

SSUE 1002 NEOLITHIC REVOLUTION: FIRST VILLAGE COMMUNITIES IN ANATOLIA

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2. week: Early Anatolia, Geography, climate and chronology

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Climatic Impact and Environmental Setting from the last glacial Age to the Holocene Age in Anatolia

- Anatolian peninsula does not constitute a uniform habitat, but it comprises extremely varied environmental zones, ranging from semi-arid basins to areas with heavy rainfall, each separated by ranges of mountains. In general, it presents more varied optimal environmental possibilities than most parts of the Near East.
- As it is located at the meeting point of diverse climates and surrounded by a chain of inner-seas, the impact of climatic fluctuations has been considered complex and yet poorly understood. Compared with the other parts of the Near East, the prehistory of Anatolia has been poorly studied and until recent years, overlooked. It was only during the last decades that the significance of Anatolian Neolithic cultures has been apparent.

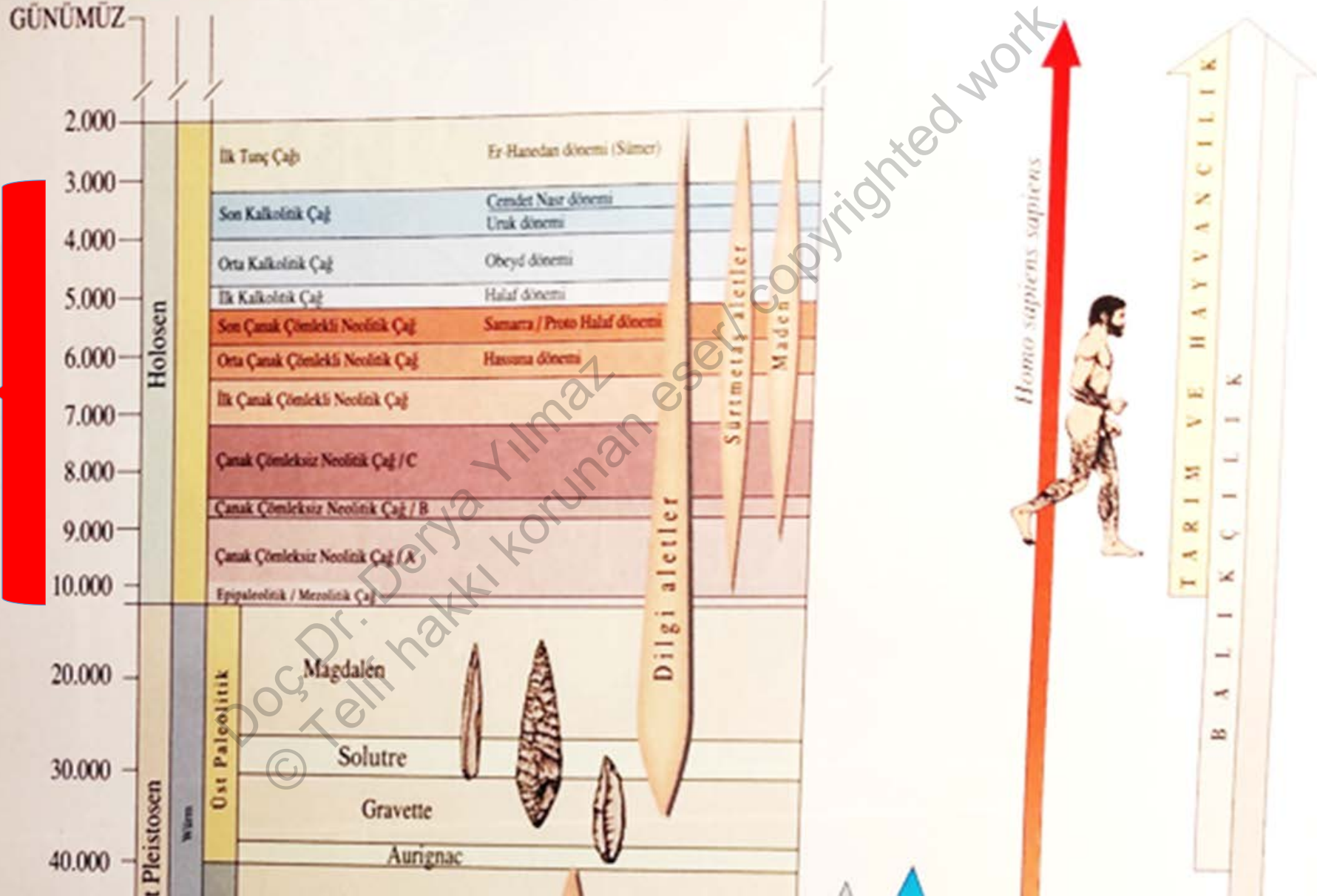
Geological Periods Table

GENEL OLARAK	KUZAY AVRUPA DA	ALPLER'DE	YAKLAŞIK ZAMAN	
BUZUL SONRASI YA DA HOLOSEN				
PLEİSTOSEN	ÜST	WEICHSEL	WÜRM	Post-glacial period/ Holosen
		Son Buzularası		- 10,000
	ORTA	WARTHE ? SAALE	RISS ? (MINDEL ?)	Late interglacial Period
		Büyük Buzularası		- 75,000 - 125,000 - 200,000 - 265,000
	ALT	ELSTER	(MINDEL ?)	Great interglacial period
		?	(GÜNZ ?)	- 430,000 - 800,000
"Cromer" Buzularası			Cromer interglacial period	
DIP	DAHA ESKİ	(GÜNZ ?)	- 1,000,000	
Villafranca			- 3,000,000	

Pleistosen Silsilesi
Buzullar ve en eski (Villafranca) fosil hayvanlar gösterilmiştir

