"Climate Histories", European Society for Environmental History conference, Uppsala, Sweden, August 18 to 22, 2025

Climate Histories of Renaissance Architecture: An Eco-Art Historical Perspective

The historical intersection between climate and architecture offers a valuable lens for exploring societal resilience and adaptation during periods of environmental stress. This paper investigates the impact of climatic variability—particularly during the Little Ice Age (14th to 17th centuries)—on the architectural theory and practice of the Renaissance. Far from being a purely artistic or stylistic development, Renaissance architecture also responded to the environmental challenges of its time. Architects such as Leon Battista Alberti (1404–1472), Vincenzo Scamozzi (1548–1616), Albrecht Dürer (1471–1528), and Joseph Furttenbach (1591–1667) integrated climate considerations, health concerns, and environmental factors into their architectural treatises and design principles, offering holistic approaches to urban planning and building construction.

The Renaissance period saw widespread fluctuations in temperature, extreme weather events, and resource scarcity (especially wood). In this paper, I will explore how environmental conditions influenced the construction and spatial organization of residential buildings at the peak of the Little Ice Age around 1600, focusing on palace architecture and noble residences. I will discuss material choices, the development of heating systems, and building typologies, particularly the differentiation between "summer" and "winter" rooms that appeared in noble residences from the mid-16th century onward. As an art historian with experience in building archaeology, I will examine the buildings themselves as historical sources, comparing examples from Italy, France, Germany, Poland, and Sweden. This new eco-art historical perspective not only enriches our understanding of the past but also provides potential insights for addressing the architectural challenges posed by contemporary climate change.