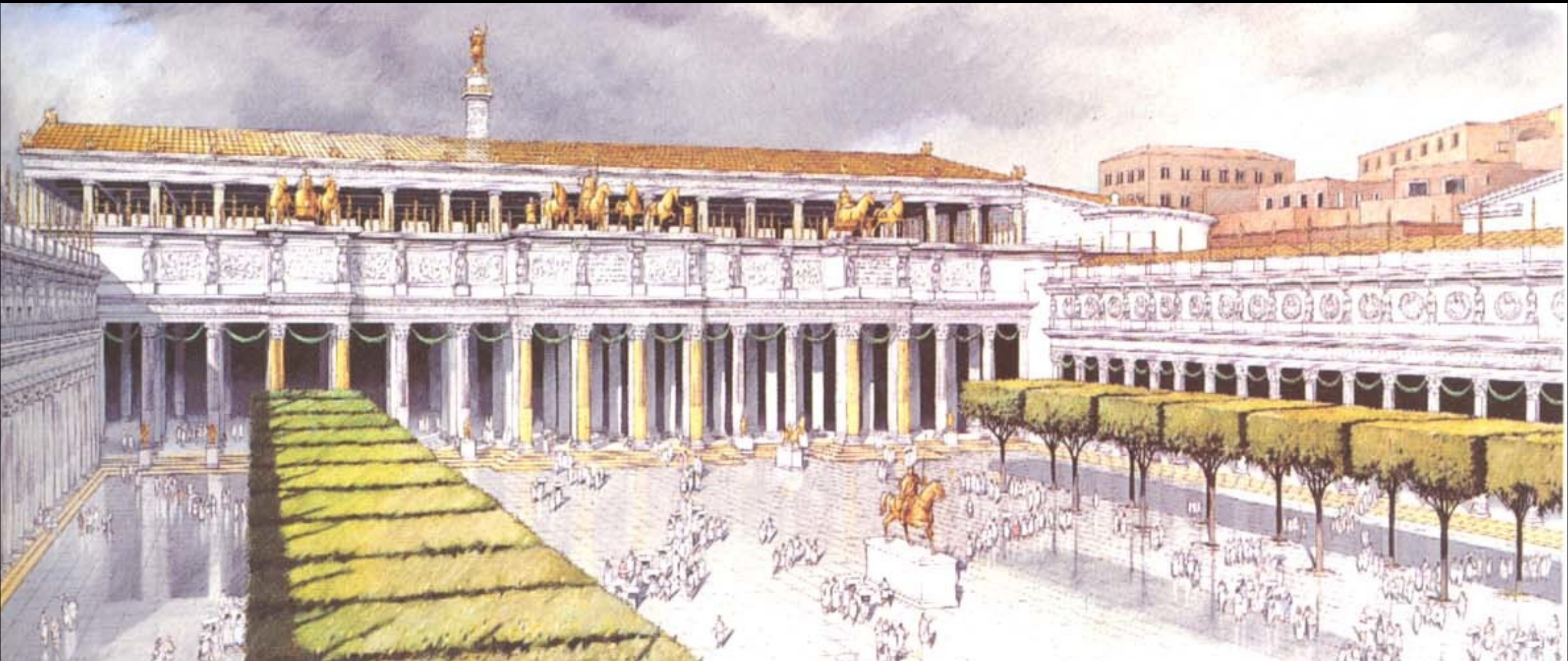


FORUM OF TRAJAN ca. AD 120



“But when he came to the Forum of Trajan, a creation which in my view has no like under the cope of heaven and which even the gods themselves must agree to admire, he stood transfixed with astonishment, surveying the giant fabric around him; its grandeur defies description and can never again be approached by mortal men.”

Ammianus Marcellinus (XVI.10.15), ca. AD 330-392

FORUM OF TRAJAN

ca. AD 900

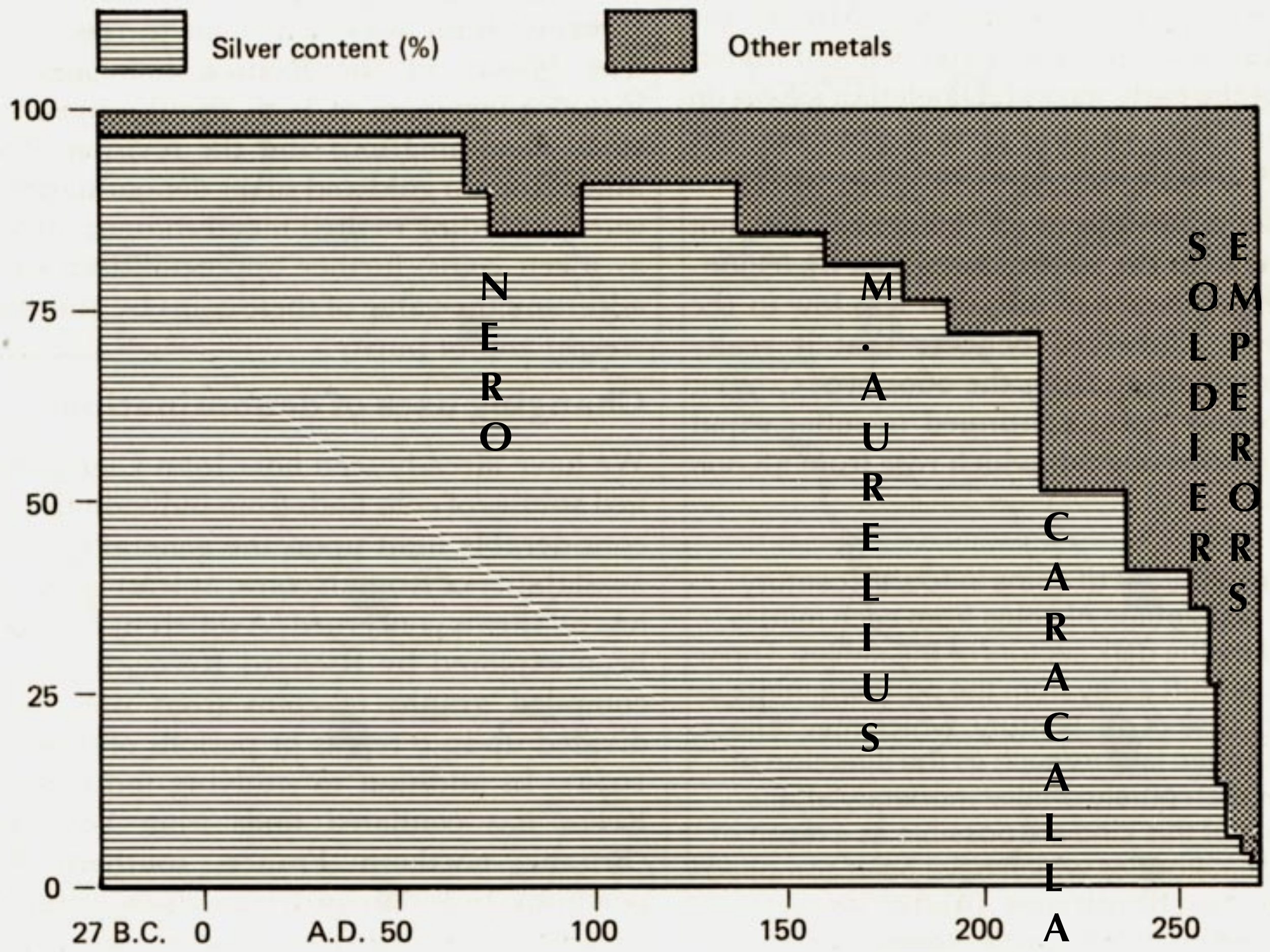


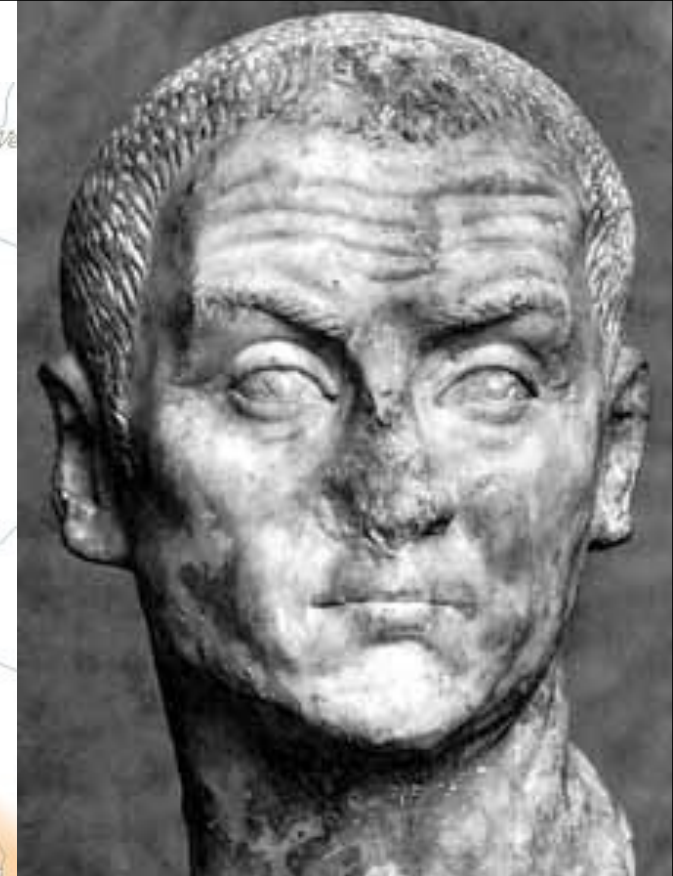
The background is a classical painting depicting the fall of Rome. It shows a large, muscular man in a white toga, likely a Roman figure, being overwhelmed by a group of barbarians. The scene is set in a grand, ancient building with arches and columns. In the foreground, there is a large, ornate fountain or basin. The overall tone is dramatic and historical.

