

Shaping Cultural Landscapes and Movement Dynamics: Rural Lives beyond the Walls

SETinSTONE workshop
Leiden, November 1st 2019



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Workshop Program

12.00-1.15 Lunch for speakers

1.15-1.30 Welcome

1.30-2.00 Ann Brysbaert and Irimi Vikatou: The “arteries” of the Mycenaean heartland revisited

2.00-2.30 Kalliopi Efkleidou: The hinterlands: Building on historical maps to approach the invisible limits of settlements' hinterlands in Mycenaean northern Argolis

2.30-3.00 Philip Verhagen: Reconstructing transport networks using least-cost paths and network analysis techniques

3.00-3.30 Stefan Muller: The death in the Argolid: necropolises and burial gifts in the Argive Plain during the Mycenaean Period

3.30-4.15 discussion and coffee

4.30-5.00 Riia Timonen: Fields of gold: the agricultural landscape of the Mycenaean Argive Plain, Greece

5:00-5.30 Victor Klinkenberg: Spreading up the slope – terracing around the Argive Plain

5.30-6.00 Kevin Walsh: An Incipient Anthropocene: Human-Dominated High Altitude Landscapes in Mediterranean Mountain Ranges during the Bronze Age

6.00-6.30 Discussion

7.30 Workshop dinner Surakarta

Workshop Abstract

Ever since the origins and spread of agriculture during the Neolithic, the majority of human populations has lived in rural environments. In the Mediterranean, about two centuries of excavation projects focused mainly on urban contexts, and these commonly yielded abundant, very visible and mostly inorganic remains ranging from architecture to pottery. The paucity of rural settlement remains in some regions should, therefore, not be equated with a marginal role of the people who inhabited them. As the main source of agricultural produce, rural landscapes and their populace have often formed the backbone of early states. To understand how these people lived and worked, it is important to go beyond the scarce material evidence and investigate landscapes, archaeobotanical finds, animal remains, site distribution patterns, mobility/transport patterns, rural-based infrastructure and, where available, textual sources.

During the Mycenaean period in the Greek Argolid, large citadels were built and monumental tombs were erected, illustrating the power and prestige of the elites. In the context of the SETinSTONE project based at Leiden University (ERC consolidator project 2015-2020), also the agricultural hinterlands of these palatial centres are investigated in order to find out in how far these regions and their populations could sustain the long-term and large-scale building activities alongside their own daily activities, and how, in turn, large construction activities may have impacted on the landscape and its people. Archaeological research here has also focused mainly on the larger centres, and very few rural sites are thoroughly excavated while some pockets have been investigated by surveys. Multi-layered data and evidence (see above) illuminate the many interconnected networks of human and resource interactions that impacted on people's day-to-day activities, first, but also on the economic, cultural and socio-political situations over time in these regions. As such, the overall project yields a novel rural perspective on the area, the focus of this workshop, next to an interdisciplinary architectural perspective (see Dec 2016 SiS workshop).

Of equal importance is the link between the rural 'hinterland' as well as the focal points of both citadels and cemeteries because *all* played a crucial role in understanding how Mycenaean polities functioned in the period between 1600-1100 BC at several socially interconnected levels. While interested in rural areas and its people we equally investigate how all parties interacted with others in and beyond their regions, how they communicated across distances, both physical and social, and how they moved within this landscape. These bottom-up approaches aim to dissolve a "Monolithic" Mycenaean Society and the elite-labour/farmer dichotomy because the many social groups co-depend on each other, albeit perhaps in unequal measure.

Based on presentations by invited speakers, this workshop aims to have open discussions on a range of topics. We welcome contributions, also beyond the strict Aegean, on innovative methods to investigate rural populations and ancient agricultural systems around the Mediterranean, any aspects of the lives of ancient agriculturalists, and their interactions with both their land and their societies at large (settlements, centres of power, etc.). We are particularly interested in the following topics, both from a practical and/or a theoretical perspective: Landscape reconstructions, Crop production, animal husbandry, subsistence agriculture, Rural settlement patterns and small sites, Mobility, migration, transportation and infrastructure, and storage, Land use strategies and carrying capacities, resilience strategies, Ethnoarchaeological evidence of agricultural strategies.

