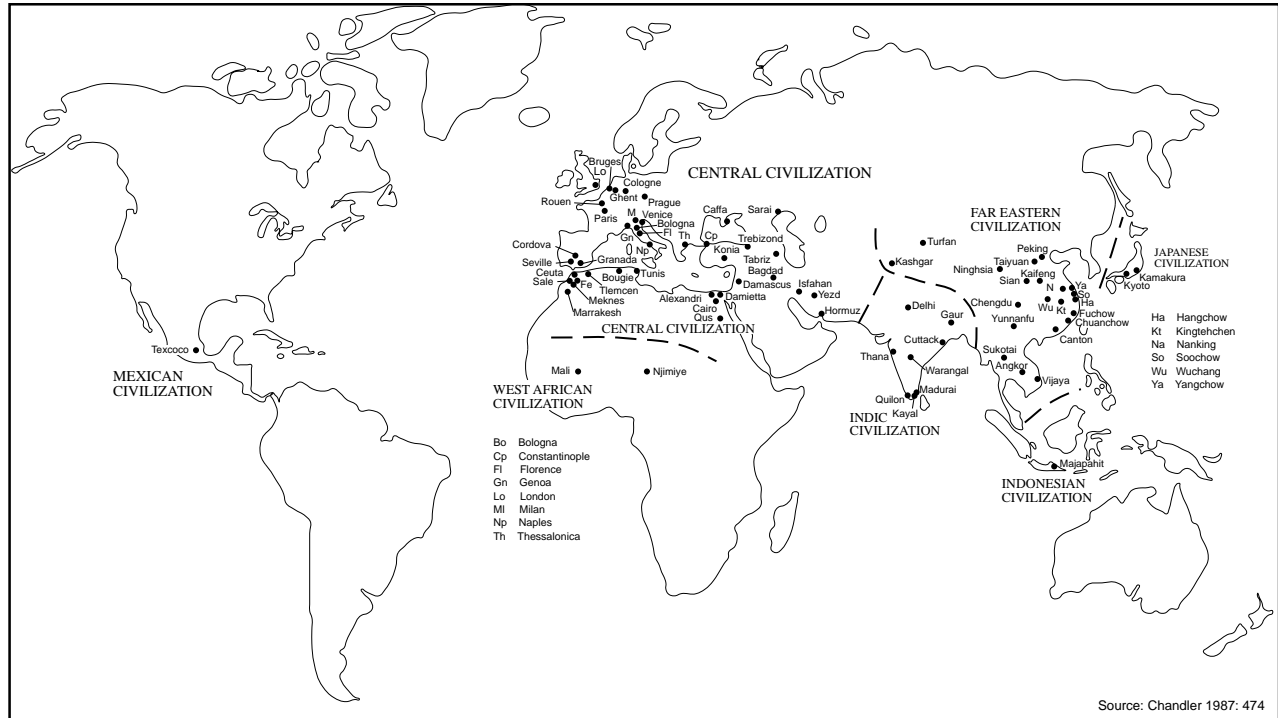
● = Largest cities, threshold 40 thousand, 70 total, derived from Chandler's list (1987) via Wilkinson (1992-1993). Map shows only those civilizations which had cities on this list.

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Cities and Their Civilizations in A.D. 1200

