

2 PhD positions, ERC CoG URBAN-DELTA, KU Leuven

Leuven (Belgium), to Jun 10, 2024
Application deadline: Jun 10, 2024

Merlijn Hurx

PhD History of Architecture URBAN-DELTA. (ref. BAP-2024-301).

The Department of Architecture is an international centre of expertise in architecture, urbanism & spatial planning, architectural theory and history. The PhD student will be part of the research group P A D P (Perspectives on the Distant Past <https://architectuur.kuleuven.be/perspectives-architecture-distant-past>). This group consists of leading researchers studying architecture from the late Middle Ages to the Interwar period from different perspectives. One of the group's focuses is developing digital research methods for studying architecture between 1300 and 1750.

Project

The Department of Architecture (Faculty of Engineering, Heverlee Campus KU Leuven) is looking for two full-time PhD students (48 months) for the ERC-funded project: URBAN-DELTA: Metropolis-es in the Mud. Innovation in Delta Building Technology in Europe and China before 1800 directed by Merlijn Hurx (PI).

Deltas are among the most urbanised and wealthiest regions of the world. Today, their very existence is threatened by climate change. Innovative solutions are urgently needed, and delta cities around the globe have joined forces to confront the climate crisis. The dependence on innovation for their survival is however not a recent phenomenon but has a longer history. Surprisingly, little is known about the specialised skills and knowledge shown by earlier civilisations in constructing and protecting these cities.

URBAN-DELTA hypothesizes that major advances in the history of water-related engineering were not random but occurred at specific places and times. Several pioneering hotspots in the pre-industrial age seem to have existed. Therefore, the aim of URBAN-DELTA is to attain an entirely new, multidisciplinary understanding of technological innovations by tracing and explaining their historical emergence in the production of the built environment in Eurasian deltas before 1800.

This project is the first in-depth comparative study of construction techniques for marshy conditions. It examines three key deltas in Europe and China: that of the Po, the Rhine-Scheldt-Meuse and the Yangtze. The project questions how builders overcame technological limitations. Did innovation occur incrementally or were there spurts at specific times and places? What were the dynamics of these processes and what factors stimulated innovation?

URBAN-DELTA studies the built environment from a comparative perspective, combining approaches from Engineering, Economic and Architectural History. It tests hypotheses central to the debate on the conditions for innovation by looking at a vital industry, hitherto ignored in scholarship. It aims at a fundamental rethinking of how architecture comes into being and developing an entirely new explanatory framework for future research. In addition, it generates new knowledge that is urgently needed for the preservation of heritage threatened by climate change.

Within the project we offer two full-time PhD positions of 48 months. The first PhD student will concentrate on Rhine-Meuse-Scheldt in the Low Countries, while the second will focus on Venice and the Po delta:

PhD Student 1: Delta Building Techniques in the Low Countries 1300-1750.

As a PhD student, you will identify what was considered building know-how specific to the Low Countries and trace the development of a range of techniques to build in marshy urban conditions. Due to a lack of synthesis studies, questions regarding which specialised building technologies and what building knowledge were developed remain largely unanswered. You will develop four distinctive case studies employing different methodologies. First, you will investigate accounts by contemporary observers on distinctive Dutch/Flemish building technologies and consider the exchange of technological knowledge by examining the travels of craftsmen, architects, and engineers from and to the Low Countries. The second and third case studies consist of an in-depth analysis of the actual techniques, which negotiated the difficult conditions by providing greater stability or a reduction in weight: in particular, foundation techniques and lightweight vaults, domes and roof constructions. The fourth study will analyse how architecture was built and focuses on the mechanisation of construction processes through the use of pumps, drainage devices, sawmills, and pile drivers etc. In addition to historical research, the project will employ methods from the digital humanities, especially three-dimensional reconstructions, and animations.

PhD Student 2: Delta Building Techniques in Venice and the Po delta 1300-1750.

You will investigate the building know-how and delta building technologies in Venice and the Po delta. Like the PhD focusing on the Low Countries, you will develop multiple case studies, focusing on the reputation of the region's building technologies, the actual techniques, in particular, foundation techniques and lightweight vaults, domes and roof constructions and the mechanisation of construction processes. This project has an emphasis on the role of treatises for the diffusion of water-related building expertise, since Venice was Europe's epicentre for publications on architecture, fortifications and machines in the early modern period.