FACTORS IN THE 'FALL' OF ROME:

1. Economic Crises
2. (Elite) Political Fragmentation
3. Geographical Shifts in Power
4. 'Foreign' Invasions
5. Stressors: Climate, Disease, Poison, and more War...
6. Cultural/Ideological Transformation

1. ECONOMIC CRISES





DIOCLETIAN
AD 284-305

2. (ELITE) POLITICAL FRAGMENTATION

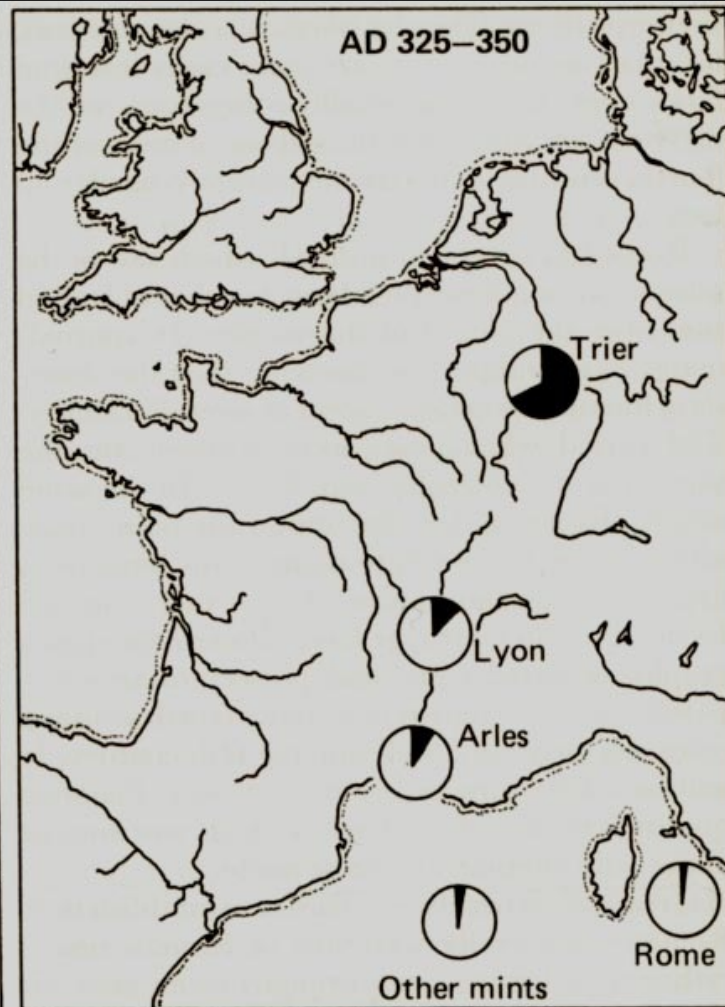
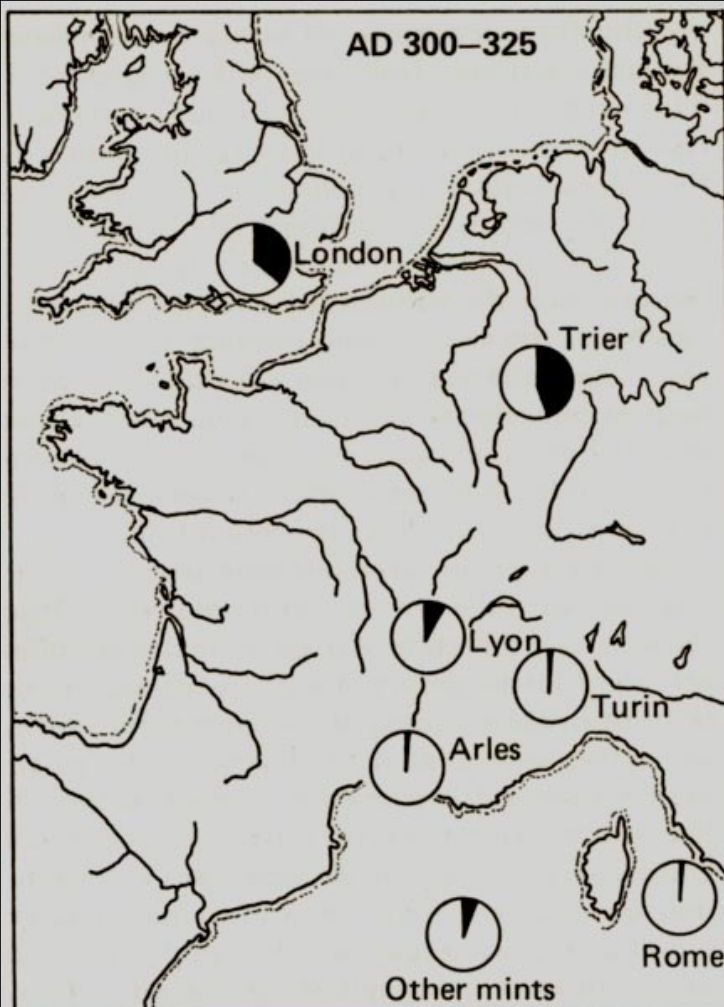


THE TETRARCHS - porphyry statue at the corner of S. Marco in Venice, after having been taken from Constantinople as loot after the 1204 'Crusade'



3. GEOGRAPHICAL SHIFTS IN POWER



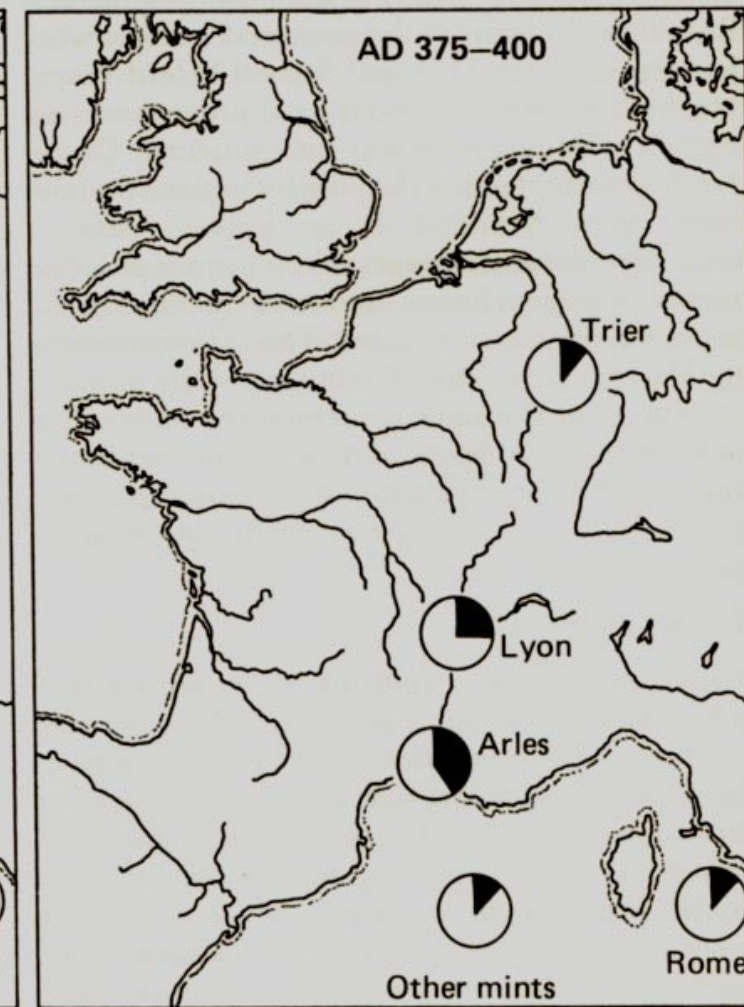
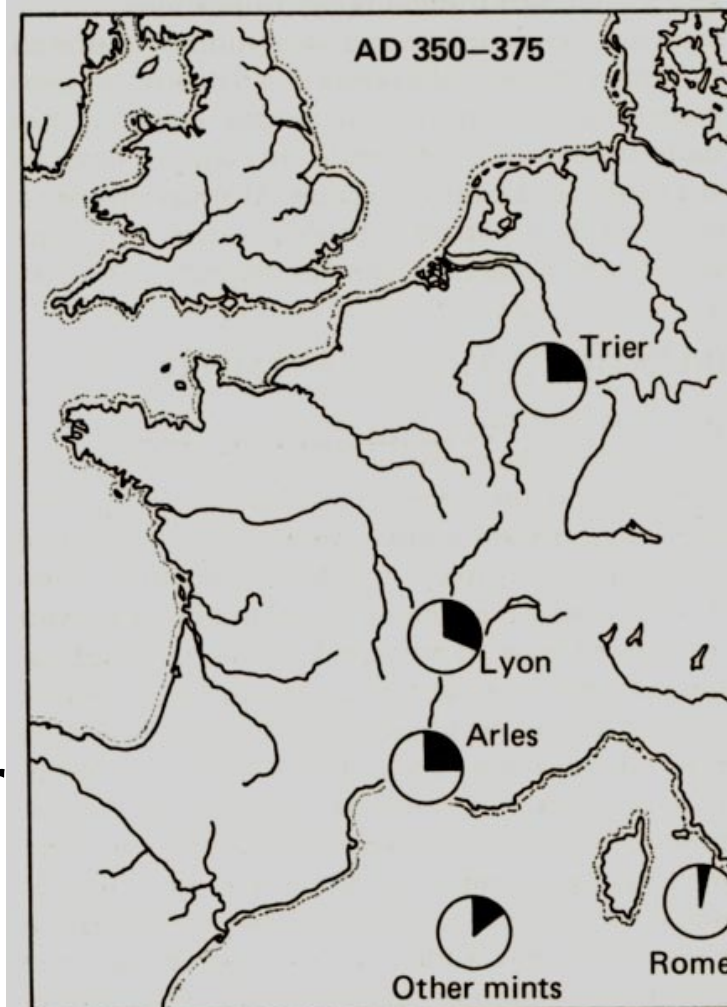


The location of **mints**.

