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PALEOBIOGEOGRAPHIC AND ECOLOGICAL CONTEXT OF EARLY HUMAN DISPERSALS IN WESTERN EURASIA

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Early human dispersals from Africa are often regarded in the context of ecological belonging of archaic *Homo* to the carnivore guild (as a scavenger) and its commensalistic relationship with saber-toothed cats Megantereon and Homotherium. The scavenging hypothesis meets several contradictions: the hominid eco-physiology is ill-adapted for the scavenger ecological niche because of limited sense of smell capacities that makes hominids poor competitors with carnivorans, and the specific physiology of thermoregulation (sweating) that exposes hominid presence to ambushing saber-toothed cats. Scavenger niche capacity depends of ecosystem productivity, which normally is declining from low to high latitudes and thus limits diversity and dispersal of scavengers in boreal latitudes. Therefore, new scavenging opportunities for hominids in higher latitudes of Eurasia sound doubtful. The earliest human fossil findings in Western Eurasia are located south of the Alpine-Himalayan Mountain Belt (AMB), which also acted as a biogeographic border during Pliocene and Pleistocene for several herbivorous and mostly omnivorous mammal systematic groups and species (Theropithecus, Mitilanotherium, Cervus nestii, Ursus thibetanus, etc.). In this case, Homo ex gr. erectus differs from ubiquitous carnivorans. The sharp annual seasonality that characterized Early Pleistocene climate of Western Eurasia in the north of AMB could be a limiting factor for human dispersal. Paradoxically, hominine dispersal advanced to the north in Western Europe after climate deterioration ca. 1.0 Ma. The use of fire could be among the factors that permitted to overcome AMB. The Movius Line, which demonstrates a technological difference between the early prehistoric tool technologies in East and West of the Old World and generally coincides with AMB with exception of its western part, is an indirect evidence of the early Middle Pleistocene hominine dispersal in Western Eurasia. The area of human distribution in Western Europe during early Middle Pleistocene also acted as natural zoogeographic refugia for some Villafranchian holdovers, mostly cervids.

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