The last traces. Historical images and the reconstruction of lost archaeological landscapes

Nehemie Strupler

1The McDonald Institute for Archaeological Research, University of Cambridge, Cambridge, UK
2Archaeological Unit, French Institute for Anatolian Studies, Istanbul, Turkey

Since one century, aerial photography has a successful track record of detecting and mapping archaeological traces of human activity in the landscape. The tools and procedures evolved gradually, following technological and methodological advancements of earth remote sensing. It started with the use of crop marks and other proxies such as soil, shadow or snow to distinguish observable differences caused by subsurface archaeological remains, locating buried archaeological features. Beside these data gathered by archaeologists, the declassification at the end of the last century of millions of photographs (such as the CORONA, ARGON or LANYARD US satellite programs as well as other non-US military programs) has resulted in a vast archive.

Historical images represent a fundamental tool in archaeological research, particularly for Western Asia. They document nowadays inaccessible landscapes that has been recovered by modern human infrastructure (i.e. building, roads) or heavily modified (notably by the increasing use of mechanized agricultural methods), erasing fragile traces from thousands of years ago. Only through the detailed analysis of archives from the 20th century, is it possible to recover archaeological evidences and paleo-environmental features.

The traditional workflow uses historical images as a first step prior to archaeological fieldwork, asserting and dating detected features. One main problem arises when ground truthing of these detected features is not possible anymore. How trustful are the detections and how to date them? My poster/talk will present sources as well as state-of-the-art analysis of historical aerial images based on the Scaling Territories Project (SCATTER). The combined use of historical maps, aerial images and ground acquired archaeological data from nearby field-walking prospections enables to reconstruct the paleo-landscapes and the location of (presumed and know lost) settlements in Central Anatolia.