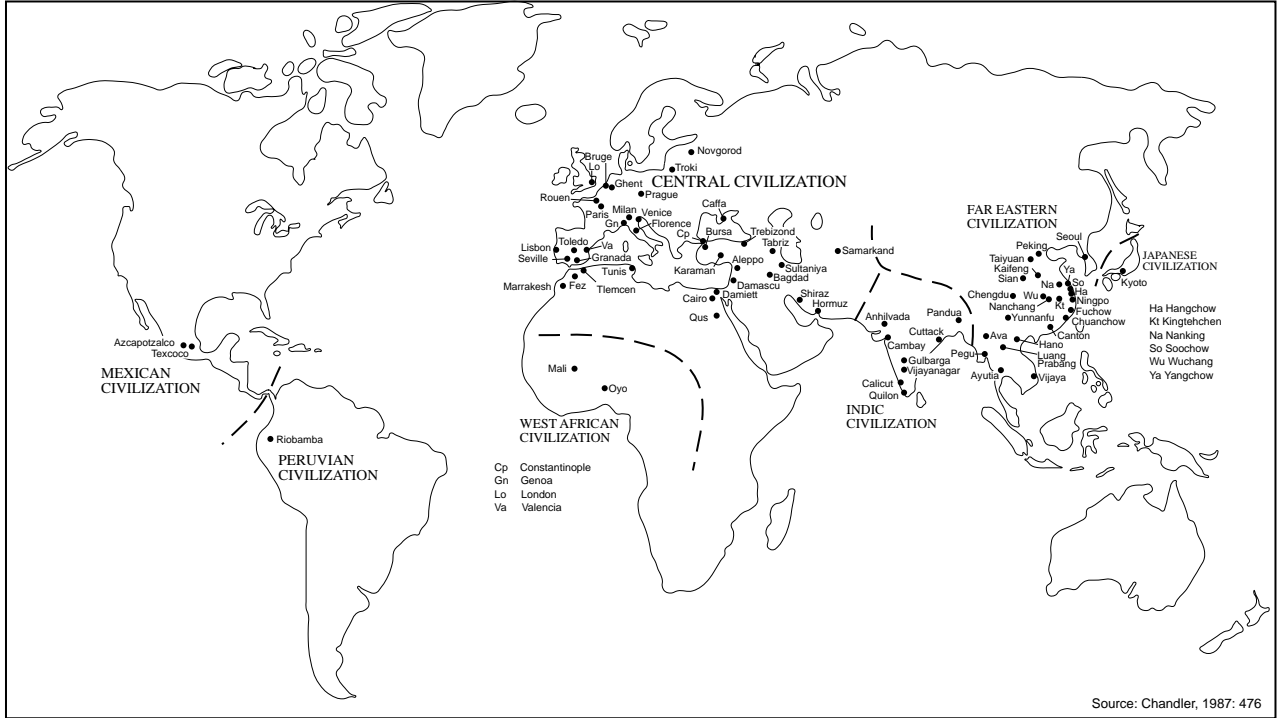
● = Largest cities, threshold 40 thousand, 73 total, derived from Chandler's list (1987) via Wilkinson (1992-1993). Map shows only those civilizations which had cities on this list.
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Cities and Their Civilizations in A.D. 1300

● = Largest 75 cities, 40 thousand +, derived from Chandler's list (1987) via Wilkinson (1992-1993). Map shows only those civilizations which had cities on this list.

