

## Anatolian travels: analysing communication routes in the late prehistory of Asia Minor

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My doctoral project, sponsored by two BIAA grants between the years 2010 and 2011, aims at defining broad patterns of movement in Asia Minor during the Early Bronze Age (EBA), by reconstructing the paths of major communication routes in this period. If successful, this research would be an important step towards the reconstruction of an EBA human geography, and would further be helpful to understand the dynamics of exchange and interaction in a wider sense. But what evidence do we have for later prehistoric roads?

During the EBA, the existence of established communication routes (i.e. non-maintained but well-known tracks connecting major settlements) seems beyond doubt, not only because there was an abundant flow of objects, raw materials and technologies travelling long distances within and without Anatolia, but also because there is both archaeological and textual evidence for slightly later periods or adjacent regions. In neighbouring Upper Mesopotamia, a careful analysis of satellite imagery uncovered a complex network of dirt roads (the so-called hollow ways) already existing during the third millennium BC. From second millennium BC cuneiform tablets, we also know that Assyrian merchants trading into Anatolia mention bridges, ferries, inns and guarded passes in their travel accounts, while a little later Hittite officials refer to roads while describing military campaigns or religious processions across the country.

So far, however, there is little archaeological evidence for pre-Classical roads in Asia Minor, with the exception of small stretches of the Persian Royal Way; since their Bronze Age antecedents were most probably not paved, they would be difficult to detect without targeted surveys, especially because the several metres of sediments deposited during the last 3,000–4,000 years in all major valleys would have obliterated most of their traces.

Despite the lack of direct proof, it seems nevertheless possible to use later archaeological remains as a proxy to reconstruct EBA routes; in fact, many scholars suggest that the main arteries of the Roman network, studied in detail since the early 20th century thanks to the large corpus of texts and extant monuments (bridges, milestones, paved roads, way stations), may have followed older non-maintained structures and be the end result of a process of road genesis started much earlier.

There are two main rationales to support this reasoning: one is that the ruggedness of the Anatolian landscape, with its high mountain ranges and wide rivers with limited crossing points, effectively funnels travel into a narrow range of ‘corridors of movement’. The other is that the ‘höyük culture’, typical of the sedentary Anatolian communities, created a settlement continuity on the same spot for hundreds of years, with larger sites experiencing an almost uninterrupted occupation sequence from late prehistory until today. Since the location of main centres (the ‘network hubs’) is relatively stable across time, it can be expected that the communication lines between them have also changed little.

To test this hypothesis, I assembled a set of archaeological monuments from different periods that share a close link with communication routes: the major Bronze Age sites, the Hittite rock-cut monuments, the main Classical towns and the medieval caravanserais. I then compared their positions with that of the Roman road network, in order to understand the degree of continuity in the use of the same routes through time and locate the possible variations in the system.

In turn, I analysed the paths of the Roman roads with a computer-simulated model of landscape affordances (GIS least-cost analysis) to understand how closely they follow the constraints posed by the terrain and whether engineering improvements applied in historical periods could have substantially modified their course.

Preliminary results seem to indicate a high degree of spatial correlation between the different classes of archaeological monuments under analysis, and that overall the main Roman communication arteries follow the path of substantially older tracks. An important exception is represented by the northeastern portion of the plateau, where the location of most Bronze Age centres (in the highlands) diverges significantly from that of Roman towns and roads (in the plains). This pattern is possibly related to a shift in economic strategies, in which the mobile herding communities living in the highlands progressively lost importance to their farming counterparts during Classical times.

