



The Mesopotamian Ancient Place-names Almanac (MAPA): A Gazetteer of the Uruk Urbanscape in the Age of Empires

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COLLECTION:
REPRESENTING THE
ANCIENT WORLD
THROUGH DATA

DATA PAPER

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ABSTRACT

The “Mesopotamian Ancient Place-names Almanac” (MAPA) focuses on the southern Mesopotamian city of Uruk and its extensive hinterland (Biblical Erech, modern Warka), one of the world’s first mega-cities. Uruk possesses some of the earliest attestations of the cuneiform writing system, and it boasts of being the royal seat of the legendary king Gilgamesh. MAPA is a first step in integrating textual sources with remote sensing data for reconstructing the social and physical geography of Mesopotamia in the Age of Empires. The dataset presented here is the recent edition of the gazetteer (v. 1.0), follows linked open data (LOD) protocols, and draws close to 400 place-names from legal, economic, and administrative texts the rich first millennium BCE archives of Uruk; namely, those produced under the Assyrian, Babylonian and Achaemenid empires.

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(1) OVERVIEW

REPOSITORY LOCATION

<https://zenodo.org/record/6411251> | DOI: 10.5281/zenodo.6411251

CONTEXT

The gazetteer was produced as part of the larger [MAPA project](#) led by Shai Gordin (2022), and was the product of research by Shmuel Clark in support of his PhD dissertation. The dataset, presented here in CSV and JSON formats, is version 1.0 of the gazetteer, drawn from legal, economic, and administrative texts dating to the Neo-Assyrian, Neo-Babylonian and Achaemenid periods (c. 8th to 4th centuries BCE), issued in and around the Mesopotamian city of [Uruk](#).

The current gazetteer (v. 1.0) primarily enriches the 377 listed toponyms of the previous version (v. 0.1) with their variant Akkadian spellings, some of them quite extensive. These were entered manually and then validated, from the books and articles listed in the bibliography attached to the dataset in both BIB and RIS (e.g. used in Zotero) formats. The information from the detailed place-name spellings also allowed us to add fields which analyze place terminology (e.g. kar “quay”), determinatives (i.e. classifications like uru “town, city” etc.) and list proper nouns attested in a place-name and their type like professional name, personal name, divine name and so on. Extra information or references to dictionaries can now be found under Notes.

MAPA is part of the [Pelagios network](#), and as such, the gazetteer follows Linked Open Data (LOD) protocols, adopting the JSON-LD based [Linked Places](#) format of the World Historical Gazetteer. The new version has consistent IDs marked by M-numbers (i.e. MAPA number), alongside new four-letter code labels. Place-name type and sub-type were entered based on established categories in the [Getty Art & Architecture Thesaurus](#) online (AAT), and references to the different languages used in place-names appear in [ISO 639](#) code URIs. For a detailed key to the dataset fields consult the markdown readme file deposited with the dataset in Zenodo which also outlines a few issues to be resolved in future iterations of the gazetteer, alongside some of the next steps in the MAPA project.

(2) METHODS

STEPS

We began by mining Geographical Names According to New- and Late-Babylonian Text ([Zadok, 1985](#)) (abbreviated RGTC-8) for place-names related to Uruk. This volume is unavailable in a machine-readable or OCR-ready edition which forced us to rely on the physical volume, and enter relevant data manually into the dataset and cross validate them with those already in the dataset. We searched for mentions of the city of Uruk in the brief prose descriptions appended to most entries; all place-names mentioning Uruk were added to the gazetteer. A second review included place-names closely connected to Uruk, and ensured complete coverage (as much as possible). Some major places in Mesopotamia were also added such as the Tigris River, Babylon, and Borsippa.

We also reviewed two articles ([Ermidoro, 2016](#) and [Zadok, 2020](#)), including a direct expansion and update of RGTC-8. These two articles present additional information about Neo-Babylonian geography in the region of focus. These newer resources were available digitally, and so these scrapings were done through digital search, and not analog, page-by-page searches.

SAMPLING STRATEGY

The gazetteer did not rely on sampling and instead endeavoured to include all relevant place-names available in the relevant source materials.

QUALITY CONTROL

Due to the analog source of much of the gazetteer’s data, digital quality control tools were not particularly effective. The addition of various pieces of data throughout the assembly process allowed for the repeated review of the source material, and the correction or expansion of the given entry as needed. Importantly, the data was cross-validated by Gordin after being assembled by Clark.