Abstracts

The “arteries” of the Mycenaean heartland revisited

Ann Brysbaert and Irene Vikatou

Leiden University, Faculty of Archaeology

Few landscapes have been so intensively modified over time than that of the Argolid (Greece) since at least the Early Bronze Age, and certainly in the Mycenaean Late Bronze Age (c. 1600-1100 BCE). Mobility and access to resources, for agricultural and building activities, were crucial factors in daily life. We investigate and assess the usability of past infrastructure and routes to transport resources between the region’s major hubs. During our walks in this landscape and in line with the ERC request for Open Access, we went one step further, while checking published remains, by employing devices and Free and open- source software (FOSS). The known eight M-highways have been either walked or driven, and are plotted with waypoints onto FOSS 2D and 3D maps. This helps to understand the relationship between these roads themselves, their link to quarries, mortuary locales, and, where known, settlements, citadels, and other marks in the landscape. We compare these road tracks with their potential modelled LCPs and also perform labour cost analysis on all of these. Being fully aware that many more local and less impressive roads were employed by a variety of people during the Mycenaean period, we focus specifically on the M-highways as these are best preserved and thus easier to track. Dating of these is, by any means, a point of discussion that will be highlighted.

The hinterlands: Building on historical maps to approach the invisible limits of settlements' hinterlands in Mycenaean northern Argolis

Kalliopi Efkleidou

Aristotle University of Thessaloniki

Studies of Mycenaean Mainland Greece and especially of northern Argolid in the Peloponnese have focused to date on the abundant funerary and the limited settlement remains. Little attention, however, has been paid to the hinterlands of both palatial and simple settlements, even though there has been great perplexity as to the territorial boundaries of the many and close to each other palaces (Mycenae, Tiryns, Midea).

Setting aside the political dimensions of the territorial divisions of Mycenaean Argolid, it is argued that we should try first to understand the extents of the settlements' hinterlands, that is the space around a settlement that is considered vital for sustaining its existence and ways of living. Aspects of a hinterland could involve the extent of the area that is considered as necessary or permissible for one to build a tomb or the extent of the lands that was considered cultivable by each community. Site catchment analysis, Thiessen polygons and other methods of territorial modeling have been occasionally used to address this issue.

This paper, however, proposes that we also take into consideration alternative sources of information, and more specifically the cadastral maps of the area drafted during the second Venetian rule of the Peloponnese (1687-1715). The venetian maps (*disegno*) show with significant topographical accuracy the limits of each settlement's territory (basically its agricultural hinterland) and are followed by a cadaster (*catastico*). Among the information recorded in these cadasters is the extent of cultivated and cultivable land within each settlement's territory.

Based on the venetian cadastral maps of northern Argolid, I attempt then, using GIS-based analytical tools, to reconstruct the limits of cultivable lands within the territory of various settlements that continued to exist from prehistoric times until then. The results of this analysis will then be used to extrapolate information on distance and mobility between settlements and their agricultural hinterland.

As agricultural practices during the venetian period in the Peloponnese did not differ significantly from those of antiquity (almost exclusively based on cereals cultivation, pre-mechanized and pre-industrial production), the information these maps provide can be valuable for archaeologists, if viewed judiciously, and can be used as an analogy to illuminate facets of ancient farming practices and ancient spatial organization.

Reconstructing transport networks using least-cost paths and network analysis techniques

Philip Verhagen

Vrije Universiteit Amsterdam

In this paper, I will discuss methodological, theoretical and practical issues of applying network reconstruction and analysis techniques for the understanding of local transport networks in archaeology. Research into modelling of transport and movement has a long tradition in archaeology, and considerable progress has been made in understanding the implications of using computational modelling for purposes of road network reconstruction. However, the complexity of the issue implies that different approaches should be taken depending on the environmental and socio-cultural contexts involved, and on the different purposes and scales of movement and transport. I will discuss several examples from various research projects around the world to illustrate this point, and will focus in particular on the issue of validation of the models.

The death in the Argolid: necropolises and burial gifts in the Argive Plain during the Mycenaean Period

Stefan Müller

University of Heidelberg

The Argolid as one of the major centers on the Greek Mainland during the Mycenaean Period (c. 1600-1080 BC) and especially its big plain offers numerous good examples to study settlement as well as burial remains. The latter will be the focus of this presentation: chamber and tholos tombs as well as shaft graves, a few tumuli and many cist and pit graves are typical grave types in the plain during Mycenaean times. Some pithos burials, built graves as well as a very few cremations have to be added. But it is less the architecture that will be dealt with here. Instead the following issues are discussed: (1) the spatial distribution of the graves and necropolises, (2) the kind and number of burials and especially offerings and (3) the relationship between the burials grounds and the settlements (if known) and how they go together.