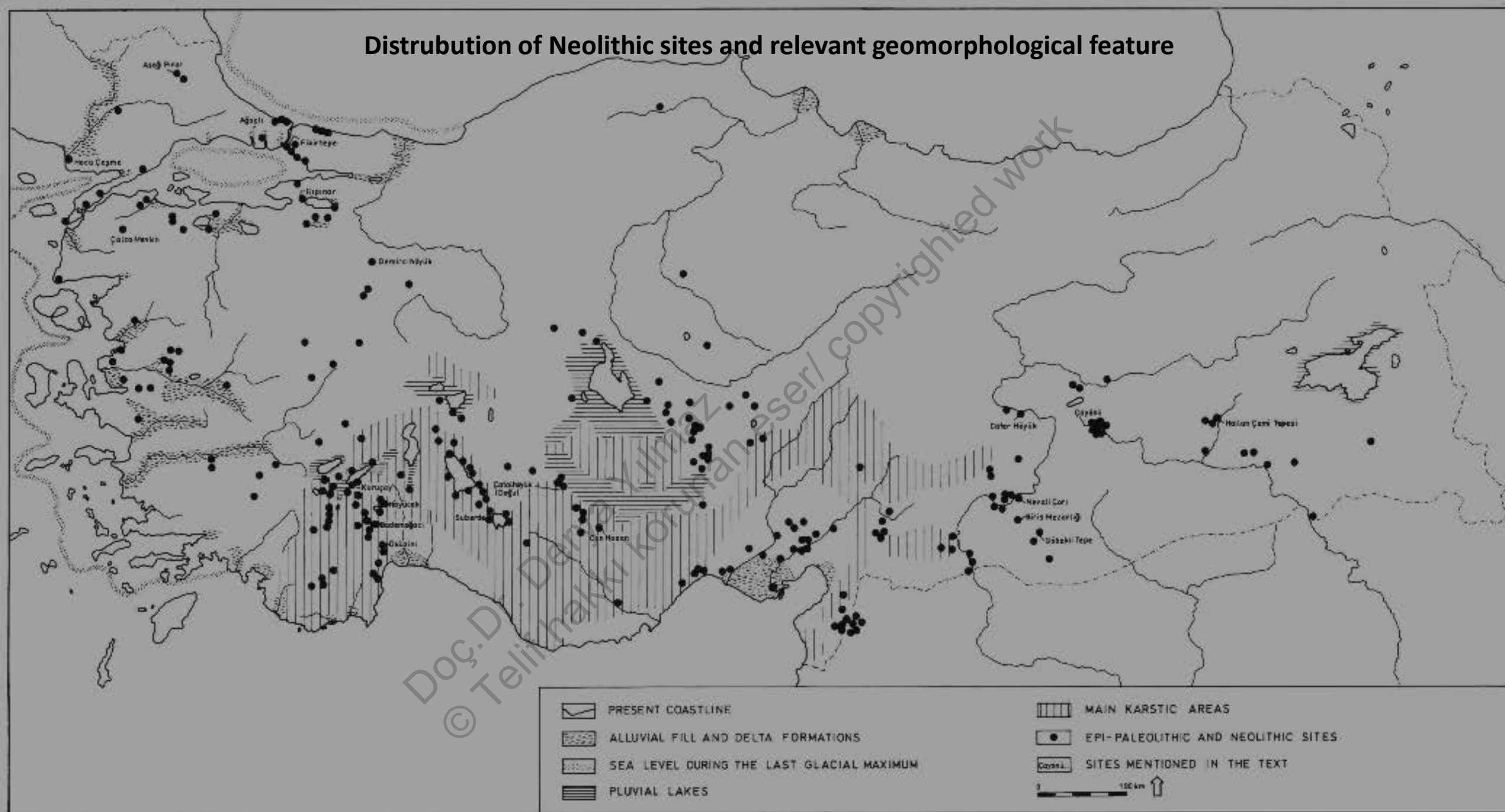
ÇEVRE, İNSAN VE TEKNOLOJİ ZAMAN ÇİZELGESİ

GÜNÜMÜZ





Distribution of Neolithic sites and relevant geomorphological feature



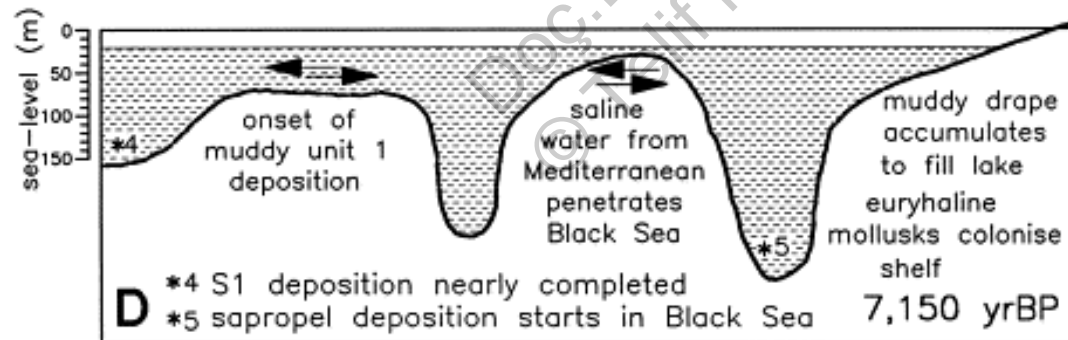
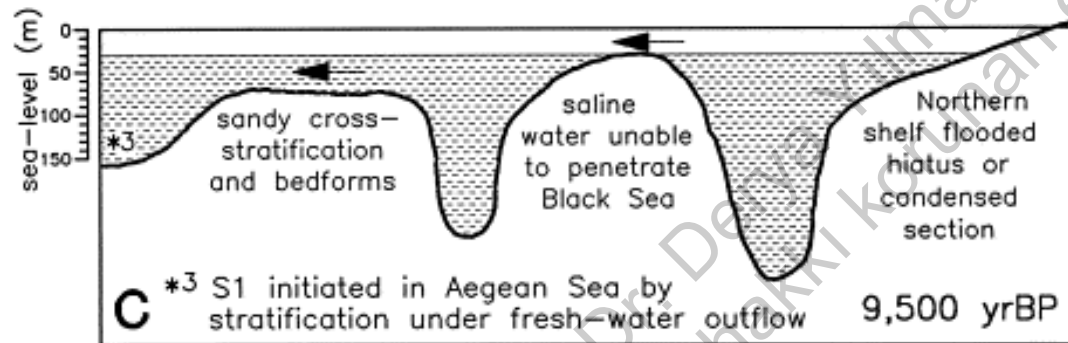
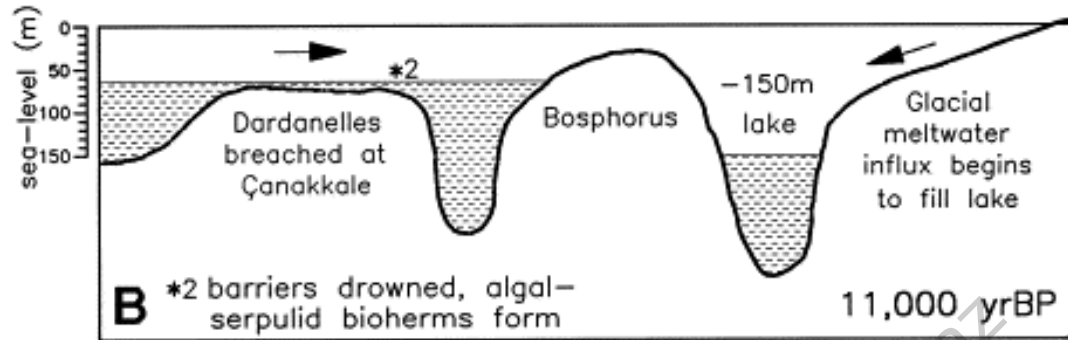
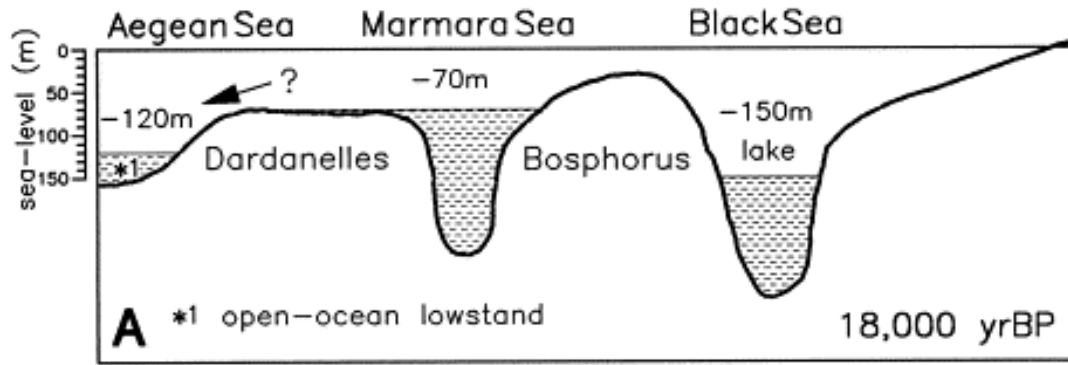
- The implications of the Black Sea - Marmara system are not just restricted to the coastal topography; it has profound implications upon the principal sea and land routes between major geographic regions, either providing or terminating connections and also on the marine ecology.
- The first intrusion of warm and saline waters from the Aegean to the Sea of Marmara took place by 6,500 BC to be soon followed by the establishment of a link with the Black Sea. The radical changes in the marine condition of Marmara had a drastic impact on the cultural environment.



