

# PhD in Architecture. History and Design

## Research Title: Human Body and Urban Space

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Context of the research activity	<p>Over the centuries, the transition from a pre- to a post-industrial era has unfolded differently among Europe and China. Since the Industrial Revolution, Europe has been basing its economic and cultural development on a linear, progressive evolution of the scientific-technological knowledge within a Positivist view. By contrast, China is seeking for a balance between progress and the original principles of the pre-industrial society, when the richness of the Chinese cultural and economic identity founded its roots. Within these differences, the Industrial Revolution represents an important breakpoint in the interdependence between human being and living space, assuming different meanings among cultures, leading to a contrasted vision and sensibility. It changed essentially the relation between, on one hand, the needs of the human body and, on the other hand, the use and configuration of the urban space. Historically, the main outlines to this topic were two: first, the human body as an aesthetic ideal that seeks anthropomorphic representations in architecture and the city; second, the human body as a vehicle of existential experience that embraces sensory memories and apprehensions. Along with the development of modern science and rational thinking within the industrial era, the human body has become instead an operator of the physical-spatial system, where the focus lays merely on the mechanical processes. In partnership with Tsinghua University in Beijing, this joint research project will investigate the reasons of this shift, aiming to define criteria and recommendations towards a more balanced relation between human body, in its both mechanical and existential dimensions, and urban space in nowadays global processes of urbanization in Europe and China.</p>
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Objectives	<p>The objectives of the research can be identified in three main aspects, all based on a human-centered point of view on urban issues.</p> <p>First, the objective is to re-interpret the lost wisdoms about human body</p>
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and urban space, to be found through the study of texts and real architectures/urban spaces. Different approaches to the topic will be considered, with a focus on the physical-spatial system rooted in early modern times. What is the role of the "corporeality" of a body in creating and generating architecture? How careful can be a built and designed space about people's well-being? In other words, how can architecture and the city pursue both the physical and mental health of the human being, that are comprehended in the wider concept of wellness?

In the 1950s the French architect Le Corbusier developed the "Modulor", an anthropometric scale of proportions based on mathematics and the human scale. It determined the dimensions of human body containers and extensions. "The architect is only able to establish harmony between the person and its urban environment" (Le Corbusier). The research aims to further stress the mathematical and scientific approach towards the development of intrinsic and subjective human principles within the designed space. Proportions and balance of the human body enter the field of architecture from the point of view of imitation, idealized allusion and the actual human use. Architecture and the human body also come into contact in a more concrete way at an ergonomic level. The relationship between size, form and movement are what essentially characterizes the human scale, charged with various ideological meanings. Our body is the ultimate tool for discovering urban environments.

Second, through comparison with European approaches, the aim is to deepening the knowledge and the interpretation of the new emerging Chinese approach to urban space planning. In the last decades it has been structured on an Anglo-American approach based on zoning and predominance of functional features. Nowadays, it is slowly moving towards a new suggestion: the idea is to bring back some principles of a pre-industrial society, enhancing attention for the human being and nature.

From the XIX century, Western reaction to poor hygiene conditions and pollution caused by industrialization, was to realize urban plans that cut the existing urban fabric in order to pursue health necessities. The planning process can be compared to the western medicine that acts in contrast to the illness, by rationally eviscerating the "problem" in favour of human wellness and urban hygiene. Unlike the West, China's urban approach to health and planning issues is nowadays comparable to the traditional Chinese medicine that supports and accompanies the unhealthiness by recalling pre-industrial principles concerning human dimension and health in a new form of "urban homeopathy".

Third, the research seeks to explore and test new methodological processes of investigation and comparison between different cultures in the field of architecture, embedding some insights from the humanities.

	<p>Because of the contrast in traditional culture, Europeans and Chinese have developed a different way how body cognizes space. Simply put, the western cognition of body is in general from the exterior inward: the environmental initiative constructed to simulate the human body by aesthetics, metaphor or mathematical human scale. In comparison, the oriental cognitive body is from within: it begins with the human body to explore the environment and space, and ultimately to comprehend the idea of a kind of metaphysics from perception. Therefore, the research roots in reinterpreting and comparing two different views of spatial cognition in a method of phenomenology; leading out a comparative reading system of architecture, history and anthropology; providing a defined process of investigation. Meanwhile, this comparison will be applied in the analysis of case-studies in Europe and China.</p>
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<p><b>Skills and competencies for the development of the activity</b></p>	<p>Phd Students to be involved in this program are expected to have an international CV, to prove their skill to work within a global environment. The availability to spend 18 months in China along their PhD program is an important requirement for all the applicants. They should prove an even basic experience in Comparative Studies between Europe and China.</p>
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