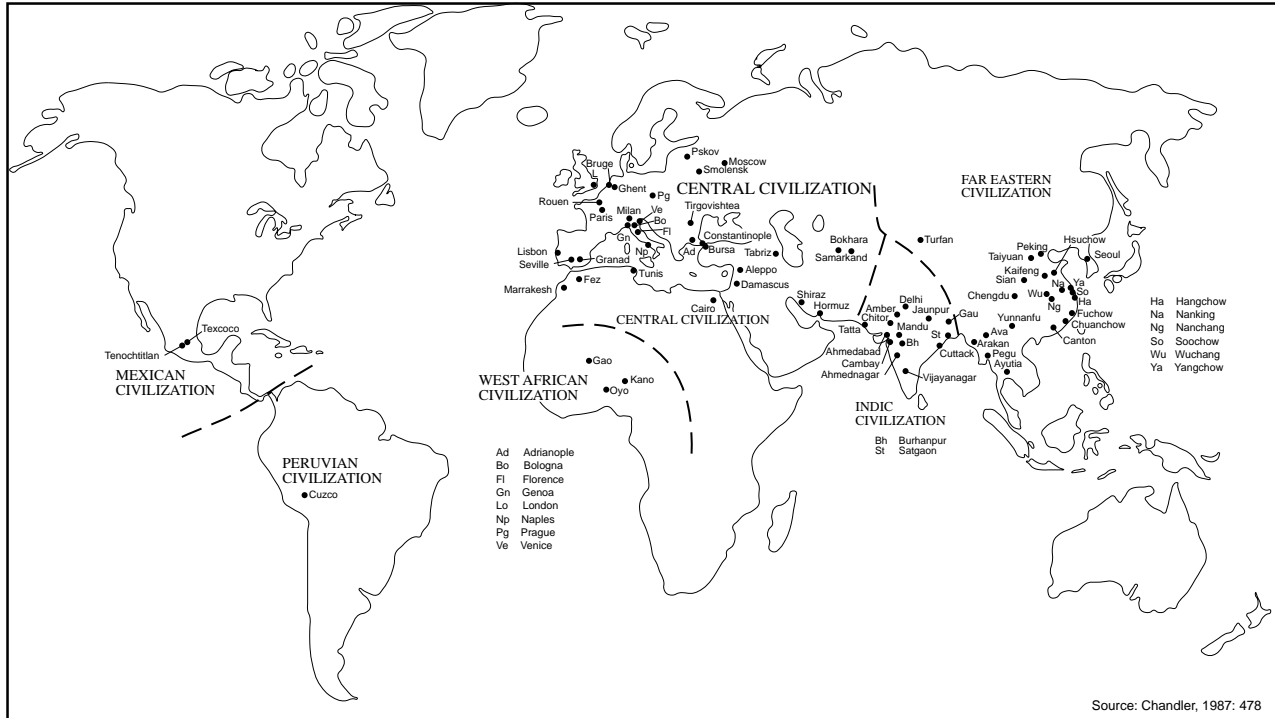
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Cities and Their Civilizations in A.D. 1400

• = Largest 75 cities, 45 thousand +, derived from Chandler's list (1987) via Wilkinson (1992-1993). Map shows only those civilizations which had cities on this list.

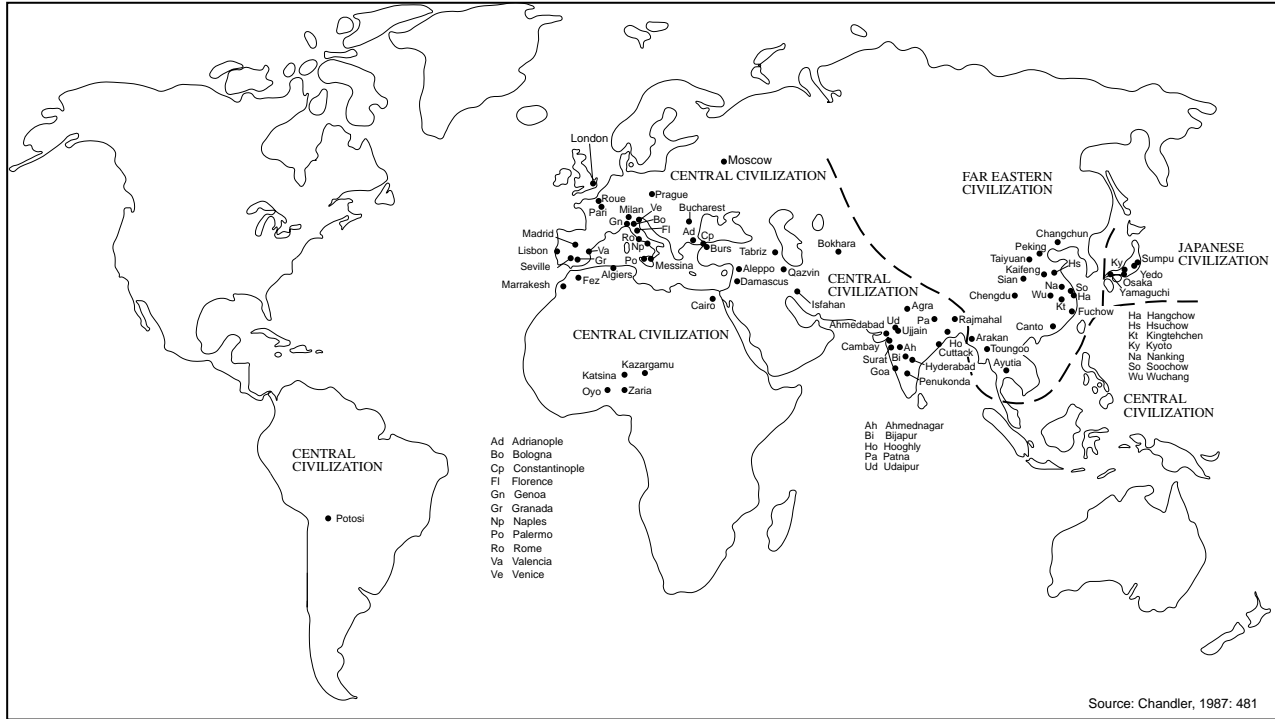
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Cities and Their Civilizations in A.D. 1500