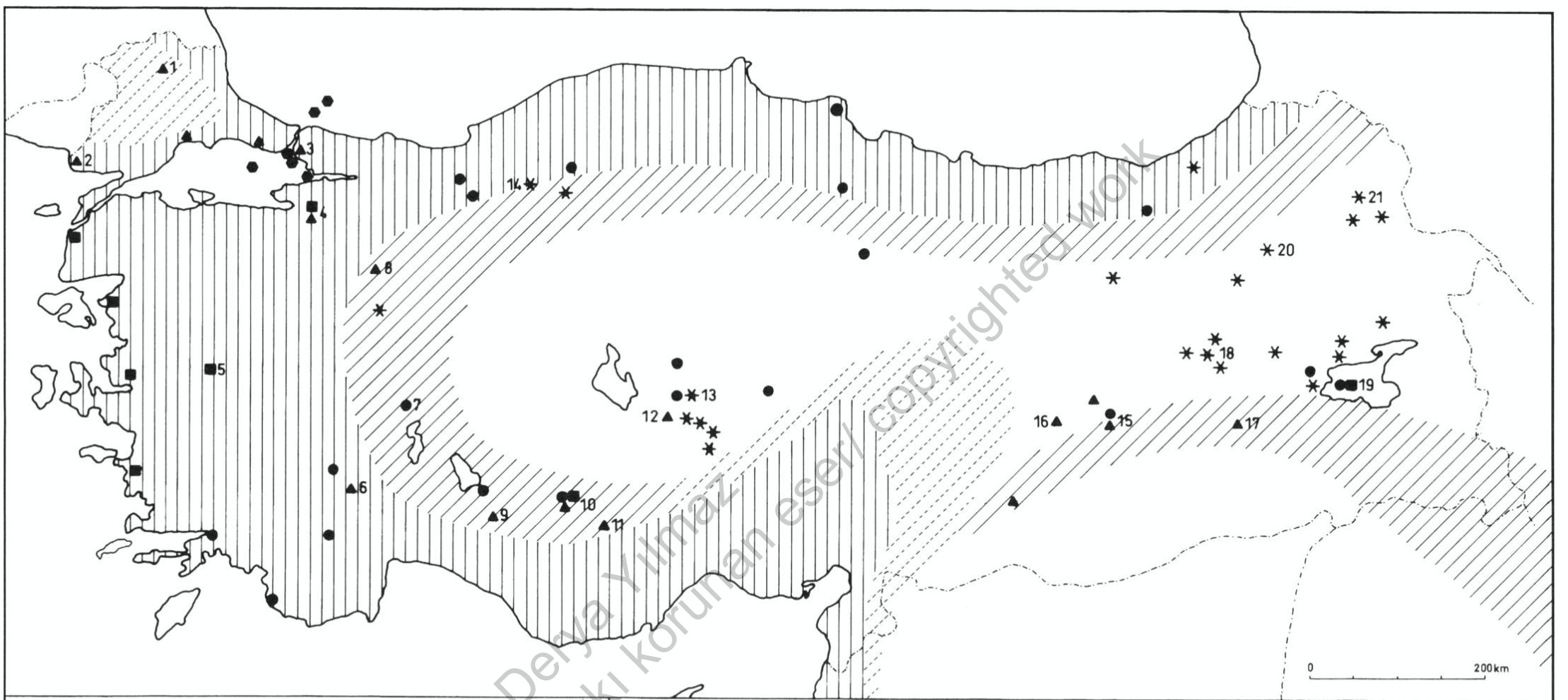
A Last glaciation



B Deglacial flood (7600 years ago)



- Schematic section showing the water exchange between the Sea of Marmara and the Black Sea.



- | | | |
|----------------|-----------------|-----------------|
| 1. AŞAĞI PINAR | 8. DEMİRCİHÖYÜK | 15. ÇAYÖNÜ |
| 2. HOCA ÇEŞME | 9. SUBERDE | 16. CAFERHÖYÜK |
| 3. FİKİRTEPE | 10. ÇATALHÖYÜK | 17. HALLAN ÇEMİ |
| 4. ILIPINAR | 11. CAN HASAN | 18. BİNGÖL |
| 5. MARMARACIK | 12. AŞIKLI | 19. VAN |
| 6. HACILAR | 13. ACIGÖL | 20. PASINLER |
| 7. KARAMIK | 14. GEREDE | 21. KARS |

