The Dawn of Everything

Session 3

Chapter 6 – Gardens of Adonis

Chapter 7 – The Ecology of Freedom

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Chapter 6 – Gardens of Adonis

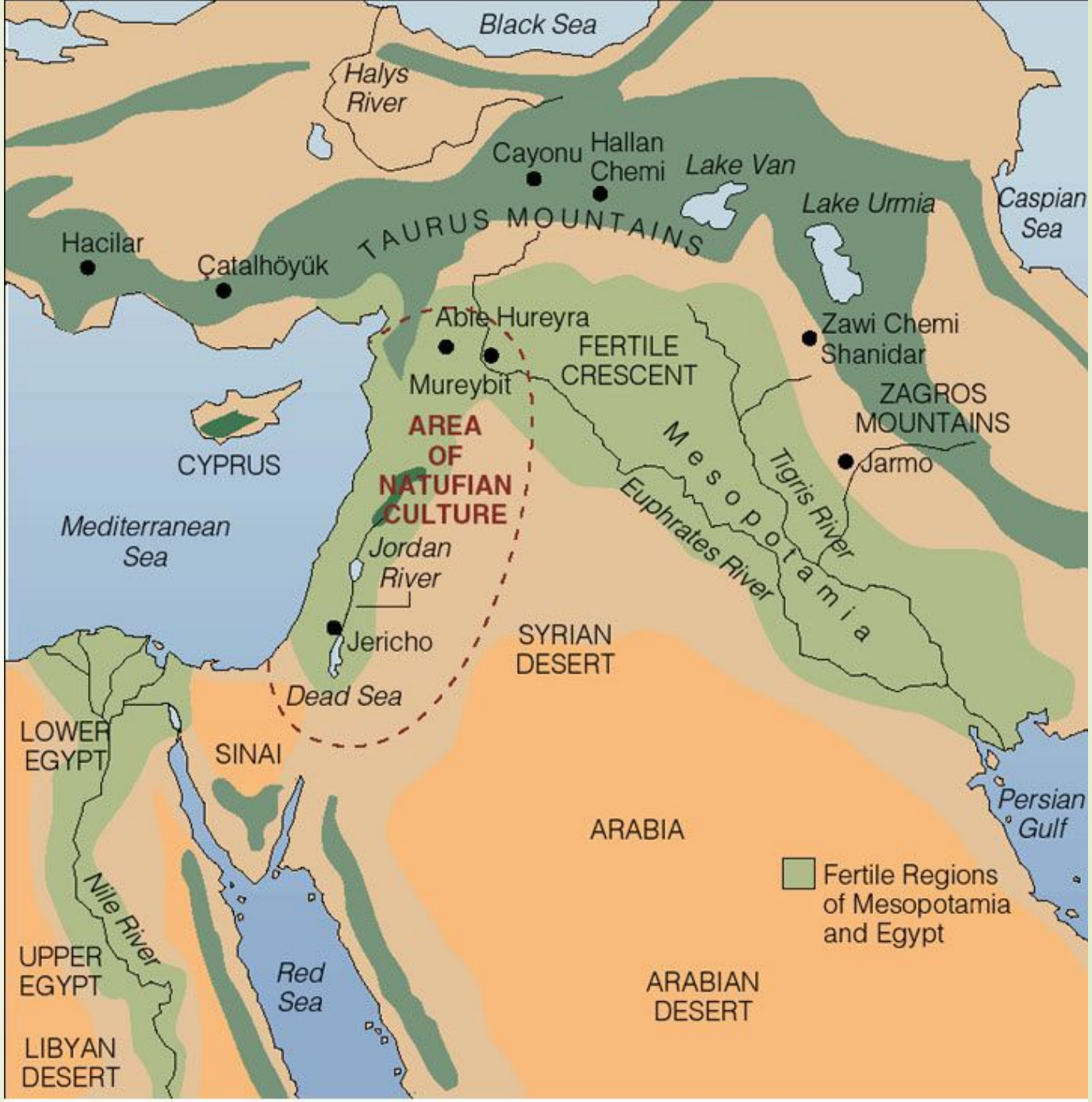
- The revolution that never happened: how Neolithic peoples avoided agriculture.
- This chapter challenges the conventional notion that an “Agricultural Revolution” during the Neolithic period paved the way for modern civilization.
- The chapter focuses on the levant or the fertile crescent as the locus of agricultural development.