(3) DATASET DESCRIPTION

OBJECT NAME

Mesopotamian Ancient Place-names Almanac (MAPA) gazetteer

FORMAT NAMES AND VERSIONS

CSV, JSON, MD, BIB, RIS

CREATION DATES

2021-02-14 — 2022-04-02

DATASET CREATORS

Shmuel Clark (Digital Past Lab): Conceptualization, Data curation, Investigation, Methodology, Validation

Shai Gordin (Digital Past Lab): Conceptualization, Investigation, Methodology, Validation, Funding Acquisition, Supervision

LANGUAGE

Mainly English, Akkadian and Sumerian, but some place-names have proper nouns in Aramaic, Elamite and a few other minor ancient languages.

LICENSE

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REPOSITORY NAME

Zenodo, GitHub

PUBLICATION DATE

2022-04-04

(4) REUSE POTENTIAL

The main goal of the gazetteer's development and publication was to provide an innovative digital resource for researchers in the field of Assyriology. As implied by the extremely analog methodology described above, Assyriology is a field which is still largely reliant on analog resources despite recent advancements in the digital space. Many vital sources of information are not available digitally which results in reduplication of effort on the part of researchers and the possible introduction of errors in the analog transfer of information from place to place. A digital gazetteer—like MAPA—provides easy access to textual data making adding the perspective of the textual record to geographical and landscape research easier and more automatic. The MAPA gazetteer specifically was used in a recent article (Clark et al., 2022), which provided evidence of the intensity of the Neo-Babylonian settlement record in texts, and a basis of comparison to earlier periods in the Uruk region.

Beyond a source of digital information on the textual geography, the connectivity data included in the gazetteer (e.g. "LOC" field in the dataset) provide an easily assembled network database of the urbanscape. This data is currently undergoing analysis so that we could identify and analyze the network of canals and other watercourses, and their associated features. Preliminary results identified a number of central features in the urbanscape and networks of related features that closely connect to them. These results constitute a first step, a proof-of-concept for a methodology that can be applied to different periods or different cities.

The data in the gazetteer can also be expanded upon. For example, each entry lists all the texts in which the toponym in question is mentioned, and from which the information in the gazetteer is drawn. Most of these texts are dated, and expanding the reach of the gazetteer's

data allows the consideration of this additional informational aspect. This data allows patterns in the textual record to be analyzed chronologically, shedding light on patterns of construction and development in the urbanscape. This technique is of course one that can be repeated for another period or region, given the assembly of a similar gazetteer.

At its core, the most valuable use of the gazetteer is its potential to serve as a proof-of-concept and a model for forthcoming development of similar projects. The above-mentioned specifics are examples, many of which are ongoing or already published. More generally, gazetteers of this LOD model, or similar to it with different or additional data points, can be assembled for the ancient world at large, focusing on specific cities or regions, specific linguistic communities, or specific periods. Combined with the parallel technique of prosopography—in fact, one could conceive of this method of geographical analysis as landscape prosopography—an extremely granular image of a city and its citizens can be reconstructed from seemingly everyday texts. To this end, collaboration with similar or related projects has been sought, and is underway with the [Pleiades](#) project and the [World Historical Gazetteer](#).

The limitations of reuse are minimal, as the gazetteer is a plainly labelled, freely available dataset. The barriers to effective deployment, on the other hand, are more complex. The textual record of neo-Babylonian Uruk, while extensive, is necessarily incomplete. It is assembled from texts collected during the course of archaeological expeditions, and from many texts collected through illicit excavations in the late 19th and early 20th centuries, and it cannot purport to represent the entirety of the landscape. A digital dataset can easily be construed to represent a complete picture of the region. Similarly, the definition of the Uruk urbanscape is unclear as places in the record with a stated connection to Uruk may in fact be more appropriately connected to a different region, and it may be present in this gazetteer due to a simple textual mention captured by the survey. In short, the uncertainty inherent in research of the ancient world must be assumed, in particular when dealing with digital resources which can often be perceived as objective and complete.

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FUNDING INFORMATION

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COMPETING INTERESTS

The authors have no competing interests to declare.

AUTHOR CONTRIBUTIONS

Shmuel Clark: Conceptualization, Methodology; Data Curation, Software, Validation, Writing – Original Draft.

Shai Gordin: Conceptualization, Funding Acquisition, Methodology, Project Administration, Supervision, Validation, Writing – Review & Editing.

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