ASSUMED NATURAL VEGETATION

c. 8000 BP

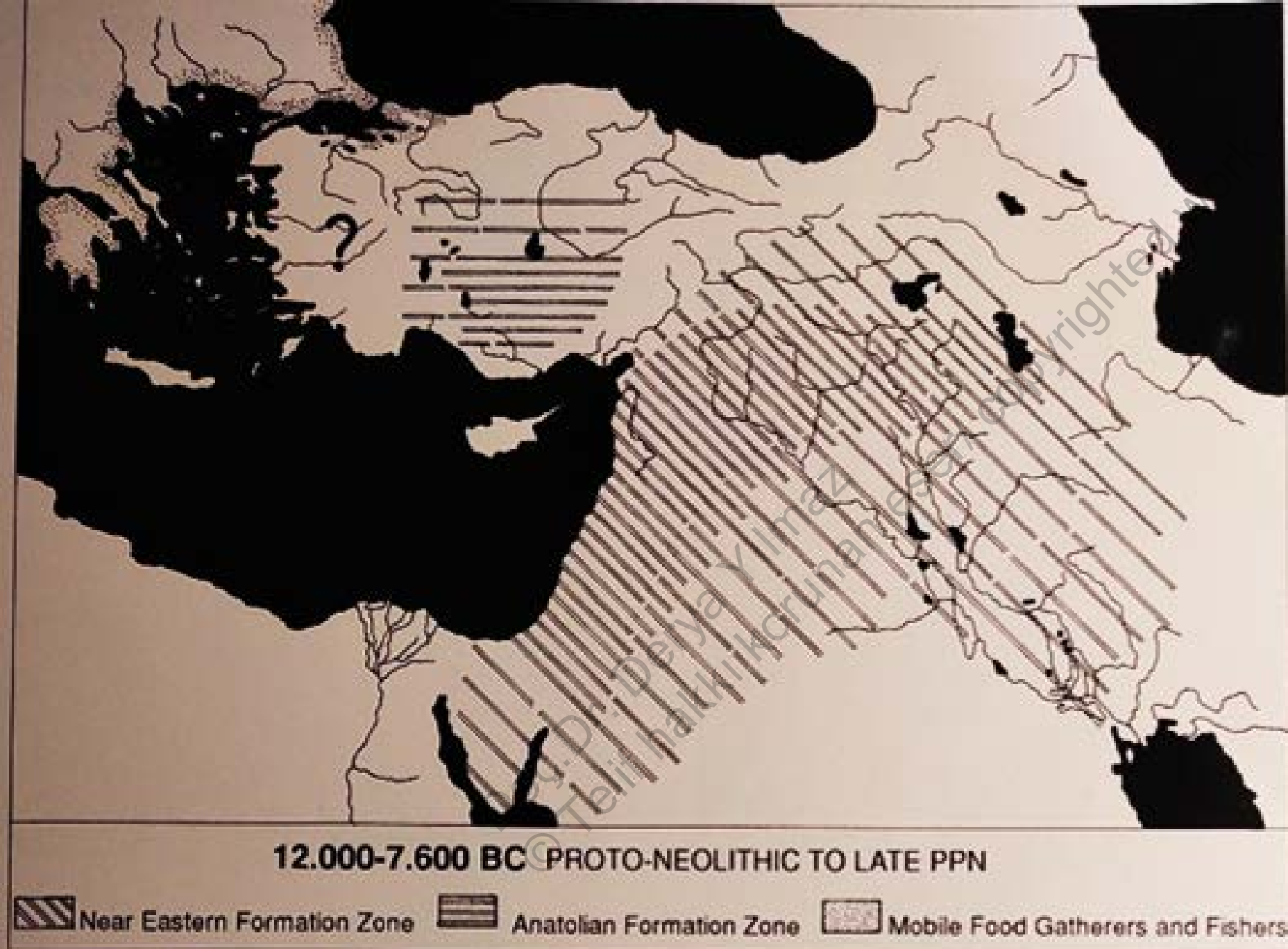
- | | |
|--|--------------------------|
| | FOREST |
| | WOODLAND |
| | FOREST-STEPPE |
| | STEPPE AND DESERT-STEPPE |

IMPORTANT LOCATIONS

FOR PALEO-ENVIRONMENTAL STUDIES

- | | |
|--|---------------------------|
| | POLLEN-DIAGRAMS |
| | LAKE AND COASTAL DEPOSITS |
| | FAUNAL EVIDENCE |
| | OBSIDIAN SOURCES |
| | DEEP-SEA CORES |

- Assumed natural vegetation at 8000 BP and important locations for Paleoenvironmental studies.



The geographic features of Anatolia are varied and more different from the other parts of the Near East so that it is sometimes called a sub-continent.

