



## Uruk (Warka)

### Uruk (Warka): Structural organization of an ancient near-eastern capital

Research on the urban development of the metropolis of the legendary king Gilgamesh (5th m. BC - 4th c. AD)

## Location

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Iraq  
31° 19' 31.0224" N, 45° 38' 10.5648" E  
See map: [Geonavigation](#)

Uruk is situated c. 300 km south of Baghdad, around 15 km east of Samawa in the ancient settlement area between Euphrates and Tigris.

## Background

Methods of the older research:

The architecture of Uruk was generally built with mud-bricks, and thus rarely well preserved. Often only the foundations of buildings were discernible. These architectural remains were found in many superimposed strata, and thus their careful excavation and the analysis of individual architectural layers became the methodological focus of the excavations in Uruk.

## History

The ancient city Uruk (the biblical Erech) evolved from a small settlement of the end of the 5th millennium BC, which was situated on the banks of the Euphrates, to a large city which covered already at the end of the 4th millennium BC a surface of around 2.5 square kilometers. Long-standing research on this "Uruk-period" provide the picture of a well organized society with complex political organization and efficient administration. Representative architecture with sacred and public function, highly evolved art (stone sculpture), the first script, a sophisticated system of authentication on the basis of cylinder seals and the first mass production of pottery and objects of everyday life are the most striking preserved characteristics. It seems that the city played a particular political role only at the end of the 4th and in the first half of the 3rd millennium BC. The beginning of the 3rd millennium BC was the time of its largest expansion with 5.5 square kilometers inside the city walls, which according to the Epic of Gilgamesh were built by the legendary king Gilgamesh. Two important cult centers determine the fame of the city also in later periods: the sanctuary of the god of heaven Anu and the sanctuary of the love and war goddess Inanna/Ishtar. Intensive archaeological research especially in the area of these sanctuaries show that the city's importance was primarily religious and economic at that time. Furthermore, clay tablets from the



later periods of the city (6th- 2nd c. BC) point to its predominant role as a science centre (literature, divination and astronomy amongst others). The settlement is abandoned at the beginning of the Sassanid period.

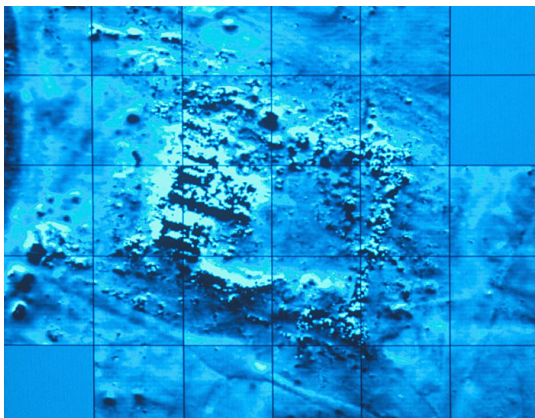
## History of Research

The site was rediscovered by William Kenneth Loftus in 1849, a first brief exploration took place in 1854. After an inspection in 1902 archaeological research was undertaken by German institutions in Uruk since 1912. Initially they were carried out under the auspices of the German Orient-Society (1912), then by the German Orient-Society and the Emergency Foundation of the German Sciences (1928-1941), and since 1954 by the German Archaeological Institute. Until 1989 39 field seasons had been carried out with few exceptions every year. In the years 2002 and 2003 the fieldwork was re-started, but since 2003 it is interrupted again.

## Previous Activities

The excavations of the years 1912-1989 (1.-39. excavation season) focused predominantly on the exploration of the city's religious centers: the Eanna sanctuary of the goddess of love and war, Inanna/Ishtar, the sanctuary of the god of heaven Anu with the "archaic" ziggurat and the Seleucid temple complex "Bit Resh", the Seleucid temple complex for Ishtar "Irigal" and smaller cultic installations such as the "temple of Karaindash" (14th c. BC) and the Temple of Gareus (2nd-3rd c. AD). A royal palace (palace of Sinkashid, 20th-18th c. BC) at the western border of the city and smaller soundings in the residential area inside and outside of the city provide information on the political as well as everyday life. A surface survey of the entire city of Uruk in the years 1982-1984 yielded a wealth of archaeological information which allowed the reconstruction of the settlement history of the city.

## Recent Activities



Following the surface survey from 1982-1984, new data was collected in the years 2001 and 2002 on the urban structure of this large city. The analysis of aerial photographs and a geophysical survey were accompanied by the geomorphological analysis of core samples. These provided information on the division of the city in districts, on the road infrastructure and the functional organization of different areas. A new discovery was the system of channels which ran through the city. The city wall also proved to be much more complex in its construction than previously thought on the basis of excavations. In the year 2005 the European Space Imaging GmbH sponsored the analysis of high-resolution satellite imagery, through which further information on the city's structure could be gained.



