

Abstracts  
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## At the cross-road of Mediterranean Europe. The human peopling of the Great Adriatic-Po Region during the Last Glacial Maximum

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Since the time of the Middle Pleistocene Revolution, the increased magnitude of glacial cycles and unstable climatic conditions deeply influenced human environment adaptive strategies and lifestyle. This occurred also during the Upper Palaeolithic, when hunter-gatherers experienced dramatic turnovers, as attested by discontinuous biological and archaeological records [1, 2]. The timing and pattern of multiscalar shifts that occurred from the Last Glacial Maximum (LGM; 30-16.5 ka sensu [3]) to the onset of the Late Glacial (LG) interstadial are considered to be among the most important events. This period was characterized by large-scale climatic oscillations triggered by changes in insolation degree that led to the build-up of boreal ice sheets and emersion of major continental shelves along the coast of North, Southwest and South Europe as a consequence of the lowering of sea level up to -120 m a.s.l. [3]. Human groups reacted to ecological turnovers by increasing their resilience, as shown by a large array of evidence revealed by sites persisting at middle latitudes. Anyhow, also large migrations took place through the corridors connecting European and Mediterranean regions, and pronounced changes in demography and behaviour occurred, resulting in the synchronic and diachronic development of a variety of archaeological cultures in different regions and at different times [1]. Lastly, these events deeply contributed to shaping our present genetic ancestry [4]. In Mediterranean Europe, the combination of the sea-level dropping with the extension of alpine glaciers contributed to the aggradation of the Great Po Plain (GPP) in the Great Adriatic-Po Region (GAPR). The GPP is largely known as the largest alluvial plain ever existed which connected the Italian and Balkan Peninsulæ. Geomorphological, sedimentological and ecological processes led to the persistence of boreal forests in moist habitats on stable areas and wetland margins, while open woodlands, steppes and semideserts occupied the uplands and part of the plain, where tree cover persisted until the LG. This offered suitable environmental conditions for several mammal species, while large part of their former distribution range, in Central and Northern Europe, was covered by ice sheets. South of the Alps, the more favourable environmental conditions also allowed the survival and delayed extinction of important consumers like cave bears. The presence of a rich mammal fauna in this southern glacial refugia provided subsistence to hunters-gatherers groups and enhanced their capability to maintain large-scale networks. Gravettian and Epigravettian hunter-gatherer groups inhabited the GPP, although their presence and settlement dynamics at the margins and across this region have raised questions for decades. Actually, a handful of archaeological sites outlines a patchy record of the peopling of the plain itself. Nonetheless, evidence of contacts across this area is provided by the exploitation of common chert sources and by stylistic and technical similarities in the lithic industries documented in northern and central-eastern Italy, Slovenia, Istria, and Dalmatia. Thanks to its peculiar geographic setting and climatic and ecological variability, GAPR is supposed to have represented a paradigmatic case which supported vast movements of populations [5]. Settlement dynamics, mobility, subsistence and symbolic thought as reflected by multidisciplinary data are here reviewed to assess the role of human adaptive flexibility and population turnover as recorded by genetic discontinuity (Fu et al., 2016). As an alternative the possibility of a concurrence of both factors in drawing distinct biological and cultural ancestries is also explored.

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