Fig. 1. The Main Formation zones of the Neolithic Cultures in the Near East

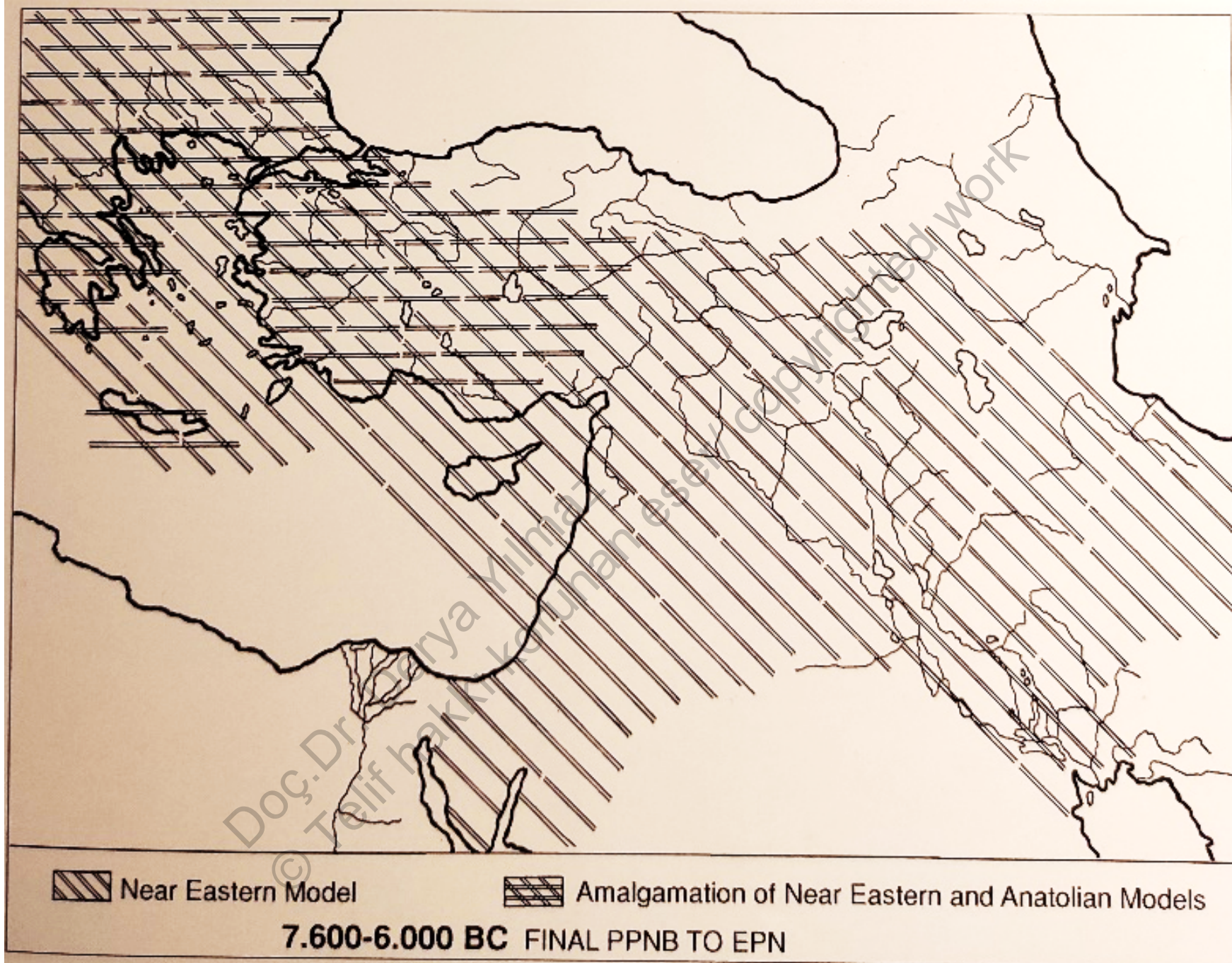


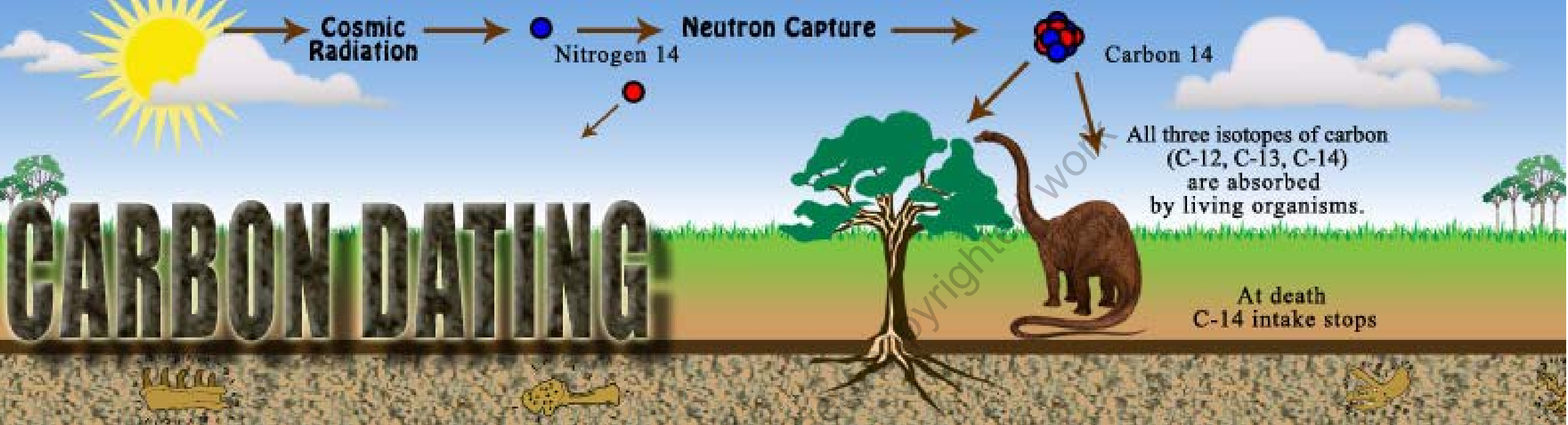
Fig. 2. The Expansion of the Neolithic Way of Life



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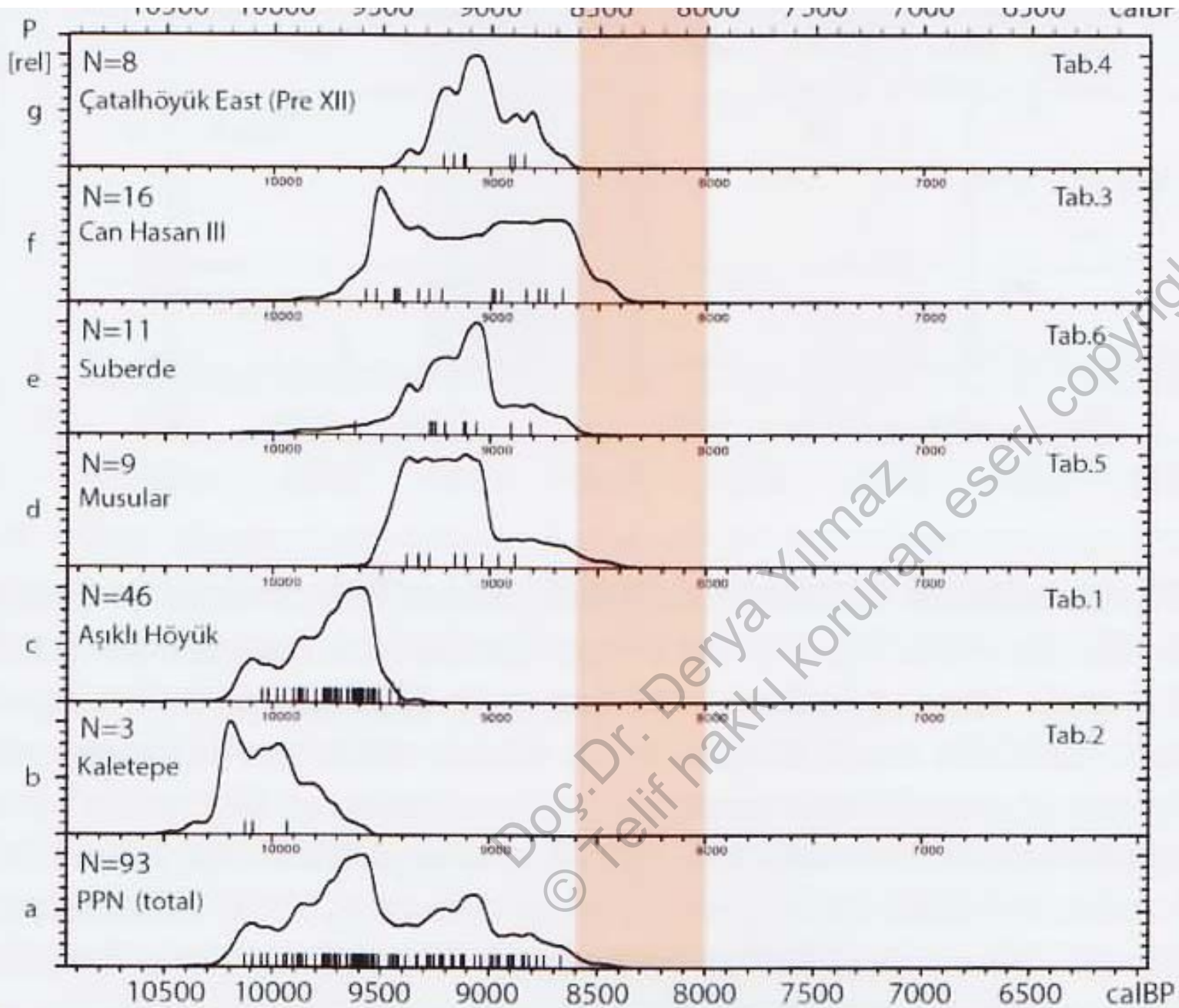
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AI QUAD CAMERA

- Anatolian climate is influenced by tropical air masses from South and West and by polar airstreams from the North, bringing minimum rainfall in the Summer and maximum precipitation in the Winter months.
- In the Winter Mediterranean Lows bring moist air masses from the South (Mediterranean) and West (Atlantic). Further, Anatolian winters are influenced by continental polar air from the North (Siberian High) which prolonged can trigger extreme cold snaps with severe frost and temperatures below minus 10 °C.