## Methodology

Methods of the older research:

The architecture of Uruk was generally built with mud-bricks, and thus rarely well preserved. Often only the foundations of buildings were discernible. These architectural remains were found in many superimposed strata, and thus their careful excavation and the analysis of individual architectural layers became the methodological focus of the excavations in Uruk.

## Results



Results of the older research:

The focus of the excavations in Uruk was for decades the building history. Only in more recent years, with the analysis of the archaeological finds and findings and especially more research on other cities and regions of Mesopotamia, more comprehensive cultural and historical research came into focus. Due to the methodological history of research in Uruk the architecture still was the main focus: the Eanna sanctuary of the love and war goddess Inanna/Ishtar can be traced stratigraphically from its youngest phase (the Seleucid ziggurat of the 3rd c. BC) to the buildings of the Uruk-Period (end of the 4th millennium BC), each phase having been superimposed after its destruction by the next one. The sanctuary was remodeled completely several times. The most important building activity of the 1st and 2nd/end of the 3rd millennium BC are the neo-babylonian reconstruction of the sanctuary (8th/7th c. BC) and the reconstruction under the rulers of the IIIrd dynasty of Ur (21st c. BC). There was in both cases a ziggurat (high terrace with temple) in the centre of the complex, which was surrounded by different courtyards. Functional areas and additional smaller temples were built as narrow rooms into the enclosing wall (so called Zingelanlagen). Clay tablets from the neo-babylonian/achaemenid complex and neighboring domestic buildings give a valuable insight into the economy of a sanctuary. The temple terraces and cultic structures of the first half of the 3rd millennium BC (the layers of the "archaic I-period" are essentially built according to this schema, but no evidence for ziggurat buildings could be found. The "temples" or profane representation buildings of the end of the 4th millennium BC (layers of the "late Uruk-period") were constructed according to completely different design criteria. In connection with these buildings and their destruction layers the first written documents were found, cylinder seals and stone sculpture. The architecture and culture of the "late Uruk-period" came first to light in Uruk. Because of the large excavated areas for this period, the research on this subject is still unrivaled.

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The c. 9 km long city wall of Uruk has only been investigated through small soundings. It was built in the 3rd millennium BC and was repeatedly renovated. The last evidence of renovation is from the 18th c. BC. The wall consists at least of two circular walls, the interior one being strengthened by semi-circular towers.

## Cooperation / Cooperation partners

All work has been carried out with the permission of the State Board of Antiquities and Heritage of Iraq. The analysis of all early clay tablets is undertaken by the team of Prof. Dr. Hans J. Nissen of the Freie Universität Berlin; the Ruprecht-Karls Universität of Heidelberg houses the [Warka collection](#) of the German Archaeological Institute.

Current work:

Bayerisches Landesamt für Denkmalpflege, Archäologische Prospektion und Luftbildarchäologie (Dr. Jörg Faßbinder); Philipps-Universität Marburg, Institut für Geographie (Prof. Dr. Helmut Brückner); Deutsches Zentrum für Luft- und Raumfahrt, Oberpfaffenhofen (Dr. Gunter Schreier).

## Weitere Hinweise

More recent shorter summaries of the archaeological research in Uruk can be found in: R.M. Boehmer, Uruk-Warka in: Eric M. Meyers (Hrsg.), *The Oxford Encyclopedia of Archaeology in the Near East* Vol. 5 (1997) 294-298; M. van Ess, Die Ausgrabungen in Uruk-Warka, in: Deutsches Archäologisches Institut, Orient-Abteilung - Außenstelle Baghdad. 50 Jahre Forschungen im Irak 1955-2005 (2005) 31-39.; as well as résumés of different research aspects in all general publications on the history of Mesopotamia. Most recently with further references in H. J. Nissen, *Geschichte Alt-Vorderasiens*, Oldenbourg Grundriss der Geschichte Bd. 25 (1999).

## Bibliography

For the fieldwork campaigns 1-39:

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For recent research:

Helmut Becker - Jörg Fassbinder, Uruk - City of Gilgamesh (Iraq). First tests in 2001 for magnetic prospecting, in: Helmut Becker - Jörg W.E. Fassbinder, *Magnetic Prospecting in Archaeological Sites*. International Council on Monuments and Sites Vol. VI (2001) 93-97; Jörg Fassbinder - Helmut Becker - Margarete van Ess, *Magnetometry at Uruk (Iraq): The city of King Gilgamesh*, *Geophysical Research Abstracts* Vol. 5, 2003 [www.copernicus.org/EGS](http://www.copernicus.org/EGS); Helmut Brückner, Uruk - A Geographic and Palaeo-Ecologic Perspective on a Famous Ancient City in Mesopotamia; M. van Ess - J. Faßbinder: Magnetic prospection of Uruk (Warka) Iraq, in: *La Prospection Géophysique, Dossiers d'Archeologie*



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