- Anatolia was connected to Europe until approx. 5600 BCE


30°E
35°E
40°E
50°E
40°N
35°N
Black Sea
RUSSIA
GEORGIA
Tbilisi
Istanbul
Ordu
Sakarya
Halys
ARMENIA
AZERBAIJAN
Kars
Baku
Yerevan
Ankara
TURKEY
Karasu
Lake Van
AZER.
Aras
Caspian Sea
Izmir
Van
Tabriz
Adana
Lake Urmi
Mosul
Aleppo
Tehran
Latakia
Fertile Crescent
Kharun
Tharthar Lake
Zagros Mountains
Nicosia
SYRIA
IRAN
Mediterranean Sea
LEBANON
Euphrates
Kermanshah
Beirut
Damascus
Baghdad
Tigris
Esfahan
Haifa
Razzaza Lake
Tel Aviv
Amman
IRAQ
ISRAEL
Jerusalem
Gaza
Khabur
Dead Sea
JORDAN
Basra
Khorramshahr
Shiraz
SAUDI ARABIA
Rafha'
Al Aqabah
Kuwait
Bushehr
Tabuk
0 Miles 200
0 Kilometers 300
Persian Gulf
The Fertile Crescent
Forest
Subtropical woodland
Steppe grassland
Desert grassland
Site of ancient settlement
Modern cities
Modern city on ancient site

Neolithic Site Catal-hoyuk

- One of the world's oldest towns.
- Settled about 7400 BCE and occupied for about 1,500 years.
- About 13 hectares (32 acres) with a population of some 5,000.
- Dense population of house-holds, mud-brick construction, accessed from the roofs.
- Buried the dead in the house.



Neolithic Site Catal-hoyuk

- The town was situated in an area of wetlands – a good source of mud and clay.
- They had sheep and goats and raised arable crops (cereals and pulses).
- Seasonal variations of social structure were used with carefully balanced alterations.
- Winter was a time of ritual and ceremonialism.

Neolithic Site Catal-hoyuk

- Men and woman appear to have had a basic parity of diet and health.
- There appears to be an equality of the sexes with associated themes separated in the houses.
- There appears no evidence of central authority.
- Each household appears to be a world unto itself – storage, production, and consumption.

Neolithic Site Catal-hoyuk

- An international team of researchers has found that the inhabitants of the Neolithic settlement Çatalhöyük (7100-5950 BCE) experienced overcrowding, infectious diseases, violence, and environmental problems.
- The research was published in the *Proceedings of the National Academy of Sciences*.
- Residents suffered from a high infection rates, most likely due to crowding and poor hygiene.
- Up to one-third of remains from the Early period show evidence of infections on their bones.