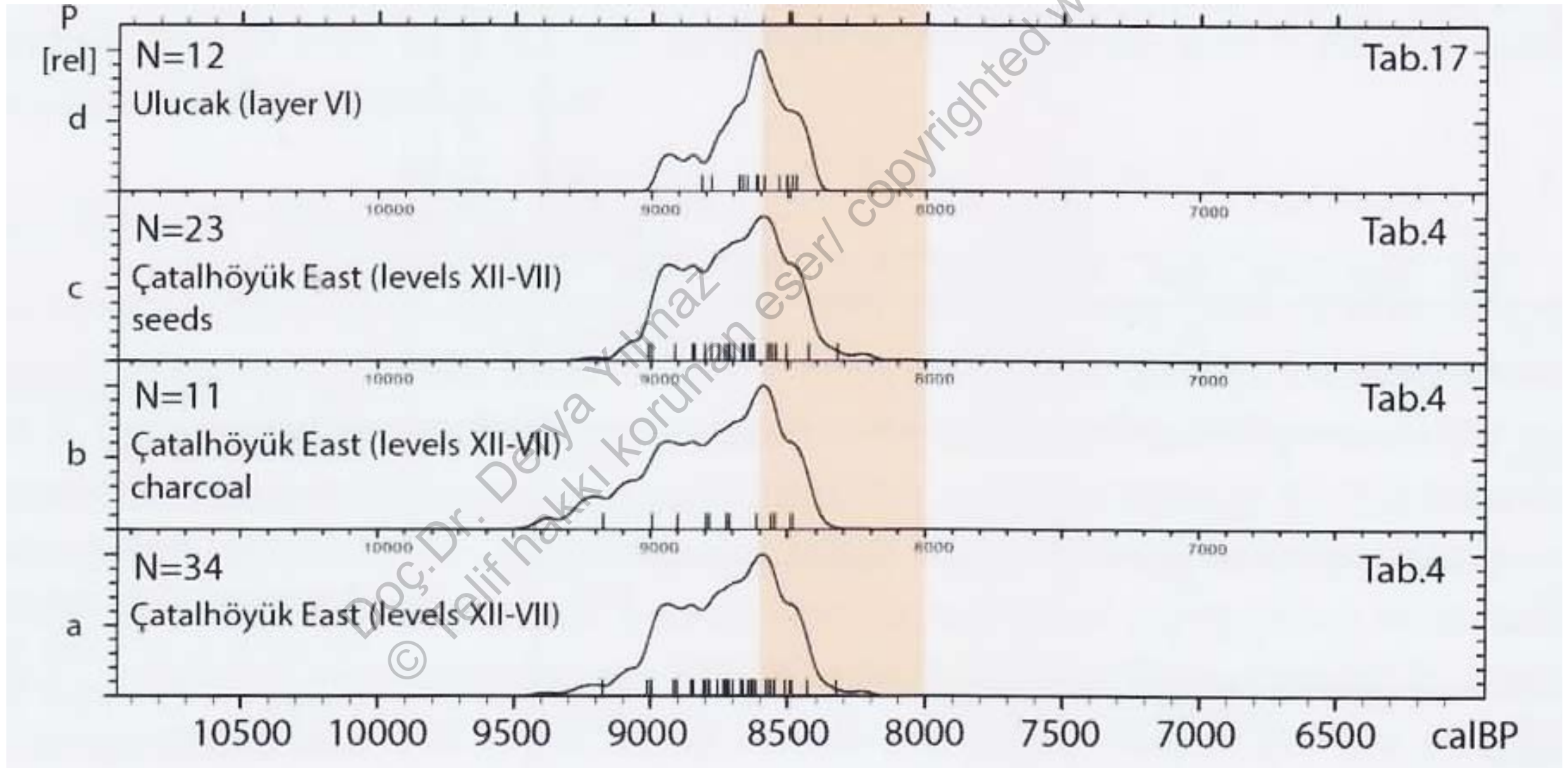
- Carbon dating is used to determine the age of biological artifacts up to 50,000 years old. This technique is widely used on recent artifacts, but educators and students alike should note that this technique will not work on older fossils (like those of the dinosaurs alleged to be millions of years old). This technique is not restricted to bones; it can also be used on cloth, wood and plant fibers.