Excavations indicate that the Argive Plain consists of around 20 sites with one or several necropolises: bigger ones like Mycenae, Prosymna and Argos as well as smaller ones like Lerna, Kokla or Schoinochori, are represented. This presentation focusses especially on question nr. 2 (the burial gifts): only some of them can be examined thoroughly, whereas others have not received full publication (if at all!), and are therefore not included here. The sites of Prosymna, Argos and Dendra will be presented as well as the research undertaken at other sites, specifically as regards to points nr. (1) and (3) (see above).

All points of examination are carried out for each sub-phase of the Mycenaean Period (from LH I till LH IIIC and Submycenaean), so that a separate picture for each of them can be presented. In general, the focus of the research will be on chamber tombs.

Fields of gold: the agricultural landscape of the Mycenaean Argive Plain, Greece

Riia Timonen

Leiden University

The Argive Plain in the north-eastern Peloponnese is one of the most investigated areas in Aegean archaeology. Contrary to its fame from the Homeric epics and numerous architectural masterpieces like the citadels of Mycenae and Tiryns, this alluvial plain comprises a relatively small area of arable land. The aim of this paper is to investigate the agricultural landscape of the Argive Plain during the peak of its prehistoric occupation, the Late Bronze Age (ca. 1600 – 1100 BCE). The main questions are 1) how was the plain area used for agriculture (what was cultivated and where), and 2) how many people could be sustained by this production. To answer these questions, I am combining data from published faunal, botanical and mortuary studies. Over the course of their long research history, the Argive Plain sites have yielded a large amount of discipline-specific datasets, which are rarely examined together. A synthesis of such data can be an effective way to overcome some of the issues related to the scarcity of material evidence in agricultural landscapes. Furthermore, a better understanding of the characteristics of rural landscapes can offer new insights to the land use dynamics of the Mycenaeans in areas where textual evidence is absent. This is particularly relevant for the Argive Plain, where multiple palatial settlements shared a limited amount of land with each other, as well with small-scale landowners.

Spreading up the slope – terracing around the Argive Plain.

Victor Klinkenberg

Leiden University

The Plain of Argos in Greece is known as one of the central areas of Mycenaean culture during the Late Bronze Age (ca. 1600 – 1100 BCE). While most earlier research has focused on the citadel sites and other expressions of power in this plain, the SETinSTONE project also investigates the landscape surrounding these urbanized centres. A major research question related to the area is how many people could be sustained through local agriculture. Answering this question requires knowledge of the crop types, average yield and the extent of the cultivated land. The latter is the subject of this paper.

The Argive Plain consists of a wide, flat plain which is suitable for agriculture. In addition, the surrounding foothills offered room to expand through terracing. Examples of Mycenaean land management in the form of road construction, waterworks and extensive terracing are well known throughout Greece. The precise dating of terraces, however, remains notoriously difficult as period-specific features are lacking. The reconstruction of the extent of terracing, and with it the expansion of agricultural areas, is therefore also problematic. Some factors, such as slope degree, soil type and sunlight exposure, may however help to set the confines of terracing, and define the maximal extent of this cultural landscape. In this paper, these factors are discussed in relation to known Mycenaean terraces and are incorporated in a GIS analysis of the Argive Plain to provide an estimation of the location and extent of terracing in this area.

An Incipient Anthropocene: Human-Dominated High Altitude Landscapes in Mediterranean Mountain Ranges during the Bronze Age

Kevin Walsh, University of York ¹

With contributions from Palmisano, A.², Berger, J_F³, Ghilardi, M⁴, Meyer, P. ¹ Garcés Pastor, S.⁵, Roberts, N.⁶, Woodbridge, J.⁶, Finné, M.⁷

During the European Bronze Age, many landscapes underwent significant changes, in some ways, as significant as those that took place during the initial transition to farming. Our period starts with the arrival of new populations in many parts of Europe and a complex phase of climate change centred on 4.2 BP. The end of the Bronze Age (c. 2.9 BP) was also situated within a phase of complex climate change. Here, I will not argue that the beginning and the end of the Bronze Age were in any way a consequence of climatic processes, but rather that this period witnessed the emergence of novel human-environment interactions and associated economic activities that intersected with complex climatic processes. These interactions, or this new socio-ecological configuration, resulted in a range of environmental responses.