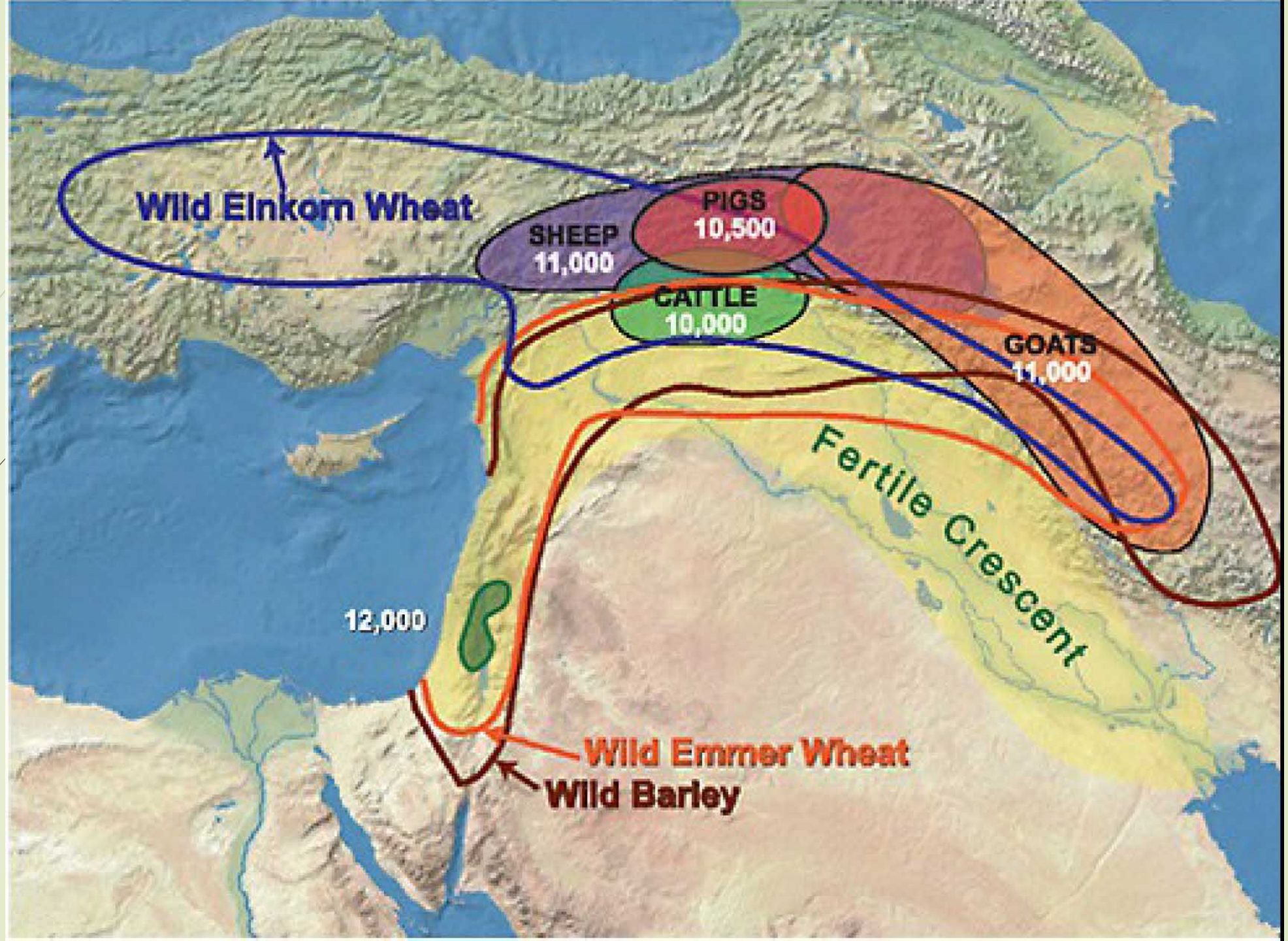
Fertile Crescent

- Crescent shaped belt of arable lands.
- There is an ‘upland crescent’ and a ‘lowland crescent’ with two distinct development trends.
- Both areas had a complex mosaic of human settlement: villages, hamlets, seasonal camps, and centers of ritual and ceremonial activity including impressive public buildings.


THE FERTILE CRESCENT AND RISE OF AGRICULTURE
Black Sea
PONTIC mts.
CAUCASUS mts.
ANATOLIA
Caspian Sea
ELBURZ mts.
ZAGROS mts.
MESOPOTAMIA
MEDITERRANEAN SEA
Cyprus
Syrian Desert
Kavir Desert
Nile Delta
Dead Sea
SINAI
Negev Desert
An Nafud Desert
modern coastline
Persian Gulf
Red Sea
natural distribution of wild cereals
Fertile Crescent
wild cereal
evidence of animal domestication
evidence of consumption of wild cereals
evidence of domestication of cereals
WORLD HISTORY ENCYCLOPEDIA

Fertile Crescent

- Both regions had livestock management and plant cultivation within a broader spectrum of hunting and foraging.
- The uplands turned toward hierarchy among settled hunter-foragers while the lowlands of the river valleys developed into craft specialists and traders.