Tasks of the PhD's:

As a member of the ERC project, you will work together with the international group members supervised by the PI. You are expected to come up with your own ideas, execute archival research abroad, and help to shape the project. You are expected to (co)author scientific articles, disseminate results at international seminars and conferences, complete a PhD thesis, and support other activities of the ERC project and the department. You will have the opportunity to pursue additional training to develop the skills you need for your PhD research, as well as developing your aca-

demic skills.

Profile

Requirements Phd1:

- You have an academic university degree (MSc/MA) in Architecture (architect and/or architect-engineer), Architectural History, Art History or Archaeology and at least one distinction.
- Proficiency in reading Dutch and French, as well as in writing academic English.
- Willingness to travel and complete archival research.
- You are capable of working independently, with good organisational and planning skills, and are willing to communicate and collaborate actively as a team member.
- You can demonstrate excellent study results, or you have distinguished yourself in a similar way during your academic career or professional life. You are able to illustrate your writing skills by means of an article or master thesis.

Desired

- Interest in digital humanities, and preferably experience with 3D design software, or willingness to develop them.
- Palaeographic skills or willingness to develop them.

Requirements Phd2:

- You have a completed academic university degree (MSc/MA) in Architecture (architect and/or civil engineer-architect), Architectural History, Art History or Archaeology and at least one distinction.
- Proficiency in reading Italian, as well as in writing academic English.
- Willingness to travel and complete archival research.
- You are capable of working independently, with good organisational and planning skills, and are willing to communicate and collaborate actively as a team member.
- You can demonstrate excellent study results, or you have distinguished yourself in a similar way during your academic career or professional life. You are able to illustrate your writing skills by means of an article or master thesis.

Desired

- Interest in digital humanities, and preferably experience with 3D design software, or willingness to develop them.
- Palaeographic skills or willingness to develop them.

Offer

Working Conditions

We offer a full-time PhD-scholarship, for 12 months (extendable up to max. 48 months, on condition of the positive evaluation of the PhD activities), with a planned starting date of 1 October 2024, although this can be negotiated. You will be based at Heverlee campus (near Leuven), specifically the Arenberg Castle at the department of Architecture. Arrangements can be made for some remote work and flexible hours to encourage healthy work-life balance. All expenses for research-based travel will be covered by the project budget. Employees of KU Leuven enjoy a num-

ber of benefits, such as a wide range of training and education opportunities, a vacation allowance and end-of-year bonus, yearly accumulation of seniority with automatic pay indexation, compensation for public transport etc. For more information see: <https://research.kuleuven.be/en/career/phd>

Interested

Please include the following in your application:

- a cover letter outlining what makes you a strong candidate for this research project;
- your curriculum vitae;
- a sample of what you have written (e.g. a chapter from a master's thesis, a final paper for a master's course or a published article);
- please indicate which project (PhD1/PhD2) you are applying for.

Selection timeline:

Applications should be submitted on or before 11 June 2024.

All candidates will be notified by 14 June whether they proceed to interview

Shortlisted candidates will be interviewed (virtually or in person) in the second half of June 2024.

Final candidates will be informed of the outcome early July 2024.

For more information please contact Prof. dr. Merlijn Hurx, mail: merlijn.hurx@kuleuven.be.

You can apply for this job no later than June 10, 2024 via the online application tool:

<https://www.kuleuven.be/personeel/jobsite/jobs/60332352>

KU Leuven strives for an inclusive, respectful and socially safe environment. We embrace diversity among individuals and groups as an asset. Open dialogue and differences in perspective are essential for an ambitious research and educational environment. In our commitment to equal opportunity, we recognize the consequences of historical inequalities. We do not accept any form of discrimination based on, but not limited to, gender identity and expression, sexual orientation, age, ethnic or national background, skin colour, religious and philosophical diversity, neurodivergence, employment disability, health, or socioeconomic status. For questions about accessibility or support offered, we are happy to assist you at the email address below.

Do you have a question about the online application system? Please consult our FAQ or email us at apply@kuleuven.be

Reference:

JOB: 2 PhD positions, ERC CoG URBAN-DELTA, KU Leuven. In: ArtHist.net, May 24, 2024 (accessed Jul 5, 2025), <<https://arthist.net/archive/41963>>.