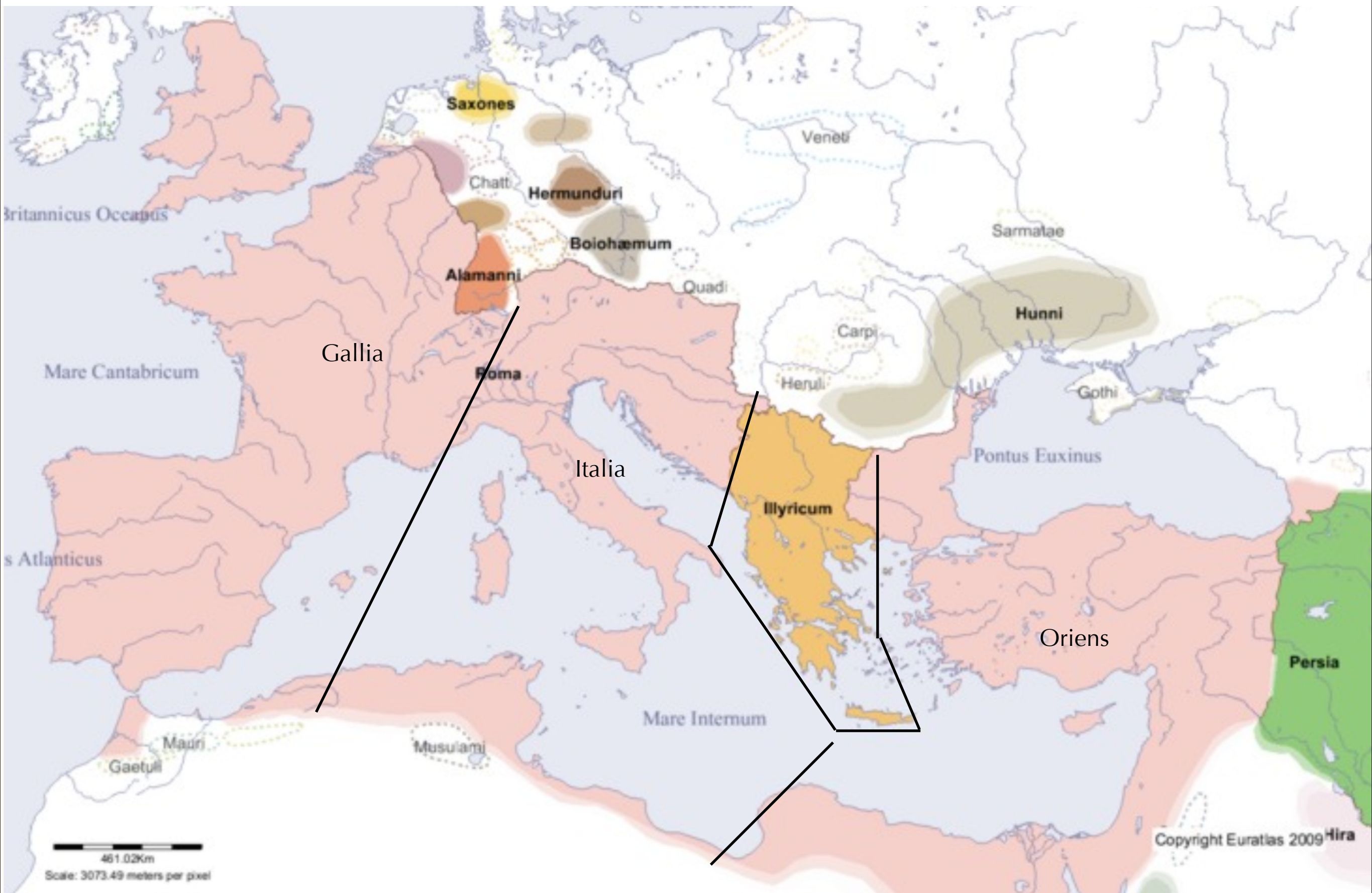
Shifting production centers of coinage.



Constantine II, minted at Trier
May 337 to March-April 340



AD 400



4. 'FOREIGN' INVASIONS

410: ALARIC and the VISIGOTHS SACKS ROME:

Due to insults and broken alliances. "If Rome can perish, what can be safe?" -Jerome

452: ATILA THE HUN: invades Italy to avenge broken promise to marry Honoria

455: THE VANDALS

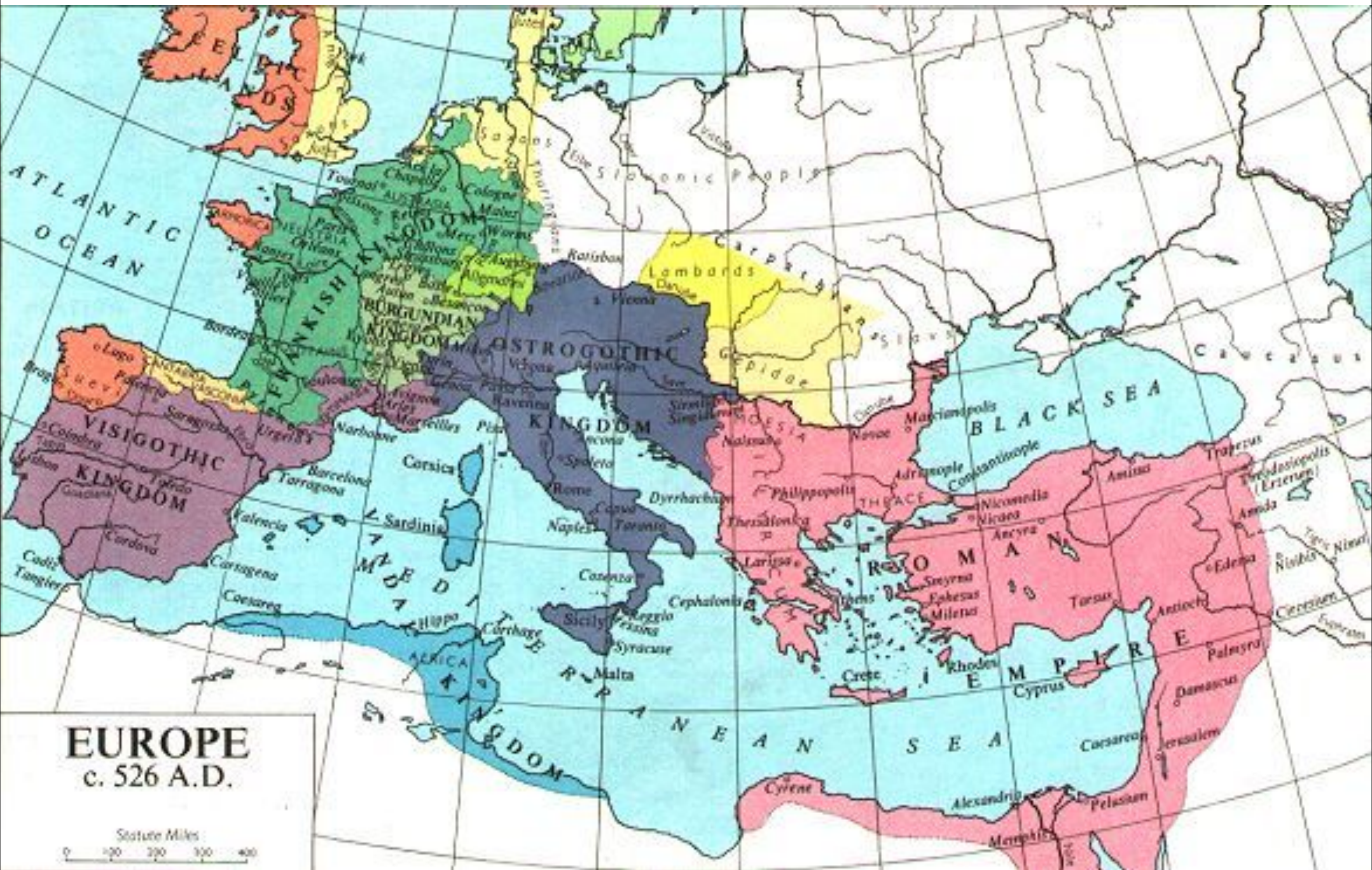
SACK ROME: Also due to a broken marriage contract btw. Huneric and Eudocia.

476: THE LAST

EMPEROR: Romulus Augustulus, an usurper given the throne by his father after the previous one fled in the face of a Gothic invasion. Flavius Odoacer (476-493) filled the vacuum, but attempts to the Eastern emperor Zeno to unify authority failed.



Theodoric consolidated the Ostrogothic Kingdom in Italy, capital at Ravenna



5. STRESSORS

LEAD POISONING?