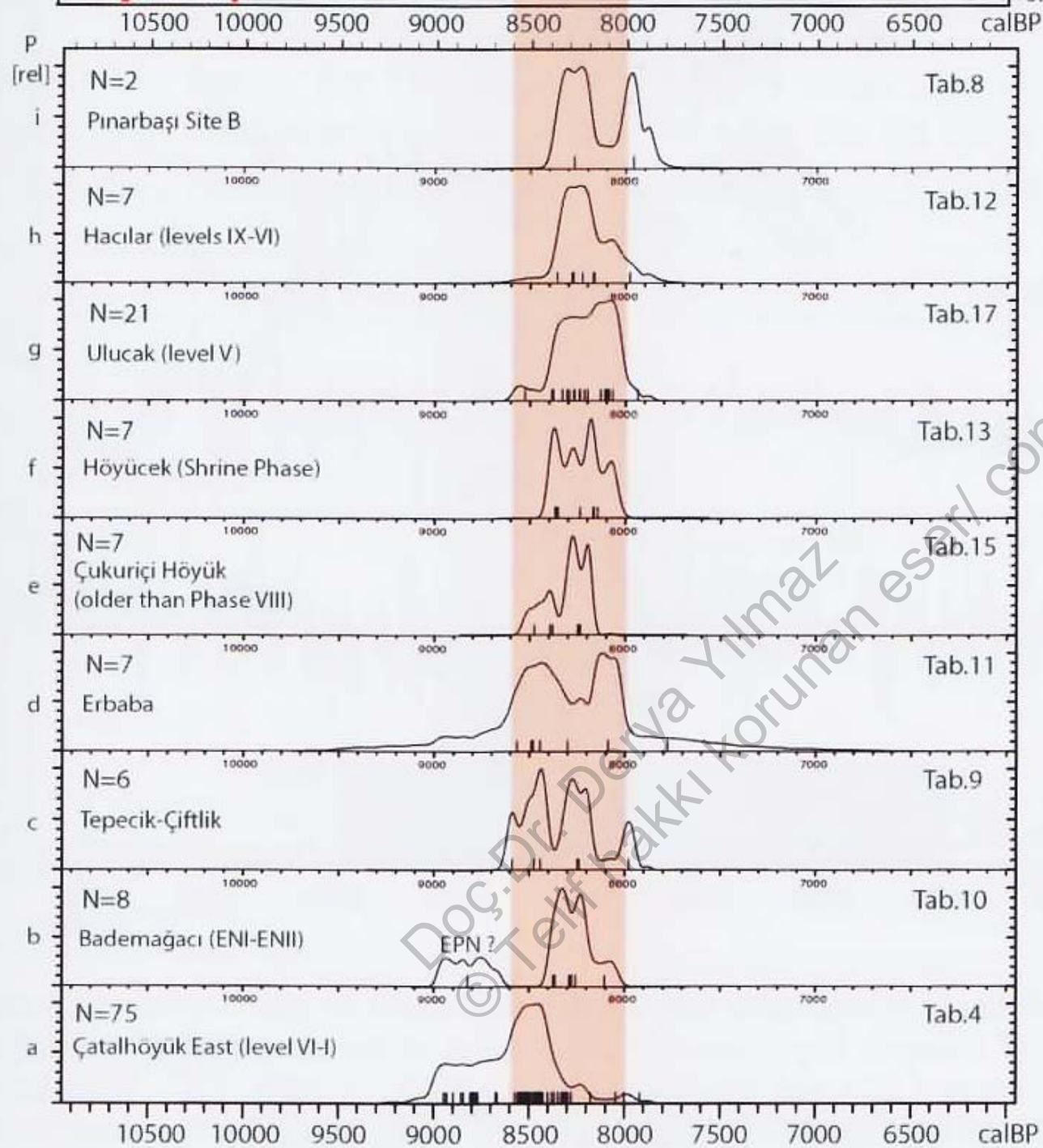
ABSOLUTE CHRONOLOGIES



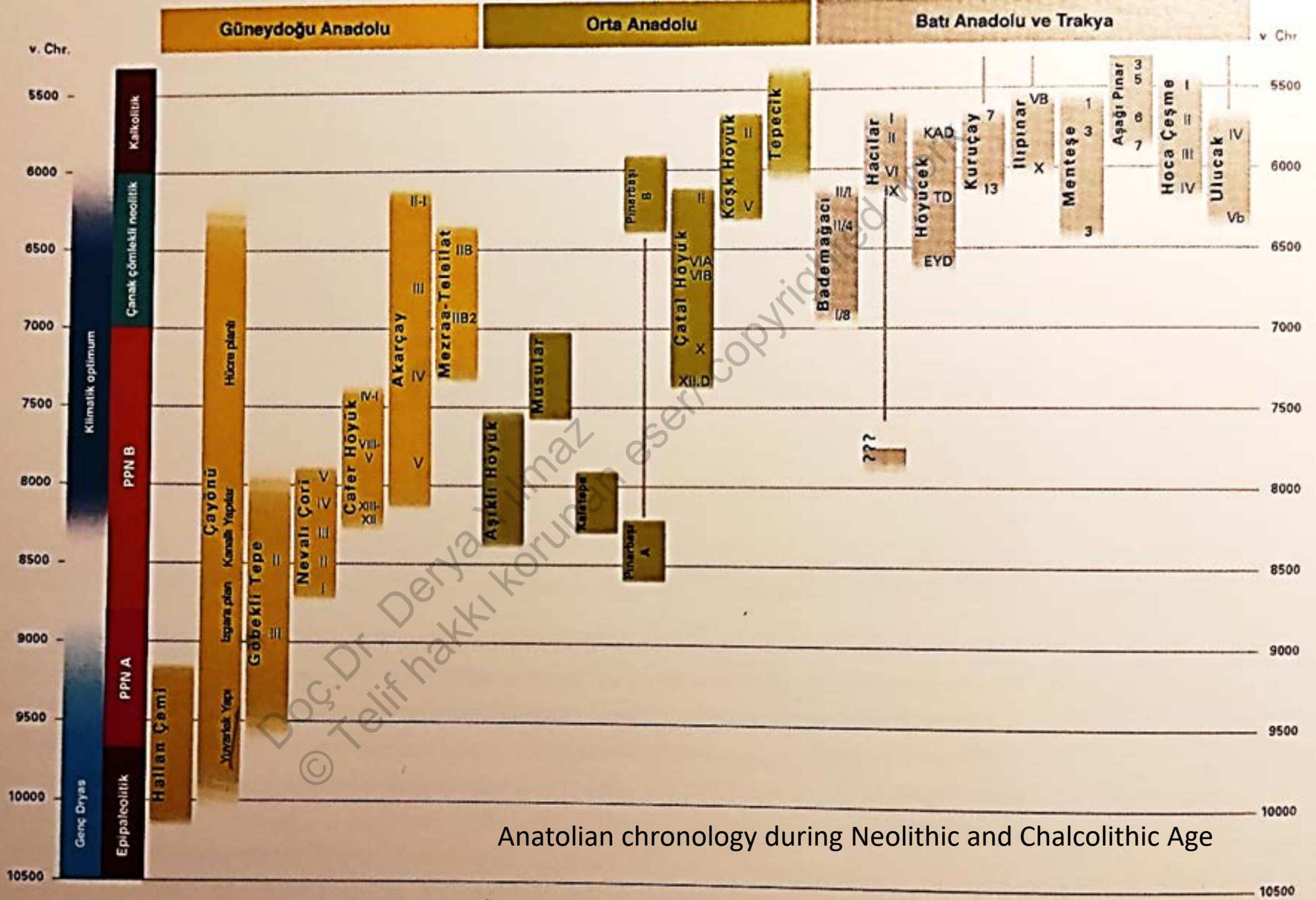
Pre-Pottery
Neolithic (PPN), c.
10.200-9000 cal.
BP