● = Largest 75 cities, 50 thousand +, derived from Chandler's list (1987) via Wilkinson (1992-1993). Map shows only those civilizations which had cities on this list.

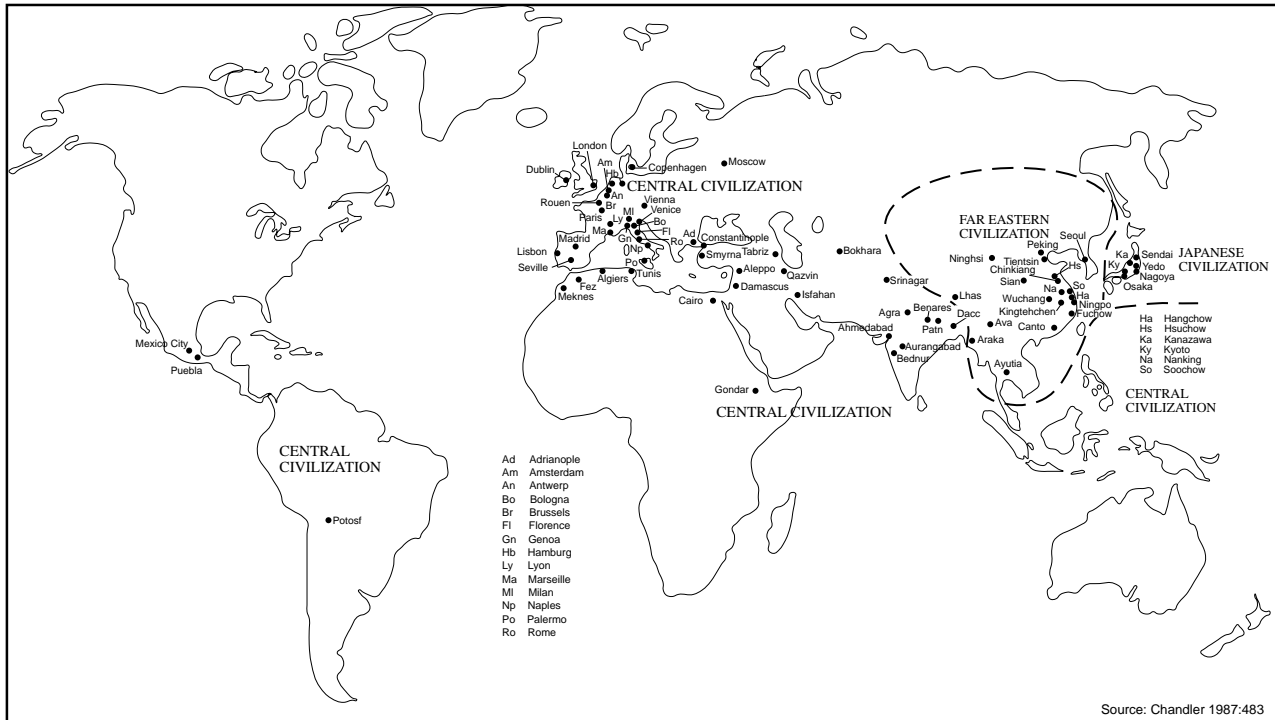
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Cities and Their Civilizations in A.D. 1600

● = Largest 75 cities, 60 thousand +, derived from Chandler's list (1987) via Wilkinson (1992-1993). Maps shows only these civilizations which had cities on this list.