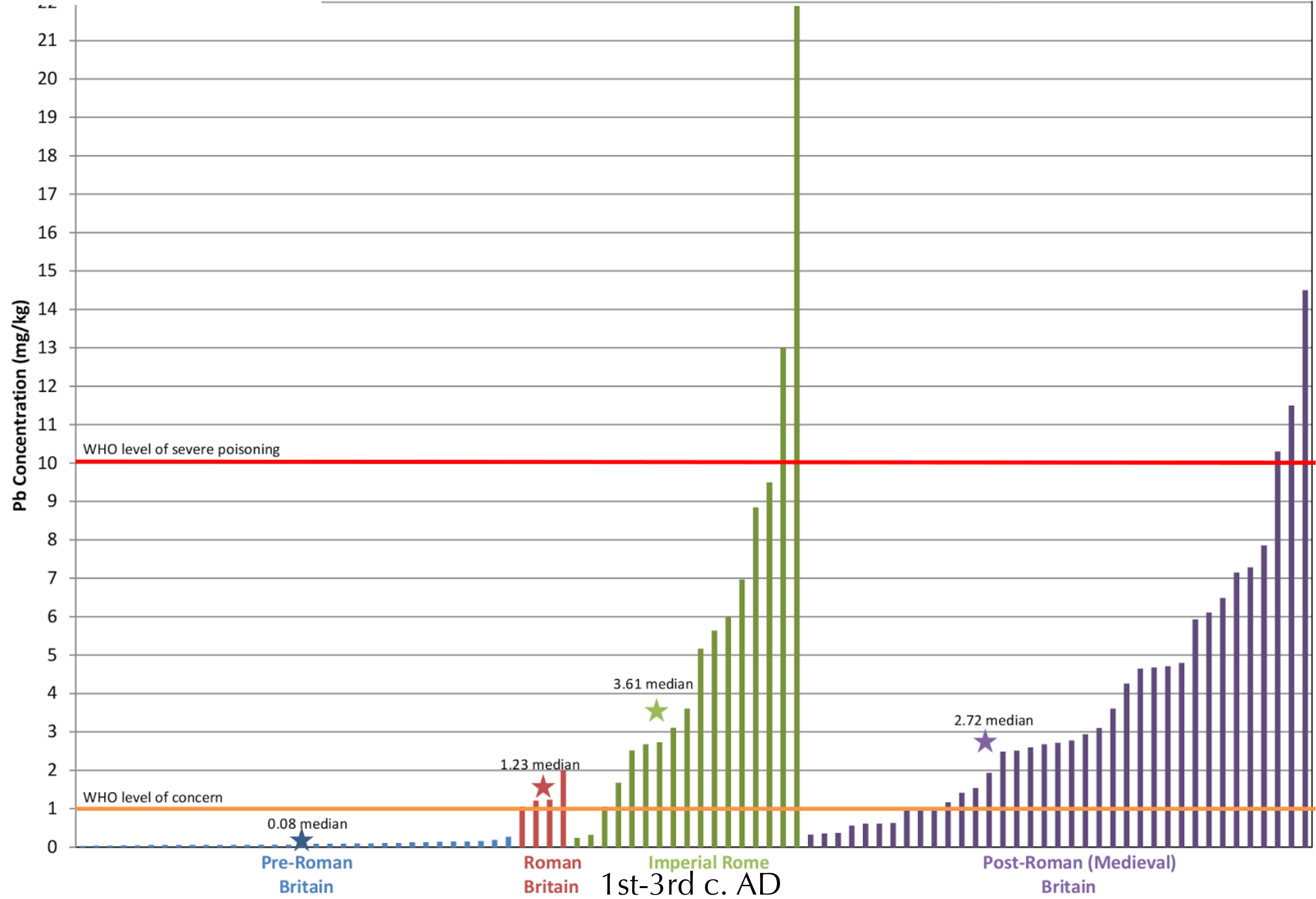
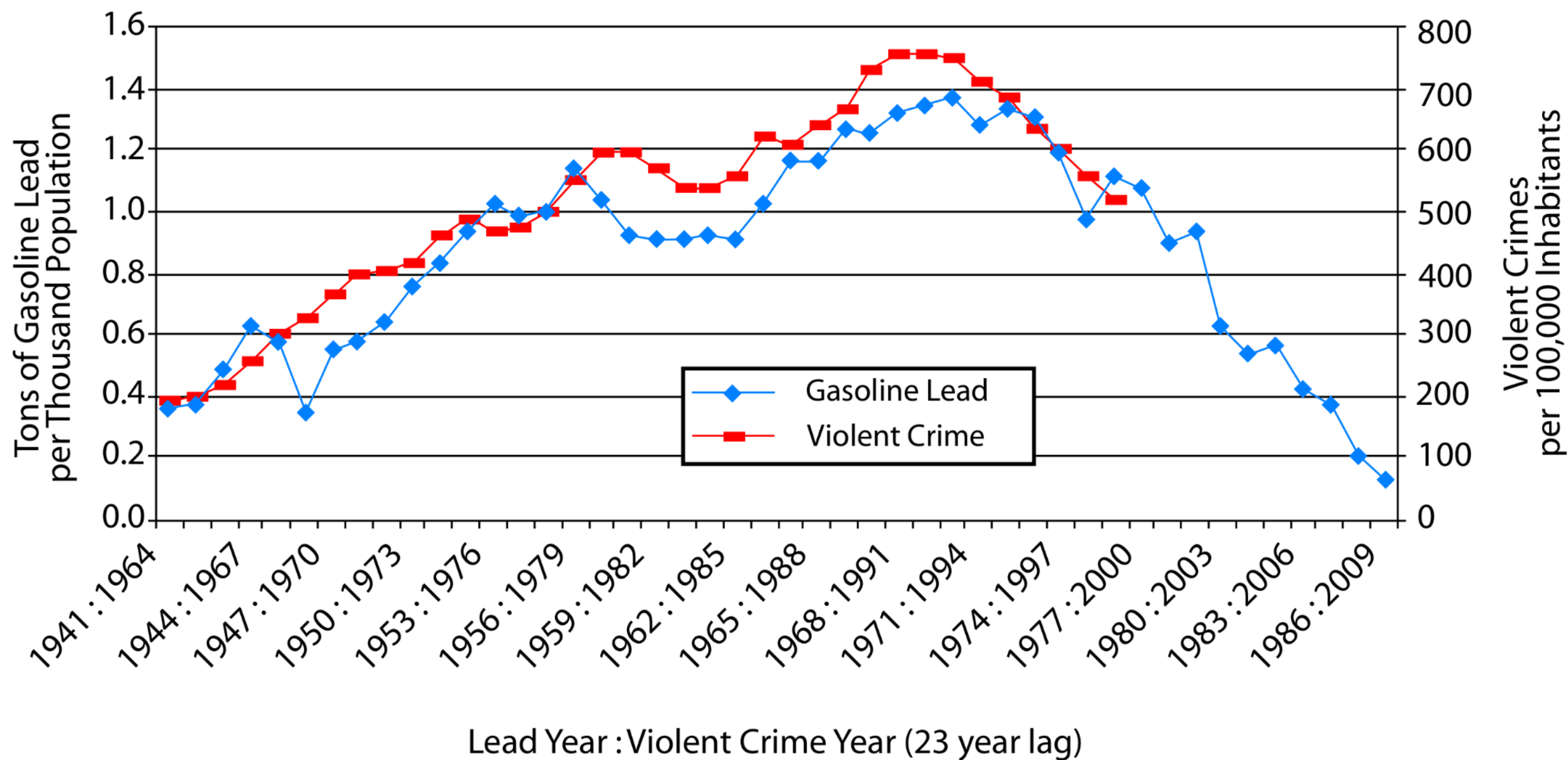
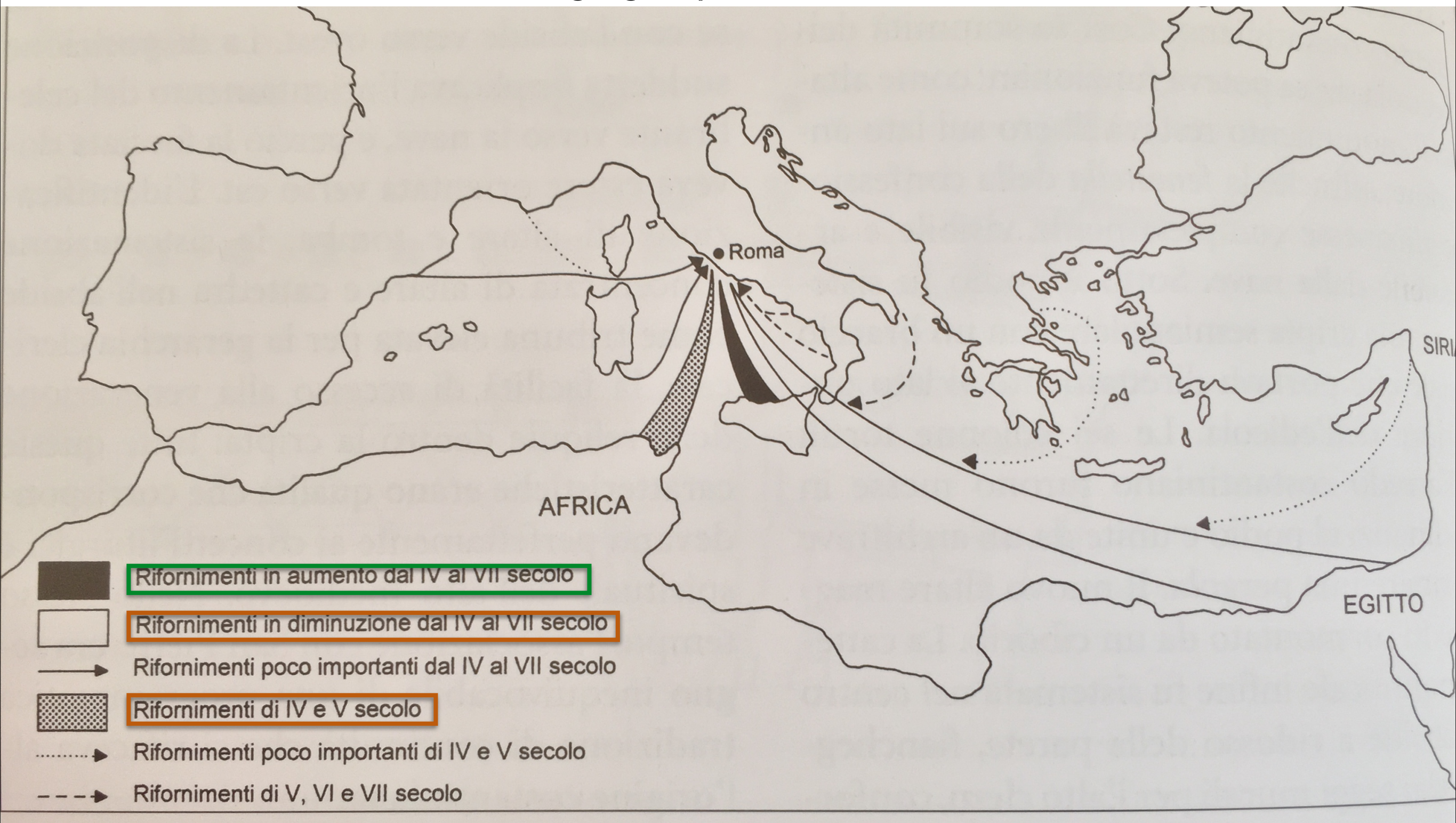


