

BARNABAS CALDER

Barnabas Calder is a historian of architecture and Senior Lecturer at the University of Liverpool. He's been publishing since 2008.

His research is about the relationship between architecture and energy throughout human history. Recently he published *Architecture: From Prehistory to Climate Emergency* on the topic, tracing the growth in cities and monumental architecture that followed the invention of agriculture, and redoubled with the exploitation of fossil fuels from the seventeenth century onwards.

Barnabas is the first historian of architecture to study the influence of human energy use on the long history of architecture. He's also keen to supervise PhD research on this rich and important topic, relating to architecture of any period or place understood in relation to the energy economy of the society concerned. For example his book *Raw Concrete*, 2016, contains the seeds of the author's awareness of the environmental damage of the production of cement, the most used material on Earth after water.¹

Calder's *Architecture: From Prehistory to Climate Emergency* is instead the most important new contribution to the field of architectural history in the recent decades. It also adds weight to the debate of architecture and climate emergency. Published at a moment of profound anthropocentric reflection: while the environmental disasters are occurring in every part of the world there is a need to have more focus and awareness for our discipline. Both in education and in practice to change the way we value materials, buildings and energy. The analysis in the book takes a different approach from the histories we have come to know until now: categorizing the history from the point of energies used into the building and not from the classical year succession. This way even the students can read the changes between the different eras and the types of constructions. Also the reader can extrapolate the rhythm of the evolution in energy consumption and see where this can lead us if we don't make some corrections and changes to the way we build.²

Calder had the idea to organize his history not in terms of chronology, style or empire, but through an explanation of humanity's ever-increasing consumption of energy: 'the capacity to do anything'. At its most successful moments. The reason we need to have this debate is because architecture produces 40% of the world's greenhouse gas emissions. From the construction and running of buildings.

If we are to avoid climate change then now, more than ever, we need beautiful but also intelligent architecture, and to retrofit - not demolish - the buildings we already have.

¹ Calder, Barnabas. *Raw Concrete the Beauty of Brutalism*. London: William Heinemann, 2016.

² Calder, Barnabas. *Architecture from Prehistory to Climate Emergency*. London: Penguin, 2021.