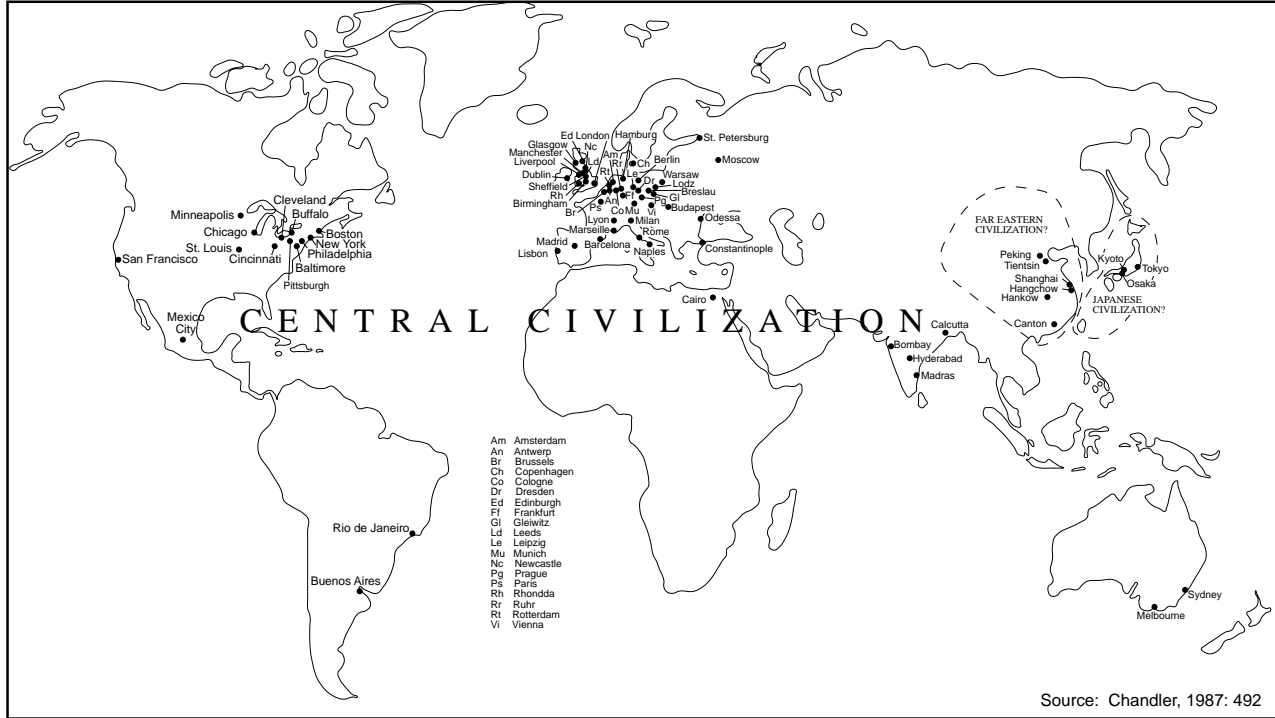
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Cities and Their Civilizations in A.D. 1700

● = Largest 75 cities, 60 thousand +, derived from Chandler's list (1987) via Wilkinson (1992-1993). Map shows only those civilizations which had cities on this list.

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Cities and Their Civilizations in A.D. 1900

● = Largest cities, threshold 350 thousand, 75 total, derived from Chandler's list (1987) via Wilkinson (1992-1993). Map shows only those civilizations which had cities on this list.
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