Figure 1: **US Violent Crime versus Gasoline Lead**



FOOD SUPPLY

Changing imports from the 4th-7th c. AD

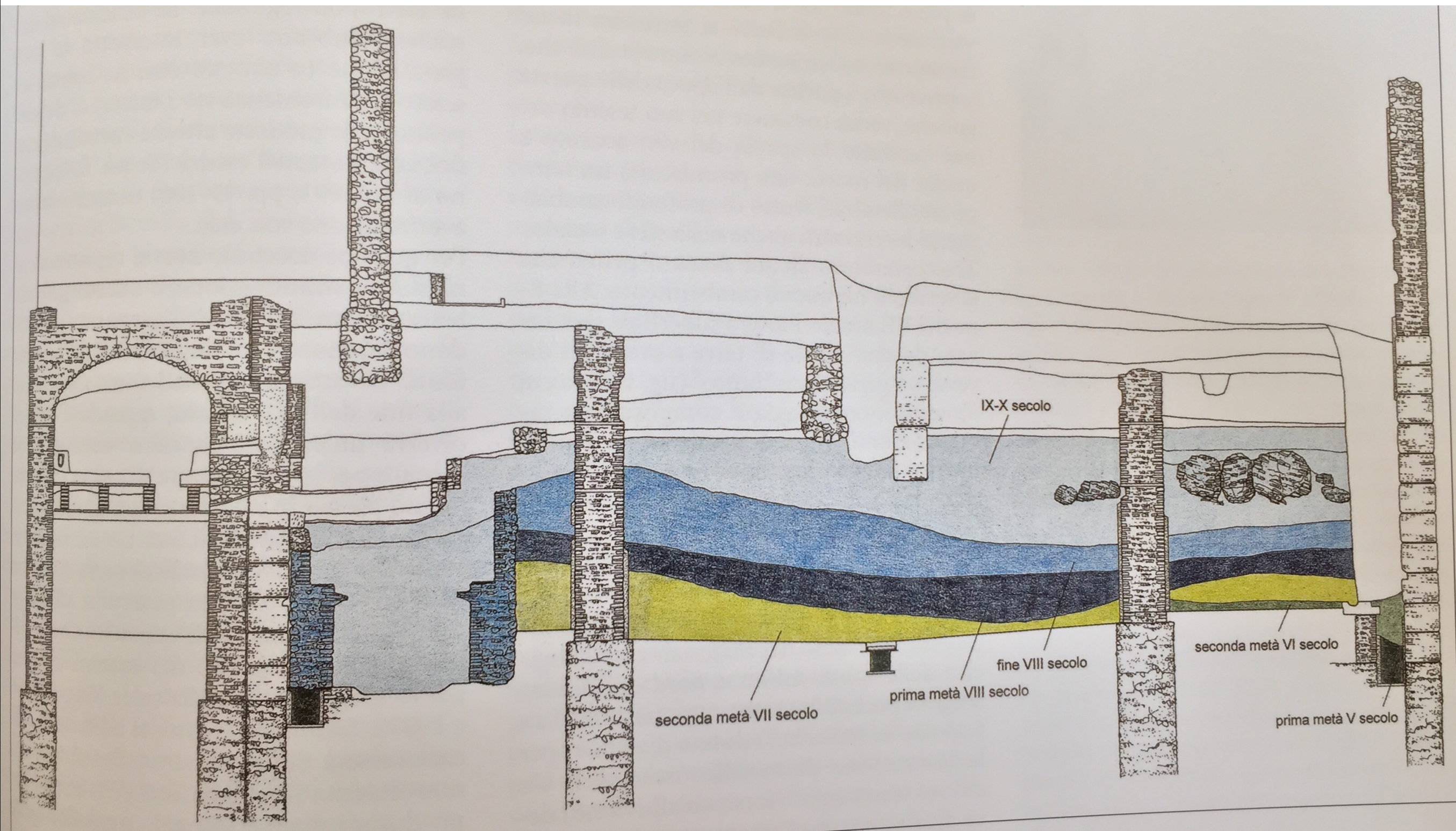


Egyptian grain is lost to Constantinople after the Arab invasion

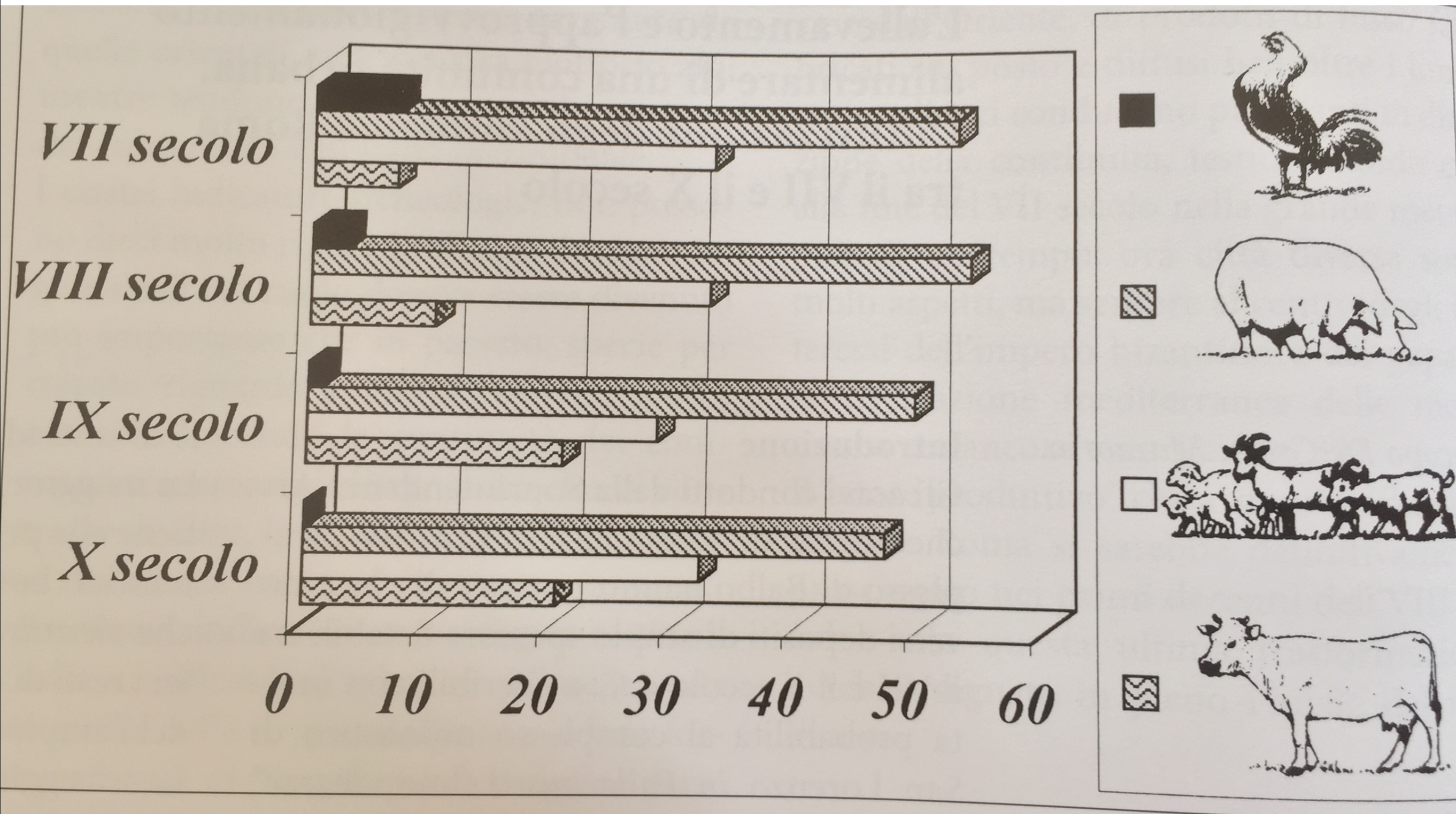
North African grain is lost to Rome after the Vandal invasion

Rome tries to draw from closer sources (Sicily, Sardinia, Spain, South Italy)

Excavations at the Crypta Balbi, Rome, which became the monastic complex of S. Lorenzo in Pallacinis, 5th-10th c. AD



Changing eating habits (at Crypta Balbi, Rome)



Consumption of birds **declines** (esp. chicken, from 7-2%), also fish and wild game (from 4.7-1.7%);
 Consumption of sheep/goat (ca. 30%) and pork (ca. 50%) **holds steady**;
 Consumption of beef **increases** (from 6-20%)

At rural sites of the same period: pork (ca. 55%); sheep/goat (ca. 35%); beef (ca. 10%).

Swine convert 35% of what they eat into meat; sheep/goat 13%; cattle 6.5%; they grow and reproduce faster.

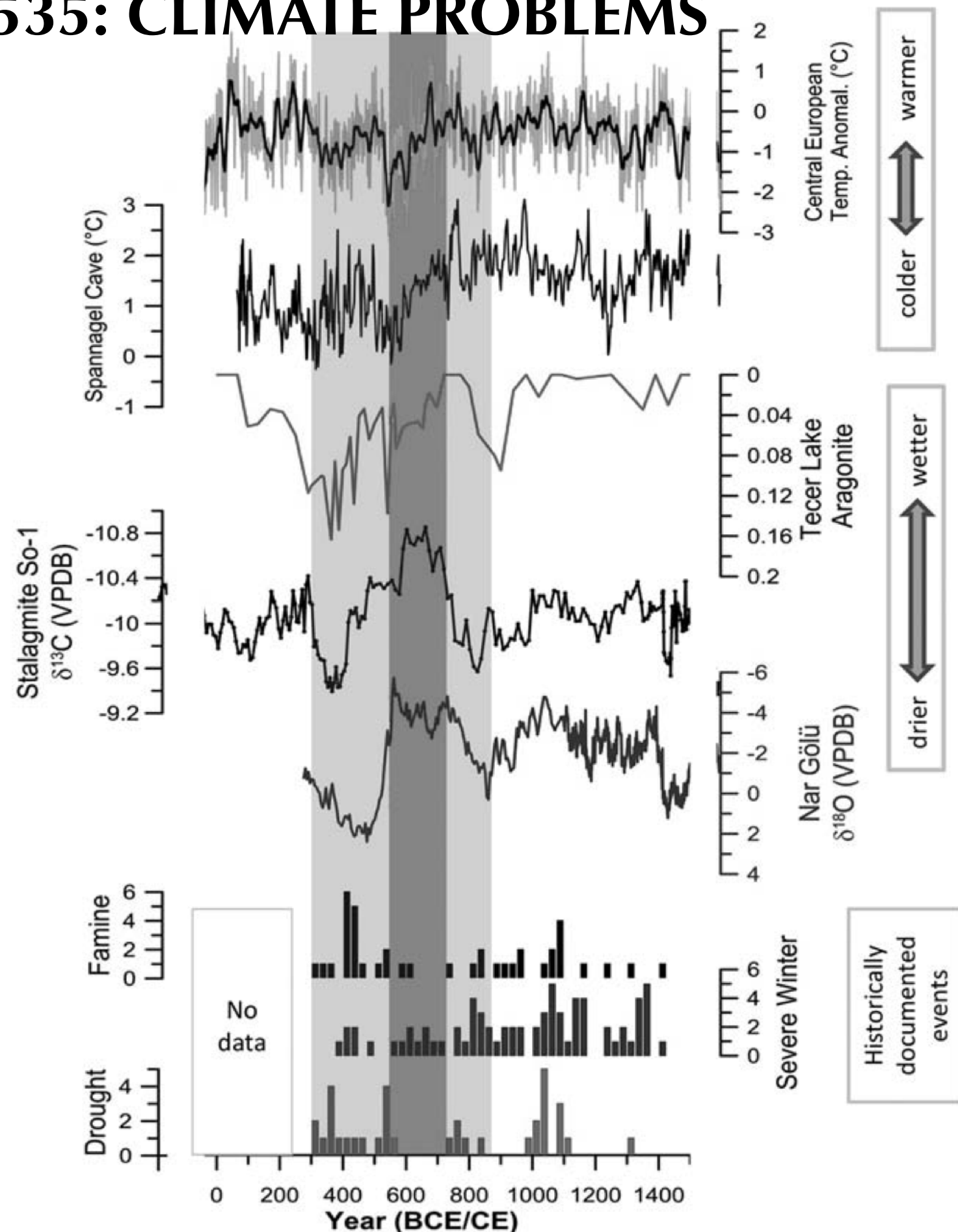
532: 'NIKA' RIOTS

ca. 40,000 dead, almost half of Constantinople burned....



Empress Theodora: "My opinion then is that the present time, above all others, is inopportune for flight, even though it bring safety. For while it is impossible for a man who has seen the light not also to die, for one who has been an emperor it is unendurable to be a fugitive. May I never be separated from this purple, and may I not live that day on which those who meet me shall not address me as mistress."

535: CLIMATE PROBLEMS



Note the sudden *decrease* in temperature and the *increase* in precipitation in the dark grey band.

"There was a sign from the sun, the like of which had never been seen and reported before. The sun became dark and its darkness lasted for 18 months. Each day, it shone for about four hours, and still this light was only a feeble shadow. Everyone declared that the sun would never recover its full light again."

