Landscape Archaeology between Art and Science

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2.1 Figure 3. Aerial photograph of the apron of the opencast pit Jänschwalde with archaeological longitudinal sections and ground plans of charcoal piles (photo: H. Rösler).
2.2 Figure 4. Coltano and Portus Pisanus area shown in the lower Arno Valley in a detail of the geomorphological map of Mazzanti (1994). The numbers identify geomorphological units (Mazzanti, 1994) and the colored symbols identify archaeological sites (Pasquinucci, 1994) dated to prehistory (black), archaic and classical period (red), middle ages (violet), and modern times (green).
2.3 Figure 5. High resolution pollen diagram KRM 0.30 – 2.24 m (simplified, only selected pollen types/taxa).

2.4 Figure 1. Overview study area with geoarchaeological and archaeological sites entered so far.
Figure 2. Cartographic analysis of the 16th-century town plan of Brussels by Jacob of Deventer, realized in a scale of approximately 1:8600 (© Royal Library of Belgium, Brussels).

From left to right are shown respectively the open spaces (36%), the road network, watercourses and green spaces (34%) and buildings (30%).

Figure 3: a) Soil profile of Dark Earth on the site of Hôtel de Lalain-Hoogstraeten; b) Graph showing enhanced phosphorus levels for the Dark Earth units (US 7338 and US 7321); c) Granulometric data showing the high similarity between the units US 7338 and US 7321 and the natural soil (US 7340), suggesting they share the same matrix; d) Thin section micrograph showing phosphorus-rich excrement proving the addition of manure (plain polarised light); e) Thin section micrograph showing a textural pedofeature enabling its identification as former at least temporary unprotected topsoil (plain polarised light); f) Thin section micrograph showing dendritic phytoliths (plain polarised light).
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5.1 Figure 3. Example of least cost path calculations using different specifications of movement costs, in a study area in Cappadocia, Turkey. Adapted from Verhagen & Polia (2010).

5.2 Figure 6. Localisation of sites in relation with ecological floors, extracted from GIS.

5.2 Figure 7. Example of visibility analyses between two or more sites, extracted from GIS.
The schematic drawing above shows the different floors of the Andes and their ecological resources. It also indicates the barter system in which llamas or mule caravans are used to transport products between zones. Archaeological sites of the Formative period are located in the lowlands and the fertile ecological floor (Yunga). Villages of the Late Intermediate are located in the highlands (Suní, Puna and top of the Quechua zone).
5.2 Figure 8. Visibility map based on a DTM, extracted from GIS.

5.3 Figure 2. Example of viewshed: shade indicates the non-visible areas within the fifteen km radius around the analysed site, in this case Singilia Barba. Similar visibility analyses were carried out for each of the sites included in the project, as well as for a random distribution of sites, in order to compare them statistically.
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Figure 5. Map showing both the random and archaeological distributions of sites during the Roman Republican period in the Antequera Depression, combined with a table showing the different categories of relative height, and the number of sites counted in each category. Both distributions were employed for investigating the randomness/relationship of the Republican settlement pattern with regard to visibility and relative height.
Figure 1. Data processing steps for the generation of the Local Relief Model (LRM). See text for the description of data processing. The image series shows a group of burial mounds in the Schönbuch area.

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5.6 Figure 4. Znióvárálja, location of the old layout and uses of land. The photos display remaining elements: walls, fences, ruins of an edifice, a meadow and some old trees.
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5.7 Figure 4. Areas with concentrations of stone piles and the remains of stone, rock-cut, or ditch and mound field boundaries in the forest are outlined in red. Almost a quarter of the modern forest contains evidence of organised field systems predating the current, and long established, system of parcels. Image: R. Opitz, C. Fruchart, Lieppec / MSHE C.N. Ledoux
5.7 Figure 8. The ‘feature set’ of limekiln, quarry, claypit and charcoal burning platform, grouped together inside a doline, occurs frequently in the Forêt de Chailluz. a: limekiln; b: claypit; c: charcoal burning platform; d: quarry. Image: R. Opitz, C. Fruchart, Lieppec / MSHE C.N. Ledoux

5.7 Figure 11. Multiple visualisations of the same data are used to explore relationships between feature, site, landscape and distribution. (a) Air photo of the forested location of the limekiln. (b) Hillshaded DTM of the limekiln. (c) Photo of the remains of the limekiln taken from about 4M away. (d) Yellow dots show the distribution of lime kilns in the local area. (e) The limekiln’s appearance in the point cloud, with points coloured by elevation. (f) A profile section through a limekiln situated in the bottom of a doline. Image: R. Opitz, C. Fruchart, Lieppec / MSHE C.N. Ledoux
5.8 Figure 7. Soil classification in the area around the ‘Fürstensitz’ Heuneburg (Baden-Württemberg). – Fischer et al. 2010.

5.8 Figure 8. Slope classification in the area around the ‘Fürstensitz’ Heuneburg (Baden-Württemberg). The dark brown slopes indicate areas with more than 10 degrees of slope which are not suitable for ploughing. – DEM D-25 (25 m grid), © German Federal Office for Cartography and Geodesy 2004.
5.8 Figure 9. Combined classification of soil and slope values in the area around the 'Fürstensitz' Heuneburg (Baden-Württemberg). – Fischer et al. 2010.

5.8 Figure 10. Bronze Age and Iron Age settlement sites with archaeobotanical investigations in Baden-Württemberg. The steadiness of types of carbonised grain is represented in the diagrams for different periods: BZ = Bronze Age, BZ3 = Late Bronze Age/Urñfield Culture, HA = Early Iron Age/Hallstatt Period, HaLa = Early Iron Age/Hallstatt-Latène Period, Lat = Early Iron Age/Early Latène Period, Laz/z = Late Iron Age/Middle & Late Latène Period. – Fischer et al. 2010.
Figure 4. Ammaia. 3D reconstruction of the ‘buried’ structures of the forum detected with the GPR survey (elaboration by L. Verdonck).

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6.3 Figure 2. One of several late medieval carvings on the wooden rood screen at Sancreed church, west Cornwall, that depict individuals facing, like the Roman god Janus, and like increasing numbers of landscape archaeologists, both forward and back, looking into the past and the future. In this case the figure, a triciput, is also in the present looking out and thus, like us, responsible for bridging the two.

6.3 Figure 4. The Cornwall and Devon HLCs combined and simplified to create a regionalised characterisation. Patterns in and relationships between the several phases of enclosed land, rough ground and settlement suggest numerous regional and more local landscape archaeology research issues. Closer examination of the detail of each parent HLC would identify many more. (Derived from material that is the copyright of Cornwall Council and Devon County Council.)