Wild Einkorn Wheat
SHEEP
11,000
PIGS
10,500
CATTLE
10,000
GOATS
11,000
Fertile Crescent
12,000
Wild Emmer Wheat
Wild Barley

Why Neolithic Farming Took So Long to Evolve

- People started with ‘pre-domestication cultivation’.
- This cultivation of wild cereals dates back to 10,000 BCE.
- There is a 3,000 year gap between this and the biological process of crop domestication.
- This was not really a ‘revolution’, but slow change.
- So long as it did not become too onerous, cultivation was just one of the many ways early settled communities managed their environments.

Why Neolithic Farming Took So Long to Evolve

- As seen at Catal Hoyuk and in the Jordan valley, ‘flood-retreat’ farming was the low labor cost way that was adopted.
- This type of farming did not lend itself to the development of private property flood-retreat farming lent itself more towards collective holding of land.
- Did women domesticate crops -- there is a strong association between women and plant-based knowledge.

Gobekli Tepe

- One of a series of megalithic centers characteristic of the upland culture.
- Build in the ninth millennium of stone architecture.
- Carved on the stone pillars are wild and venomous male animals and raptors taking human heads.
- They seemed to be particularly taken with human heads.

Gobekli Tepe

The henges in Göbekli Tepe were erected as far back as 9600 BC.

Summing it up

- Farming began in Southwest Asia as a series of local specializations in crop-raising and animal-herding, in scattered areas with no epicenter.
- Hunting and gathering continued unabated along side cultivation.
- New products of these activities were traded and expanded throughout the region and, eventually, beyond.
- Woman were co-creators of this new life-style in the lowland regions verses male-dominated cultures in the uplands and steppes.
- This process to 3,000 years.

Chapter 7 – The Ecology of Freedom

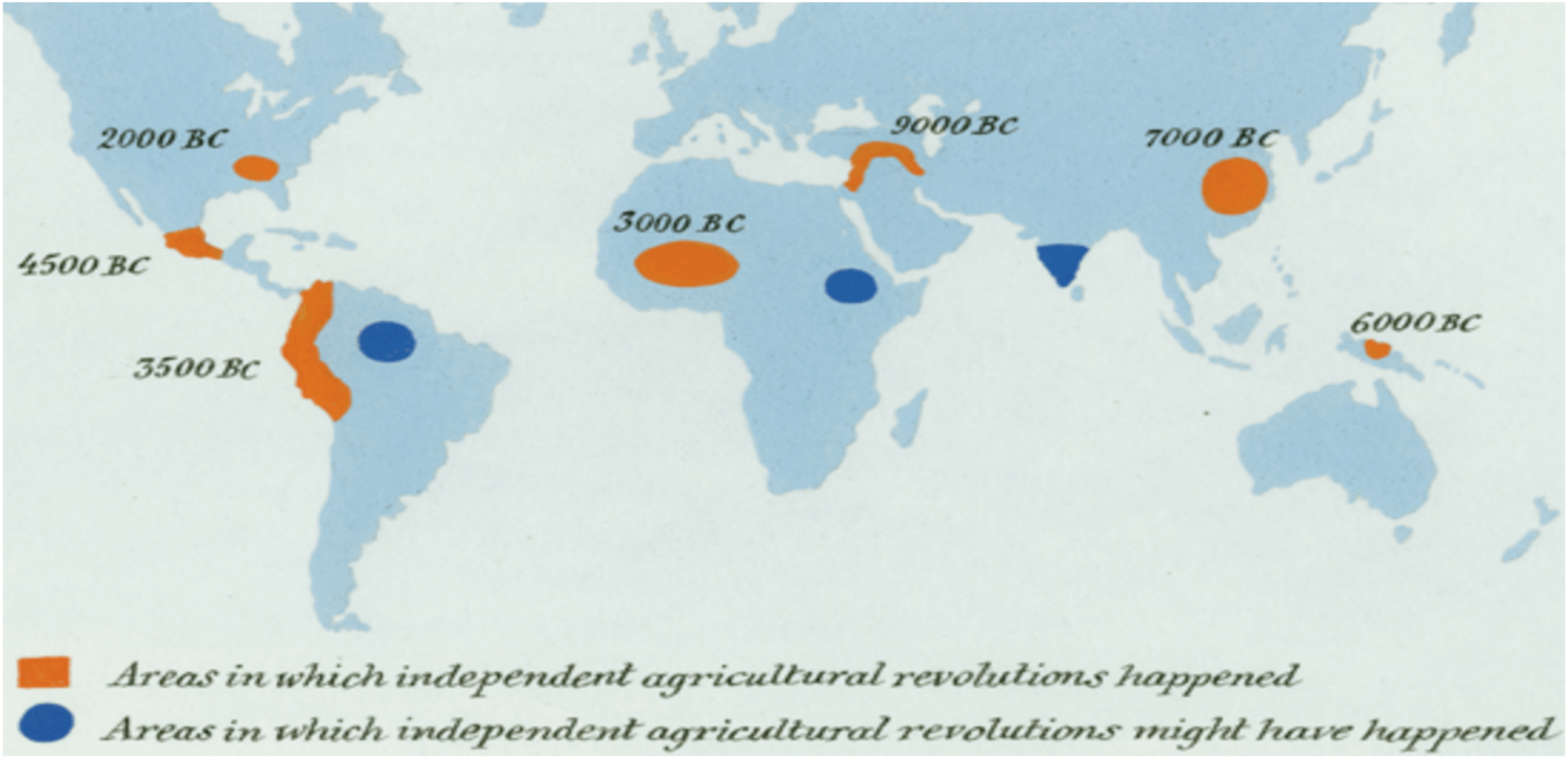
- This chapter investigates the various ways farming emerged throughout the world.
- The authors maintain it first hopped, stumbled, and bluffed it way around the world.
- It was far messier and far less unidirectional than generally perceived.
- Farming was independently developed in other places and none followed and linear trajectory.
- Farming was developed as a last resort.