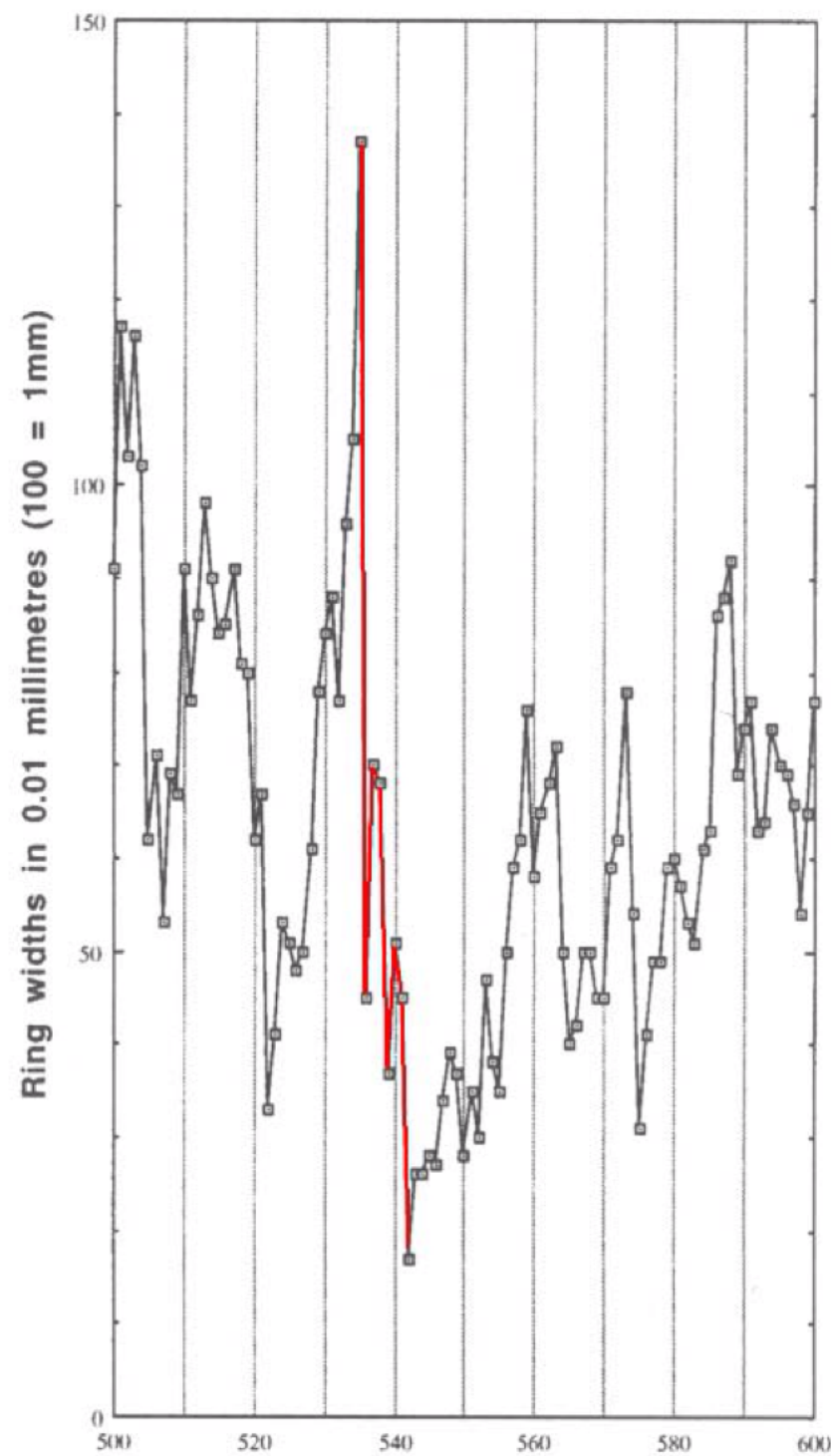
John of Ephesus, *Historiae Ecclesiasticae*, for AD 535-36

Other sources report weather and crop calamities for that period in Ireland, China, Peru, and the Middle East.

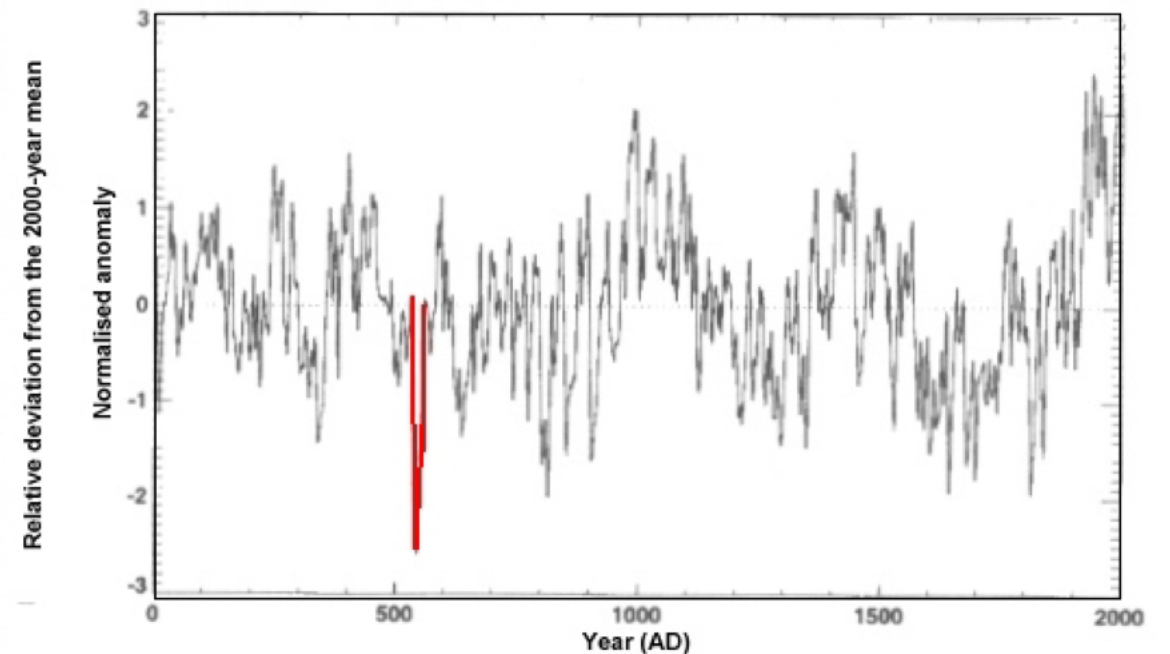
NOTE Shaded bars mark notable periods of dry climate.

Tree-Ring Data

535 AD tree-ring event known for over 10 years in Britain is now recognized world-wide



INFERRED SUMMER TEMPERATURE GRAPH FOR WESTERN SIBERIA AND NORTHERN SCANDINAVIA DERIVED FROM TREE-RING DATA AD 1-1997



From: Pentti Zetterberg, Univ. Joensuu, Finland

From: Keith Briffa, CRU, Univ. East Anglia, corroborated by European data compiled by Mike Baillie, Queen's Univ., Belfast

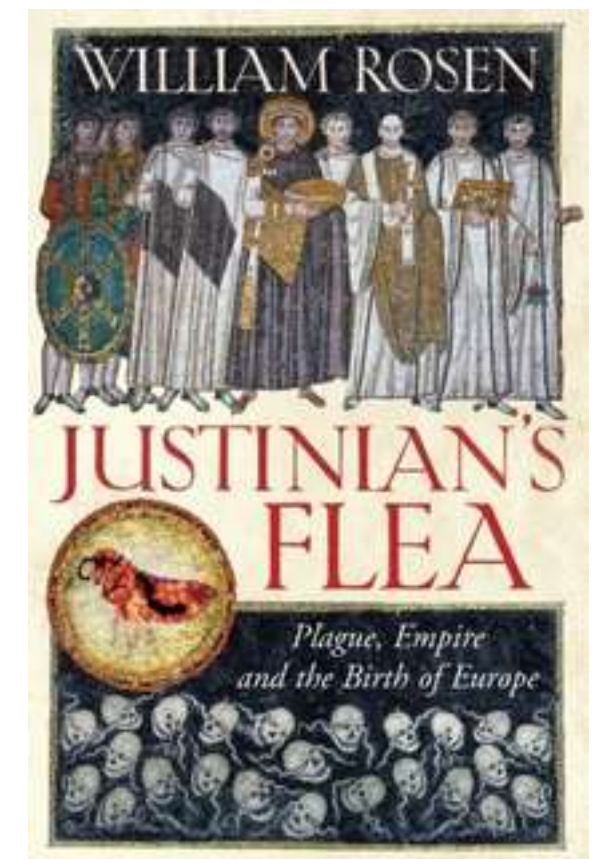
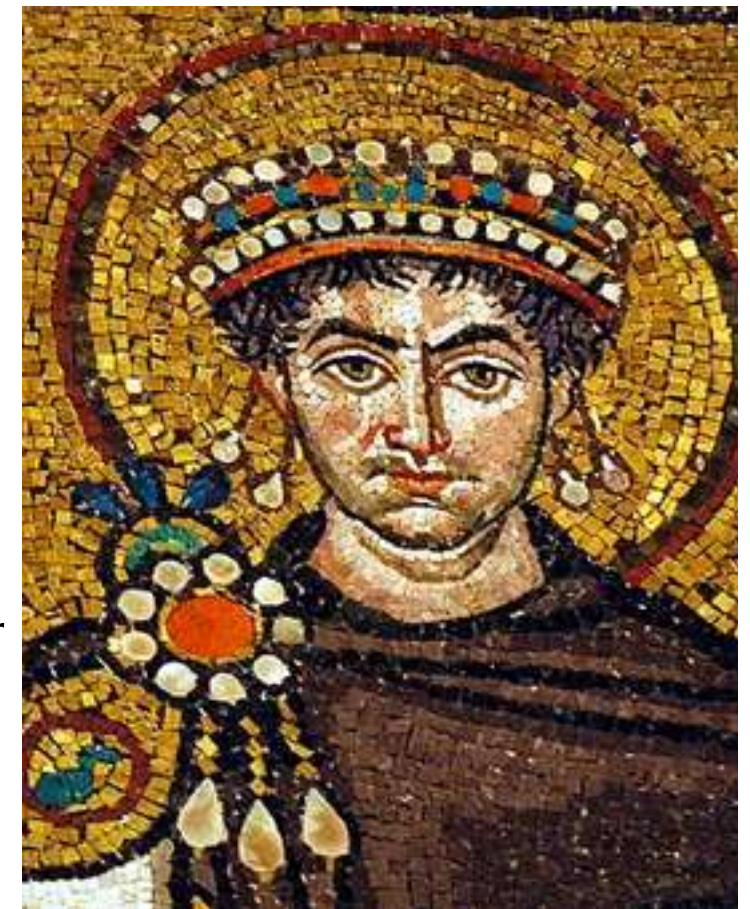
From a presentation by Ken Wohletz, Los Alamos National Laboratory. The culprit has not securely been identified: volcanoes in Sumatra or Central America, or even a comet collision...