Early Pottery Neolithic (EPN) c. 9000-8600 cal. BP



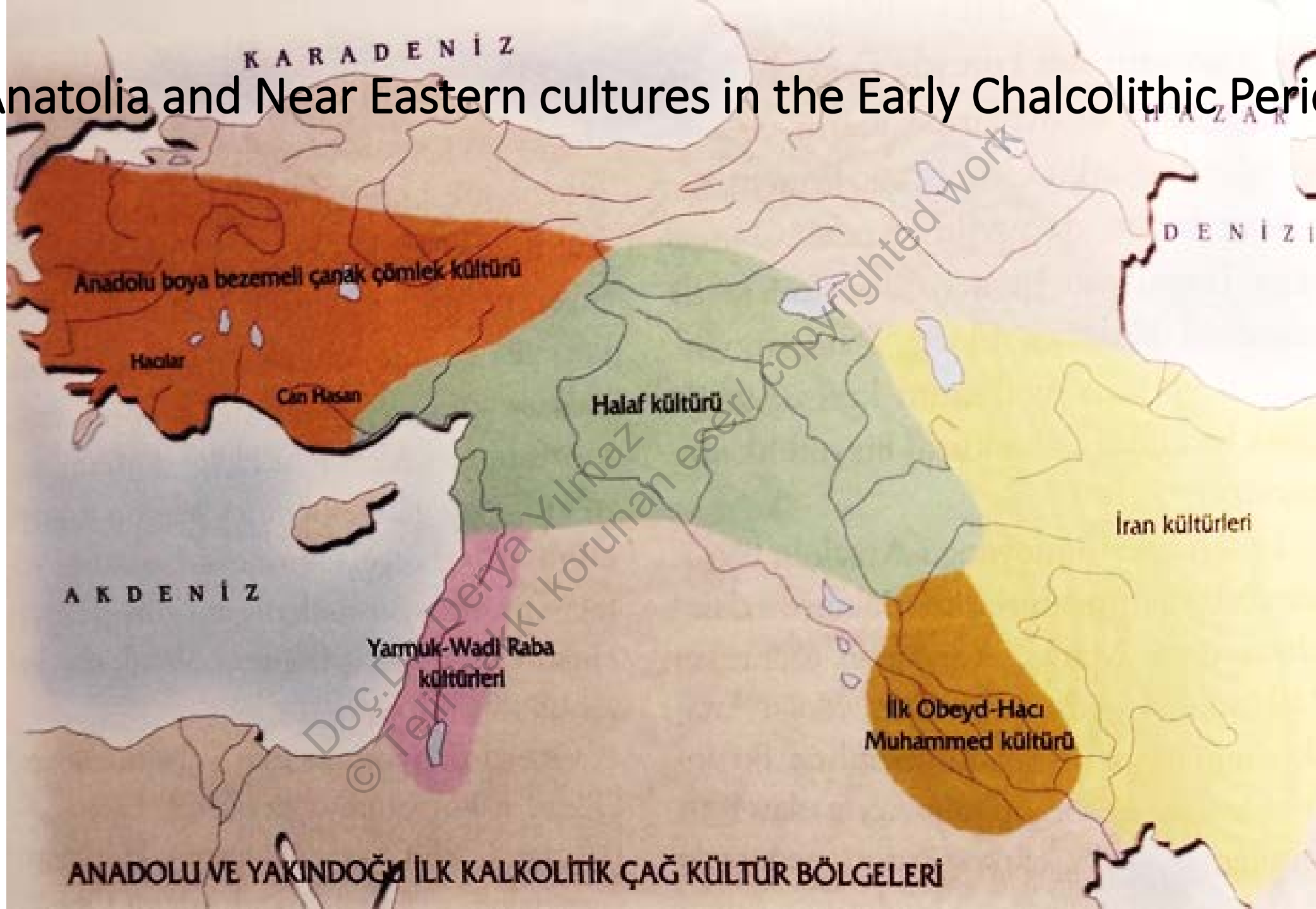


Late Neolithic
(LN) c. 8600-
8000 cal. BP



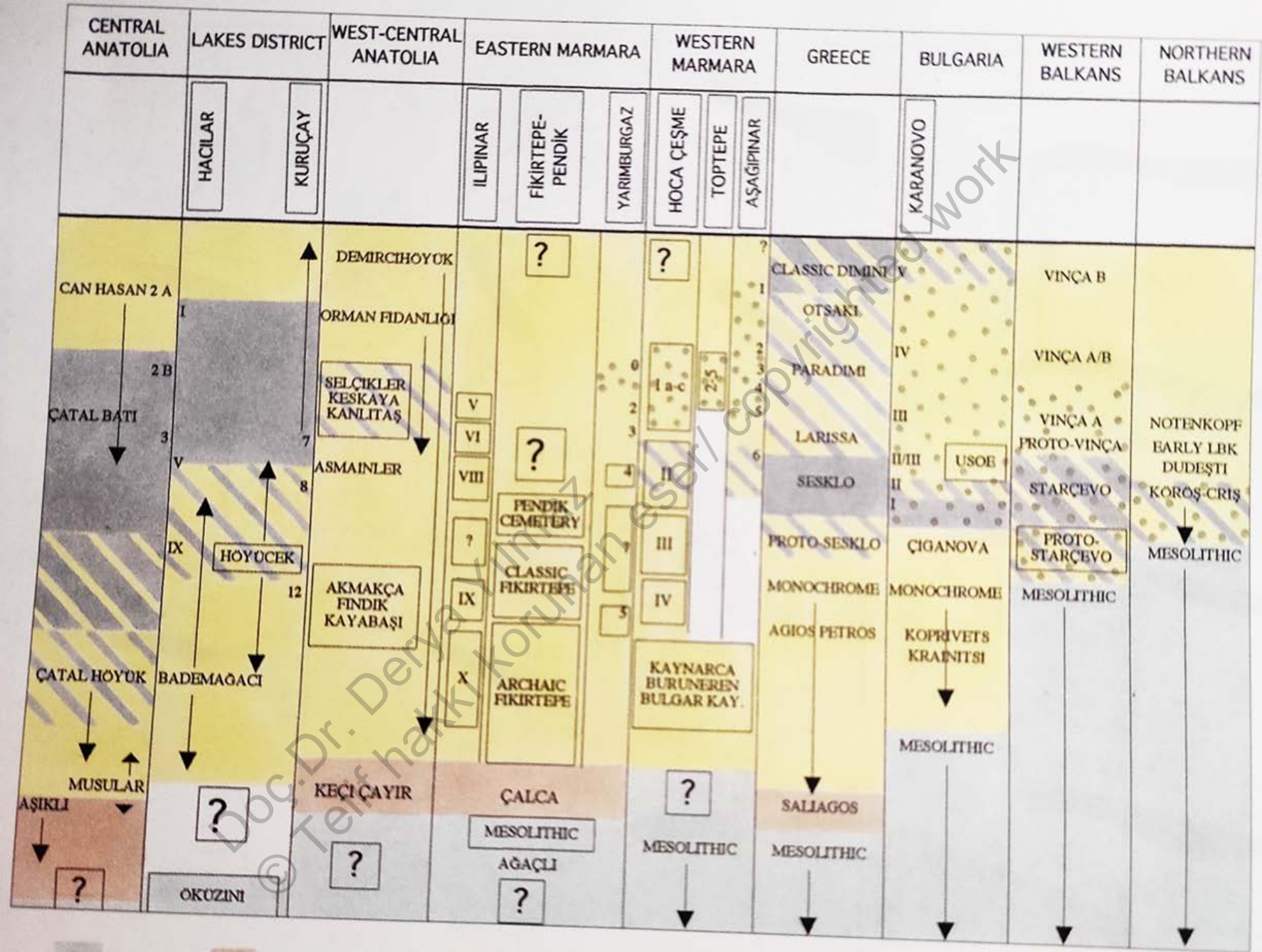
Anatolian chronology during Neolithic and Chalcolithic Age

Anatolia and Near Eastern cultures in the Early Chalcolithic Period



Anatolia and Near Eastern cultures in the Middle Chalcolithic Period





Selected Bibliography

Braidwood, R.J., 1990, **Tarihöncesi İnsan**, Arkeoloji ve Sanat Yayınları, İstanbul.

Clare,L.; Weninger, B. 2015, «The Dispersal of Neolithic Lifeways: Absolute Chronology and Rapid Climate Change in Central and West Anatolia», **The Neolithic in Turkey 10500-5200 BC: Environment, Settlement, Flora, Fauna, Dating, Symbols of Belief, with views from North, South, East and West**, Edt. By M. Özdoğan, N. Başgelen, P. Kuniholm, Archaeology&Art Publication, İstanbul: 1-65. * **I will give pdf**

Eriş, K.K., Çağatay, M.N., Akçer, S. *et al.* 2011, «Late glacial to Holocene sea-level changes in the Sea of Marmara: new evidence from high-resolution seismics and core studies», **Geo-Marine Letters** **31**, 1–18 <https://doi.org/10.1007/s00367-010-0211-1> * **I will give pdf**

Başgelen, N. (Edt.), 2007, **12.000 Yıl Önce « Uygarlığın Anadolu'dan Avrupa'ya Yolculuğunun Başlangıcı» Neolitik Dönem**, Yapı Kredi Vedat Nedim Tör Müzesi sergi kitabı, Kültür ve turizm Bakanlığı, Yapı Kredi Kültür Sanat Yayıncılık, İstanbul.

Özdoğan, M., 1997, « Anatolia from the last glacial maximum to the Holocene climatic optimum : cultural formations and the impact of the environmental setting», **Paléorient** , Vol. 23, No. 2, pp. 25-38. [from J-stor](#) * **I will give pdf**

Özdoğan, M. 1999, **Neolithic in Turkey The cradle of Civilization New Discoveries**, Edt. By. M. Özdoğan, N. Başgelen, Arkeoloji ve Sanat Yayınları, İstanbul.