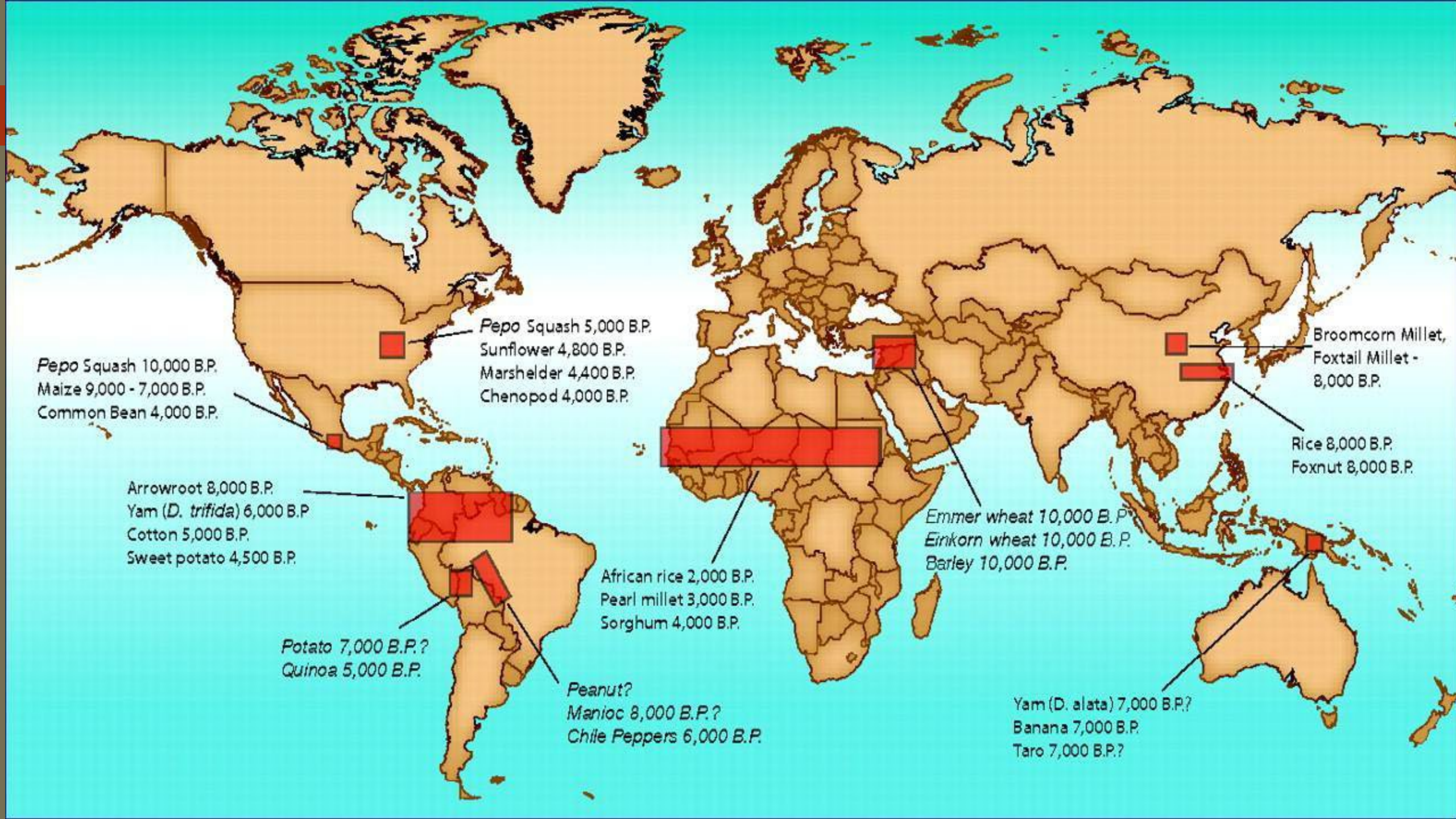
Why did Agriculture Take So Long to Develop