541-42: BUBONIC PLAGUE

Procopius, **History of the Wars**, 2.22-33: "During these times there was a pestilence, by which the whole human race came near to being annihilated.... It started from the Egyptians who dwell in Pelusium. Then it divided and moved in one direction towards Alexandria and the rest of Egypt, and in the other direction it came to Palestine on the borders of Egypt; and from there it spread over the whole world... And they were taken in the following manner. They had a sudden fever, some when just roused from sleep, others while walking about, and others while otherwise engaged, without any regard to what they were doing. And the body showed no change from its previous color, nor was it hot as might be expected when attacked by a fever, nor indeed did any inflammation set in, but the fever was of such a languid sort from its commencement and up till evening that neither to the sick themselves nor to a physician who touched them would it afford any suspicion of danger. It was natural, therefore, that not one of those who had contracted the disease expected to die from it. But on the same day in some cases, in others on the following day, and in the rest not many days later, a bubonic swelling developed; and this took place not only in the particular part of the body which is called boubon, that is, "below the abdomen," but also inside the armpit, and in some cases also beside the ears, and at different points on the thighs...
...no device was discovered by man to save himself, so that either by taking precautions he should not suffer, or that when the malady had assailed him he should get the better of it; but suffering came without warning...
...the tale of dead reached five thousand each day, and again it even came to ten thousand and still more than that..."

Secret History:

"When pestilence swept through the whole known world and notably the Roman Empire, wiping out most of the farming community and of necessity leaving a trail of desolation in its wake, Justinian showed no mercy towards the ruined freeholders. Even then, he did not refrain from demanding the annual tax, not only the amount at which he assessed each individual, but also the amount for which his deceased neighbors were liable."



MORE WARS...

535-54: GOTHIC WARS

Justinian was never able to reunite the Roman Empire



LOMBARDS ARRIVE



AD 800: Charlemagne



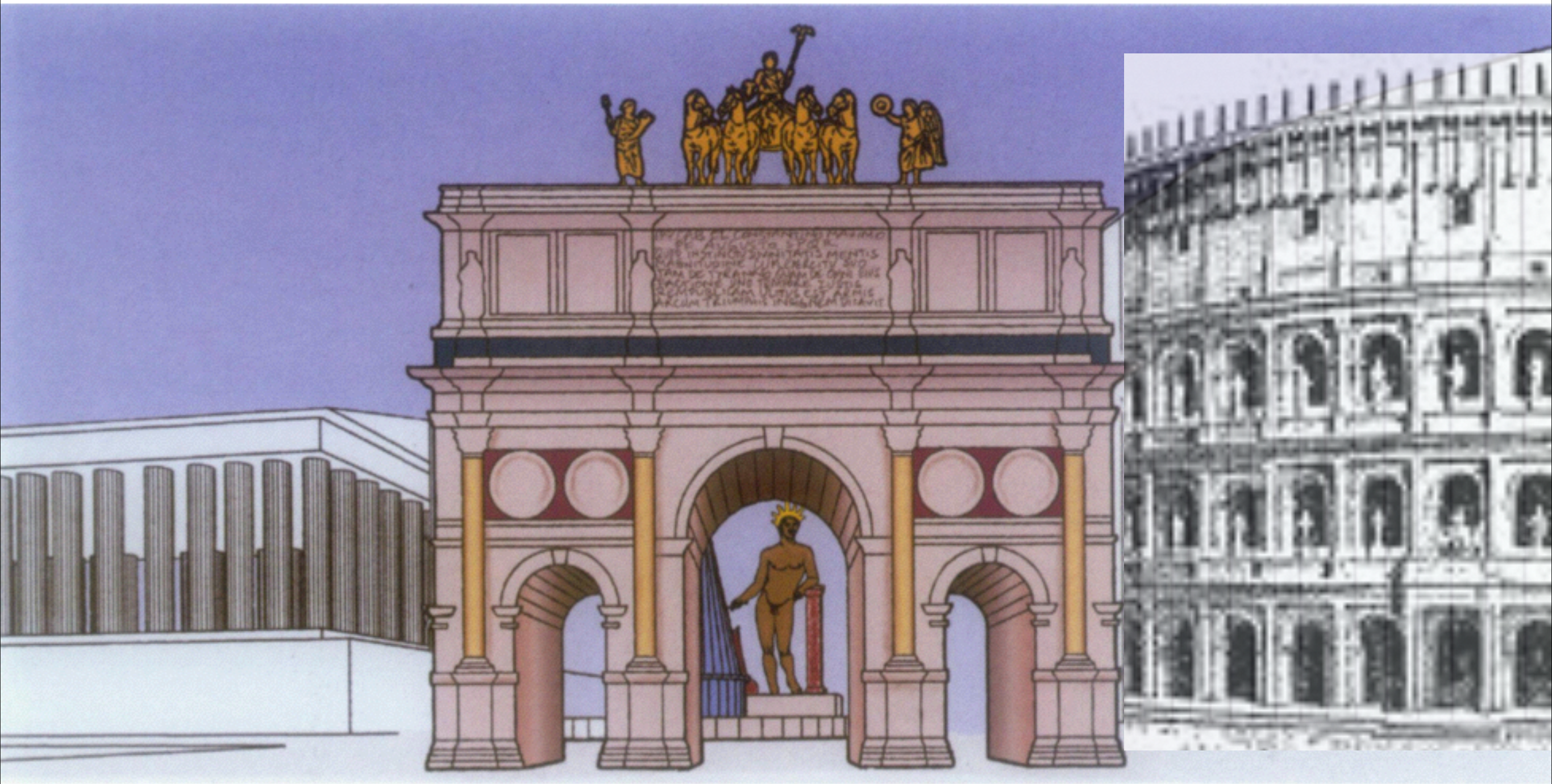
AD 900: Independent city-states begin to emerge in N. Italy



AD 1000: Holy Roman Empire and Papal Power contest...