An ideal environment type for the study of these changes are mountains from across the Mediterranean. The high-altitude zones (above c. 1500 m) in mountainous landscapes are susceptible to both climatic fluctuations and human impact. Mountainous areas witnessed important changes during the Bronze Age, the parallel development of mining and high altitude and summer pasturing, were activities that were situated within the contexts of complex environmental changes. It seems that these combined socio-environmental processes resulted in some significant changes to mountainous landscapes, in some cases, significant erosion. These moments might be considered as tipping-points; moments on a trajectory towards the Anthropocene. I will assess archaeological, palaeodemographic and paleoenvironmental evidence from the Western Alps, Corsica and the Pyrenees with a view to investigating these changes in human-environment interactions. I will not propose yet another start date for the Anthropocene, but instead, consider the extent to which the Bronze Age saw a change in the very nature of human engagements with and understandings of the environment. Via the presentation of data from different spatial scales, I will show that there are some interesting demographic changes during this period (based on summed probability distributions of 14C dates and total site counts where feasible). I will also focus on specific archaeological and paleoenvironmental evidence from the high-altitude zones in these three geographical zones.

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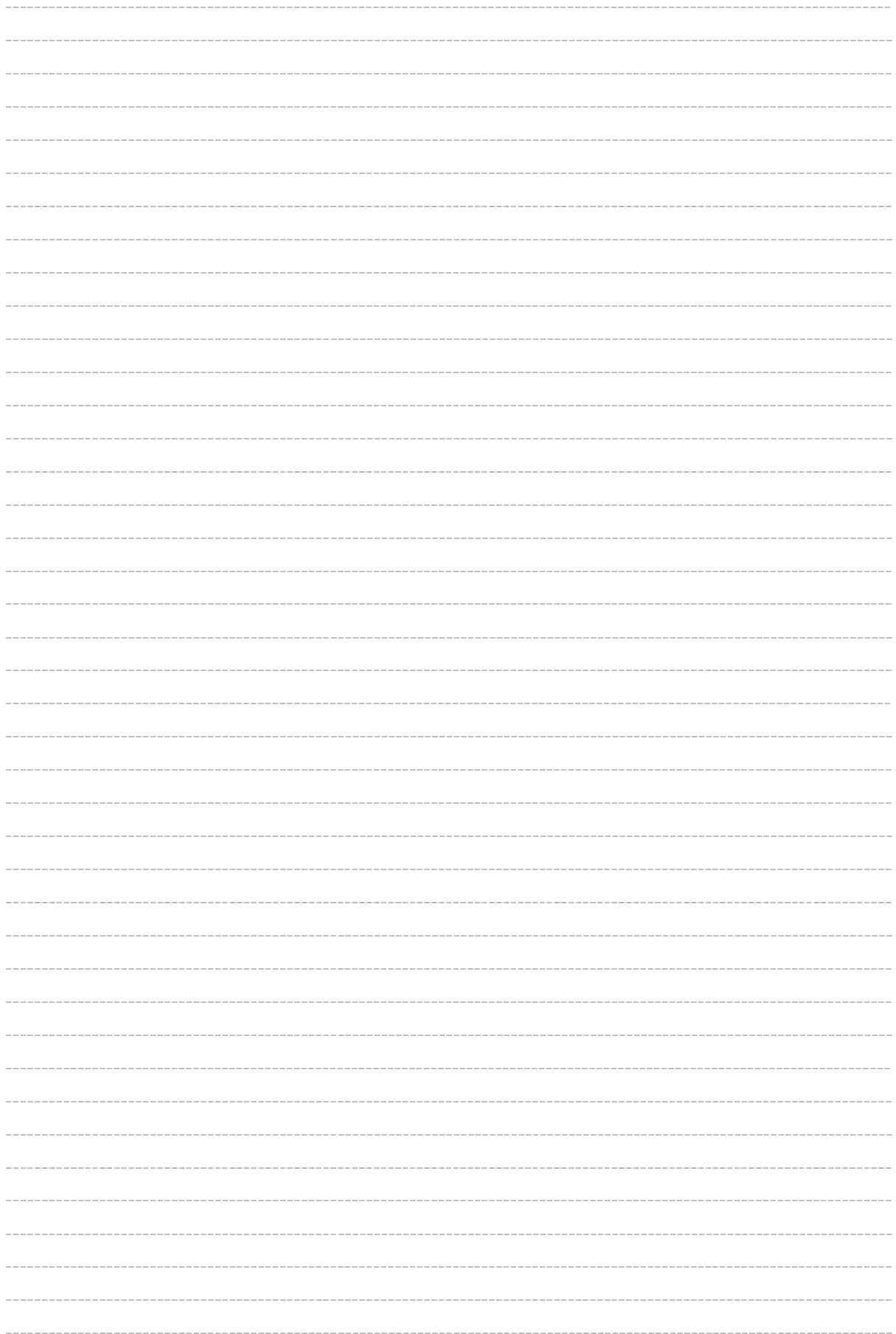
⁵Tromsø University Museum, University of the Arctic, Tromsø, Norway