- Homo sapiens has been around for 200-300 thousand years, what did it take so long?
- We're in an ice age and for up until 12,000 years ago, much of the northern hemisphere was glaciated and much colder and drier than today,
- Populations were very small (5 million in 9,000 BCE) and the earth was very abundant.
- People could live very well by foraging and hunting.

Domestication Areas

- Between 15 and 20 independent centers of domestication have been identified.
- Many followed very different paths of development.
- We know less about the prehistory of these other regions than we know about the fertile crescent.
- Food production was not always considered a beneficial undertaking.


2000 BC
9000 BC
7000 BC
3000 BC
4500 BC
6000 BC
3500 BC
Areas in which independent agricultural revolutions happened
Areas in which independent agricultural revolutions might have happened


Pepo Squash 10,000 B.P.
Maize 9,000 - 7,000 B.P.
Common Bean 4,000 B.P.
Pepo Squash 5,000 B.P.
Sunflower 4,800 B.P.
Marshelder 4,400 B.P.
Chenopod 4,000 B.P.
Arrowroot 8,000 B.P.
Yam (*D. trifida*) 6,000 B.P
Cotton 5,000 B.P.
Sweet potato 4,500 B.P.
Potato 7,000 B.P.?
Quinoa 5,000 B.P.
Peanut?
Manioc 8,000 B.P.?
Chile Peppers 6,000 B.P.
African rice 2,000 B.P.
Pearl millet 3,000 B.P.
Sorghum 4,000 B.P.
Emmer wheat 10,000 B.P.
Einkorn wheat 10,000 B.P.
Barley 10,000 B.P.
Broomcorn Millet,
Foxtail Millet -
8,000 B.P.
Rice 8,000 B.P.
Foxnut 8,000 B.P.
Yam (D. alata) 7,000 B.P.?
Banana 7,000 B.P.
Taro 7,000 B.P.?

Eemian versus the Holocene

- The interglacial 130,000 years ago was the Eemian.
- Temperature was higher today and the weather was as predicted for our future.
- World population was about 100 to 300 thousand.
- The Holocene until more recently, was the Golden Age for foragers and hunters.
- It was also perfect for the development of ‘civilization’.

NEXT WEEK

- Read Chapters:
  - 8 Imaginary Cities (Cities without Kings)
  - 9 Hiding in Plain Sight (Origin of Social Housing and Democracy)