6. CULTURAL/IDEOLOGICAL TRANSFORMATION



Constantine's arch in Rome

FORUM OF TRAJAN

ca. AD 900



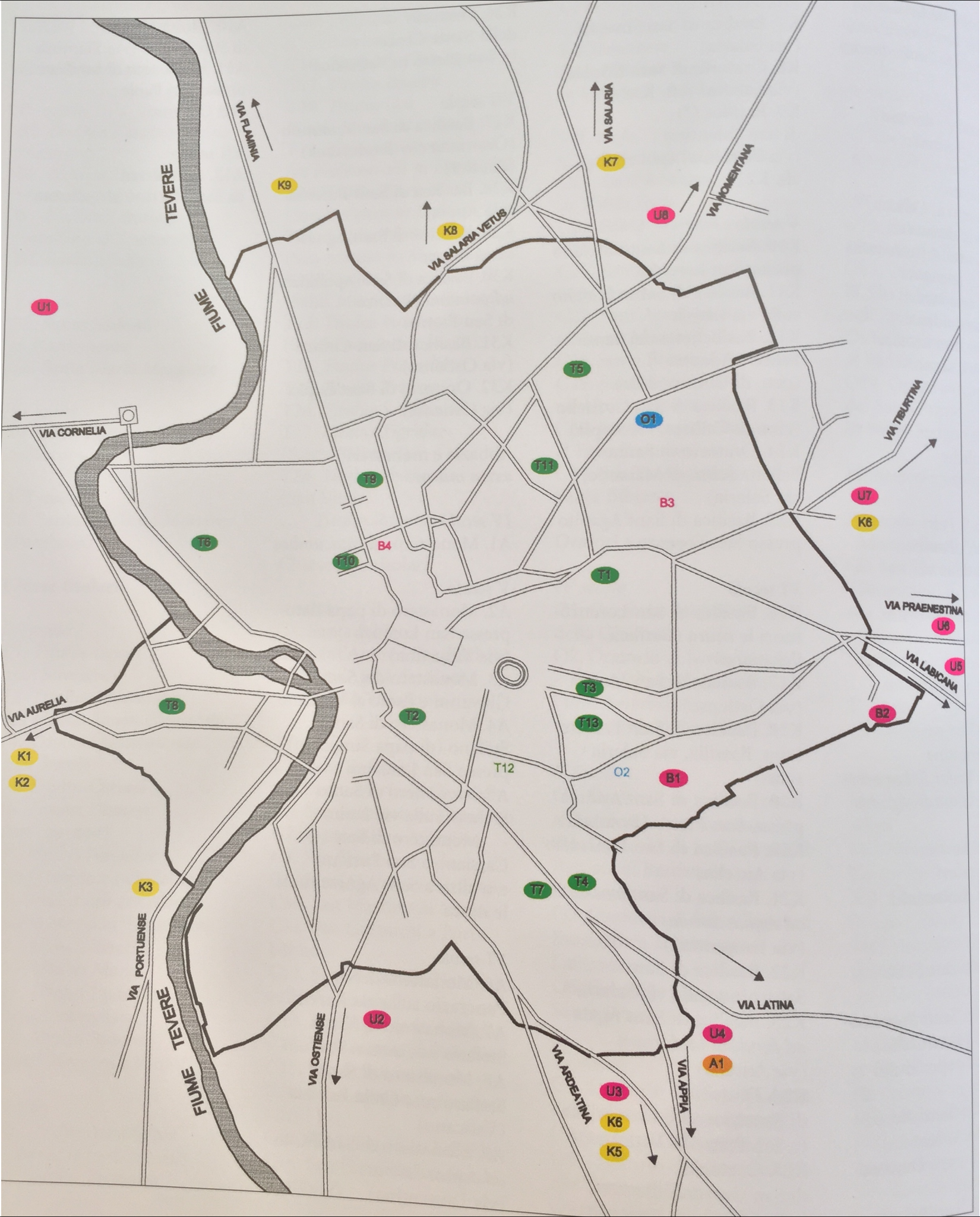
Old St. Peter's,
Rome - early
4th c. AD



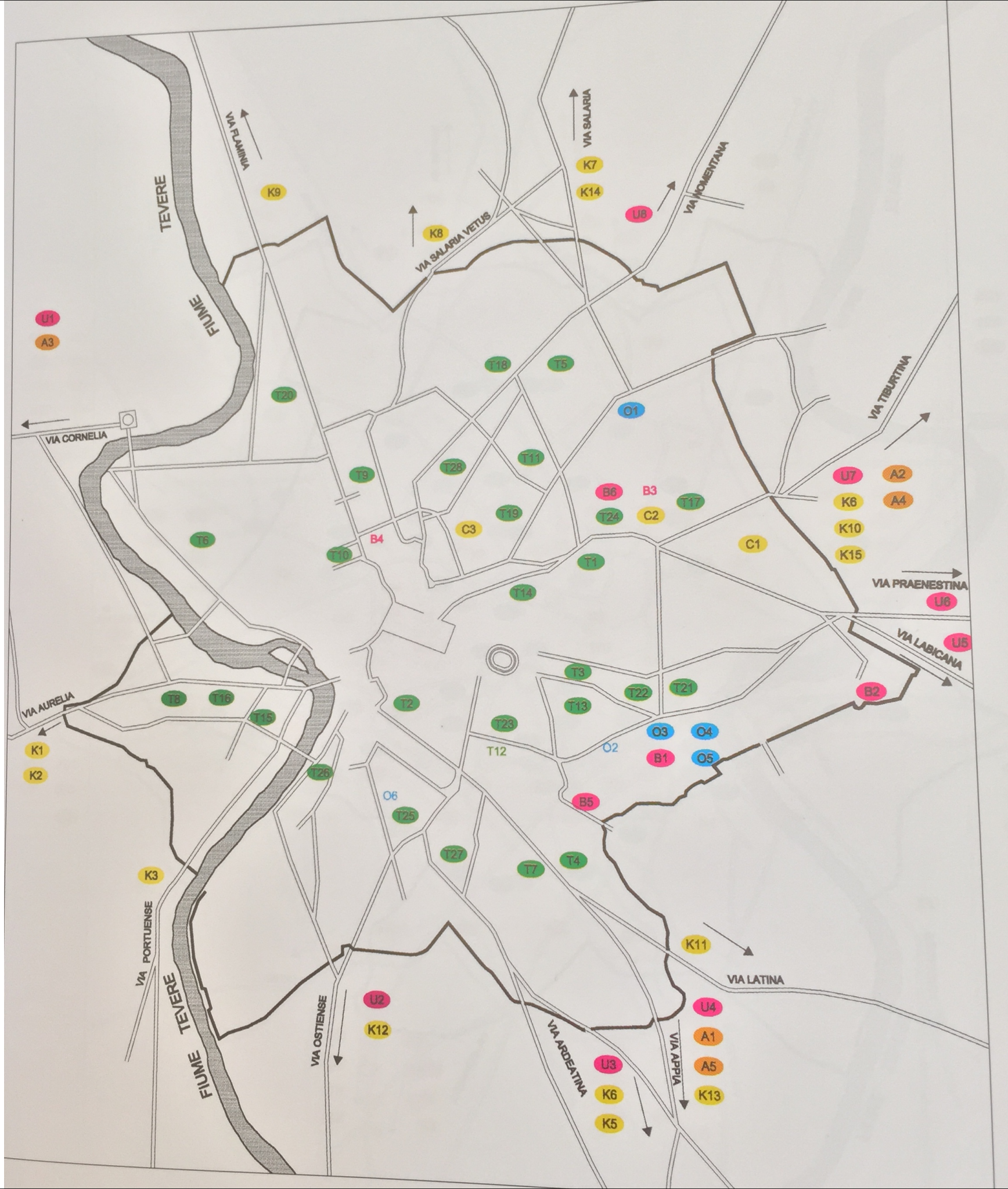
S. Sabina,
Rome - early
5th c. AD



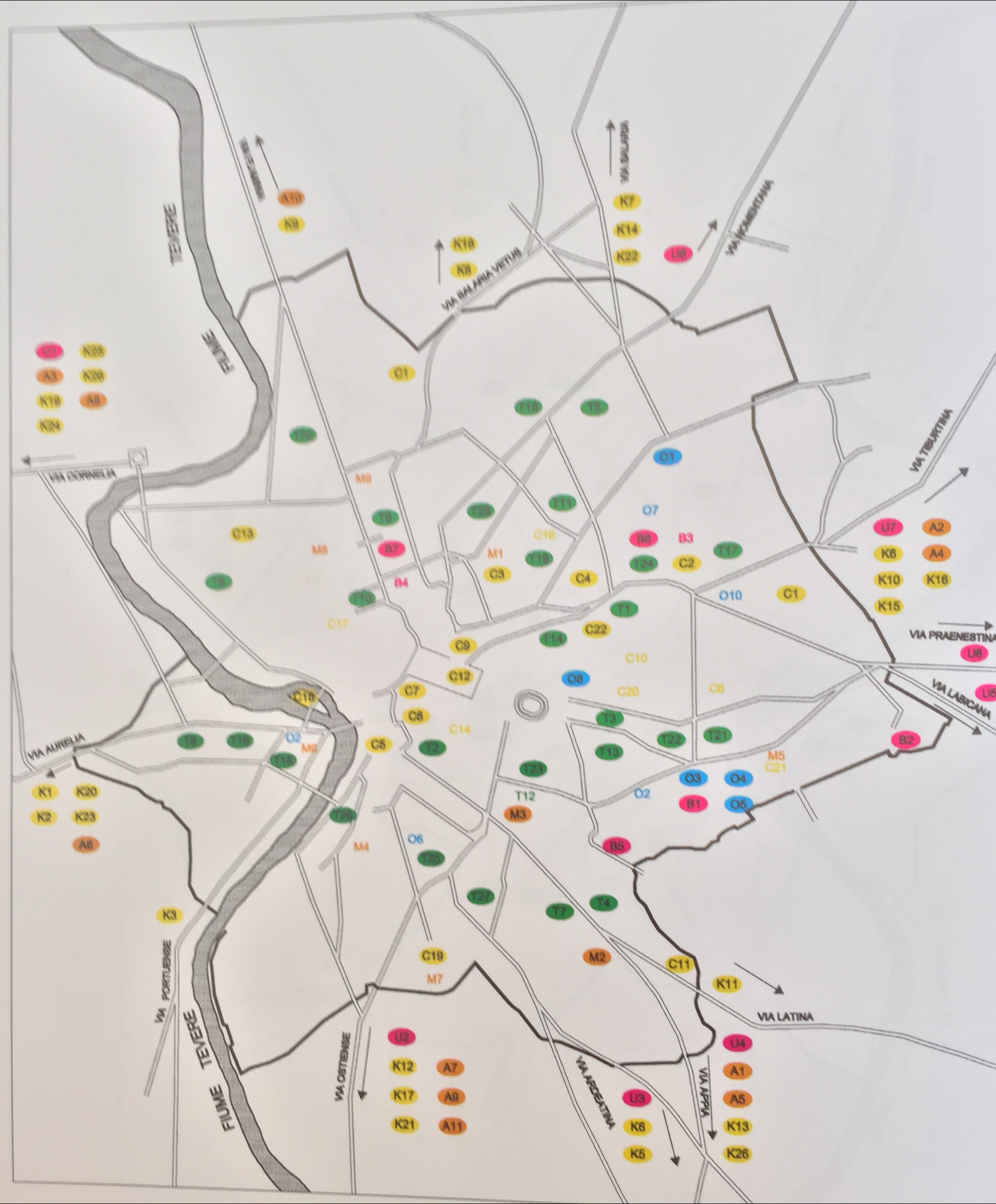
AD 400



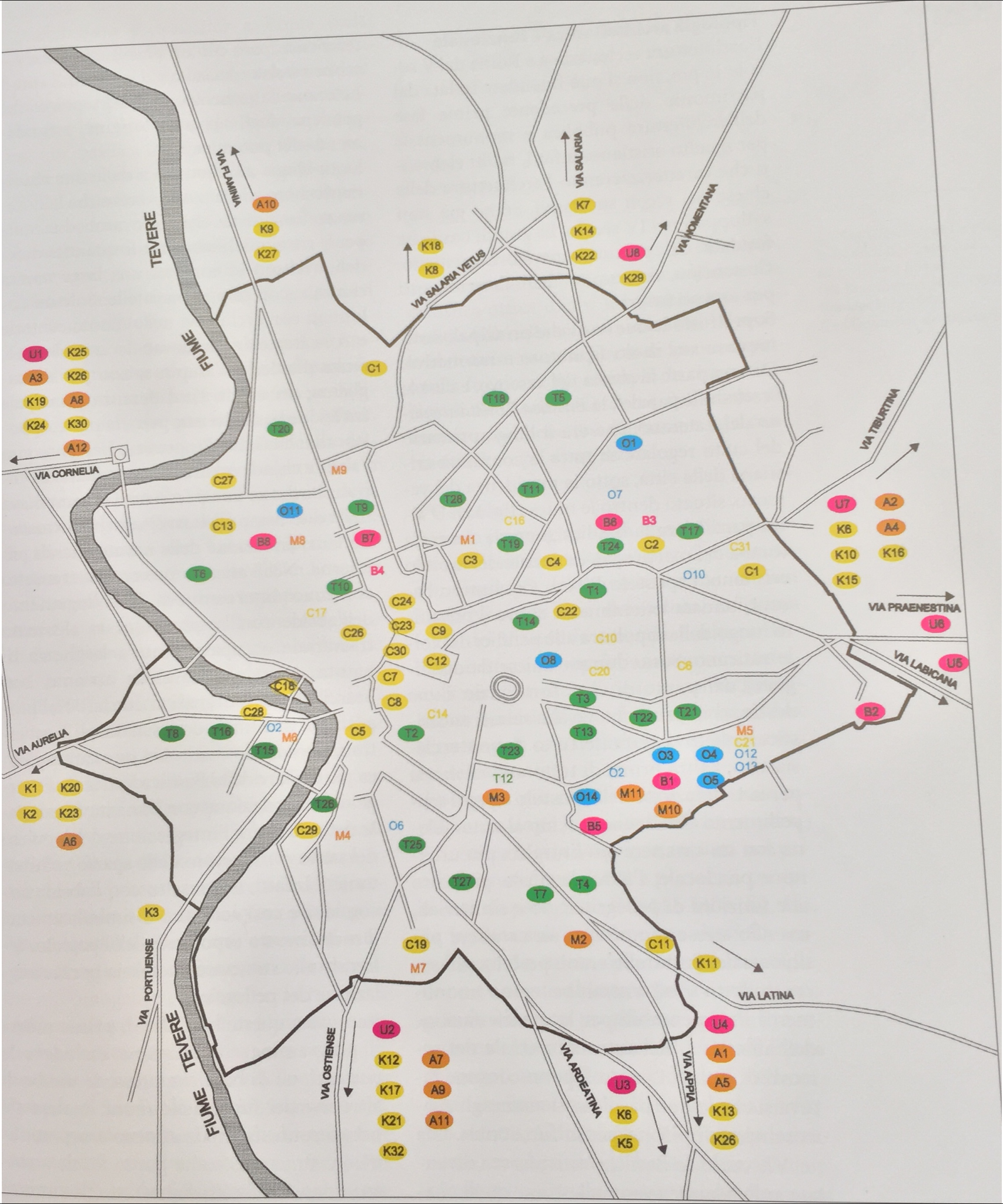
AD 500



AD 600



AD 700





DISRUPTION or TRANSFORMATION?