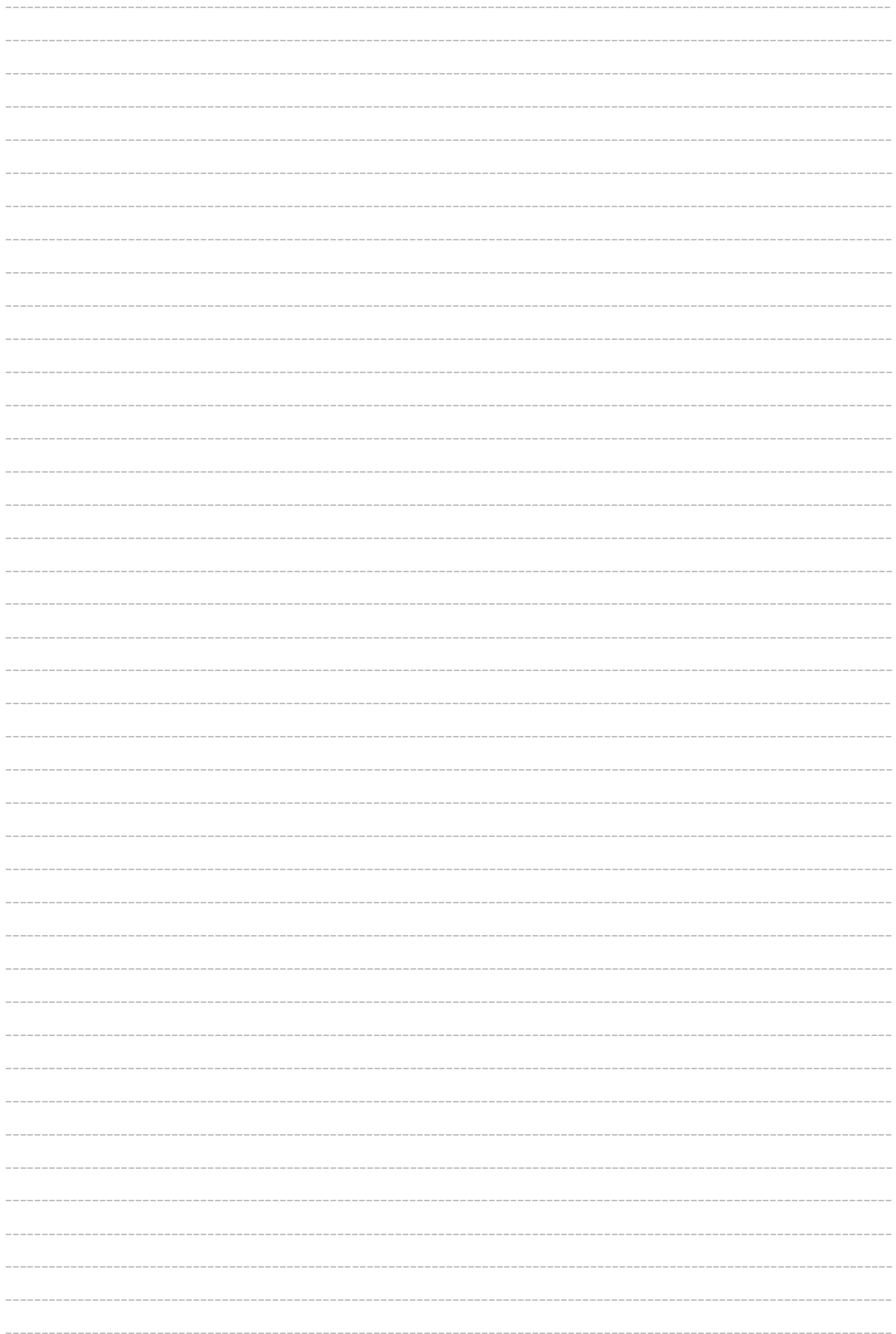
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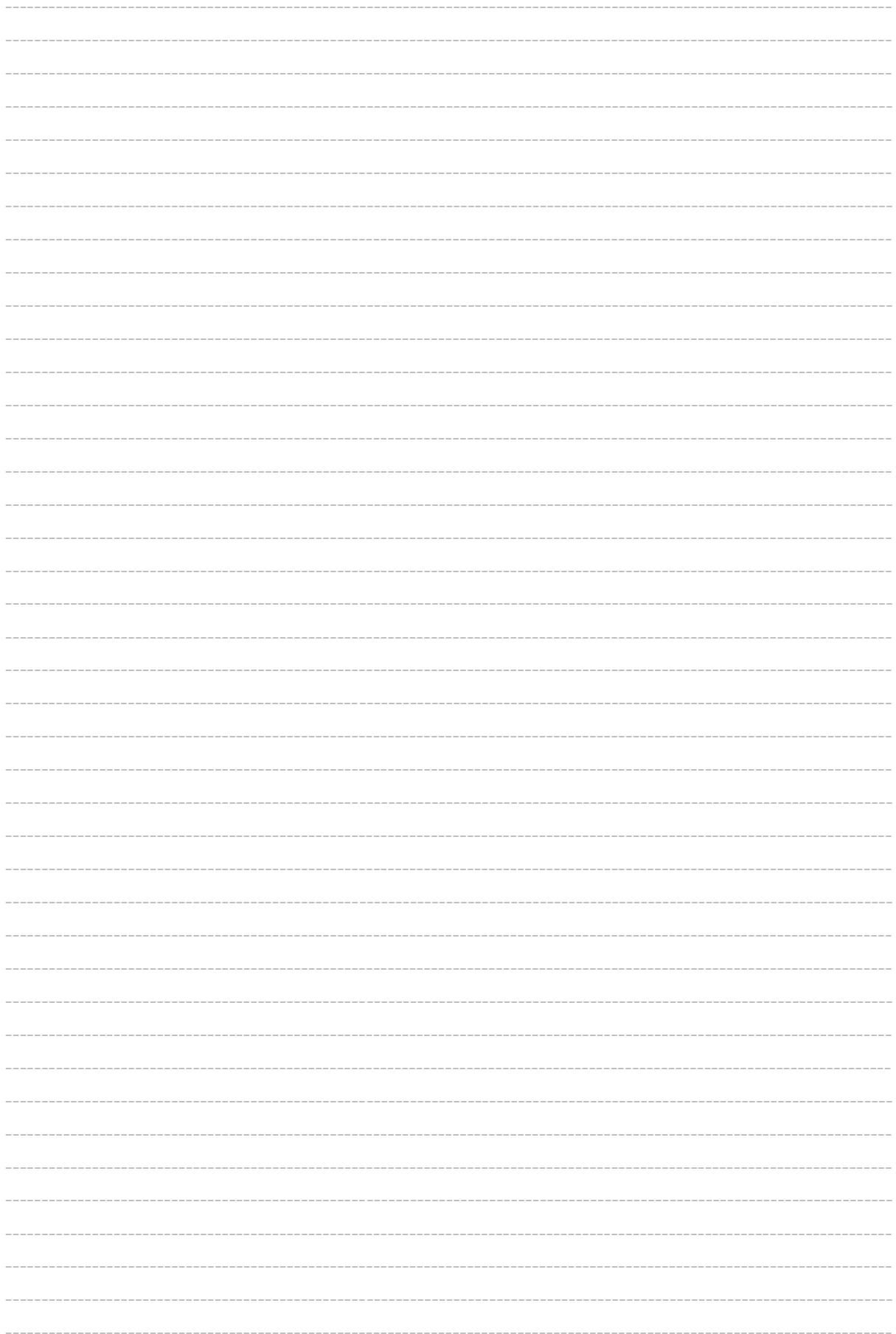
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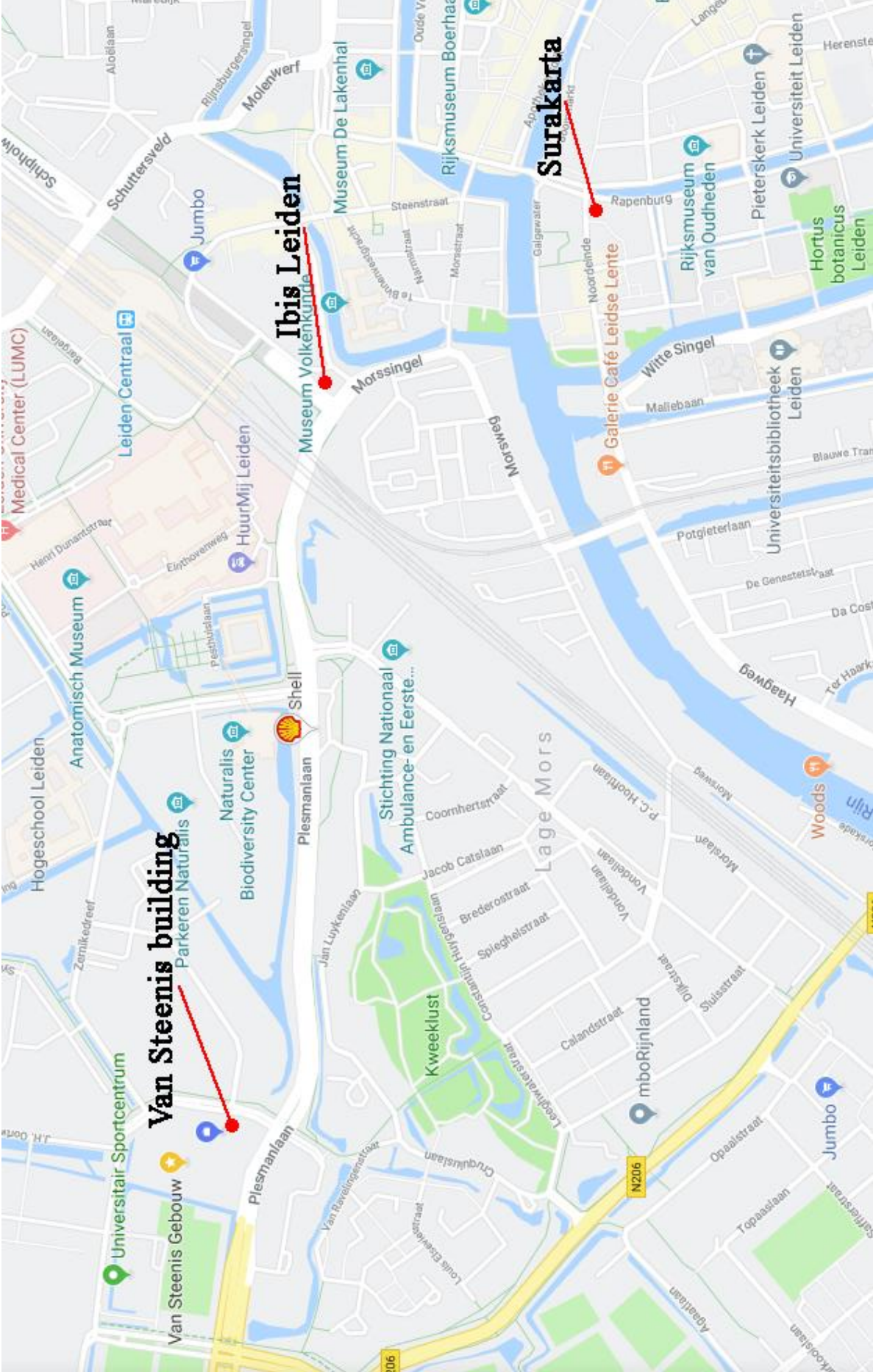
Notes

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Van Steenis building

Ibis Leiden

Surakarta