• Paper / Proposal Title:
The City is a System: an architectural history of an idea

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• Abstract (300 words):
The paper will explore how systems theory has come to govern (and restrict) how we understand buildings and cities, from the 19th to the 21st century.

In ‘Architecture of the Well-Tempered Environment’ (1969), Reyner Banham identified that point in history ‘either as the final liberation of architecture from the ballast of structure, or its total subservience to the goads of mechanical service.’ Writing at the height of the Cold War, and the technological advancements that accompanied it, he identified a point of transition in the primacy of building systems, from the physical to the environmental (as demonstrated by the Environment-Bubble, which illustrated ‘A Home is Not a House’).

System-buildings, for example Le Corbusier’s Unité d’Habitation, Buckminster Fuller's Biosphere, or Renzo Piano and Richard Rogers' Pompidou Centre, have gone on to inform and inspire how their creators (and society) have understood the city around them.
In turn they have shaped architect’s understanding of climate change, energy use and sustainability in systems terms (ecosystems, Limits to Growth), and inspired utopian visions such as ‘Spaceship Earth’, ‘Eco-cities’ and ‘One Planet Living’.

However the ideas and technology that underpin these system visions has often arisen as a product of dystopian paranoia: of social unrest, nuclear war, global pandemic or climatic Armageddon.

Similarly the application of systems theory at the city scale (the advent of Smart Cities) has made possible restrictions of personal liberty at an unprecedented rate, through mass observation and the application of social control through use of ‘big data’.

This paper will examine what these and other architectural visions of the city (e.g. Ebenezer Howard’s Garden City, Archigram’s Plug-in City, Godfrey Reggio’s Koyaanisqatsi) can tell us about the societies that produced them, and ask what our contemporary (digital) visions of urban life might reveal about our own (remote) preoccupations in the present.

• Author(s) Biography (200 words each):

Ranald Lawrence is Lecturer in Architecture at the University of Liverpool. His research examines the history of environmental design, and the relationship between buildings and climate in different cultural contexts. Ranald trained as an architect and has led building performance evaluations assessing user satisfaction and indoor environmental quality across the UK. His research has been published in Building and Environment, Energy and Buildings, Building Research and Information and the Journal of Architecture.


He completed his PhD at Cambridge in 2014, funded by the AHRC, recently published as ‘The Victorian Art School’ (Routledge, 2020), supported by the Paul Mellon Centre for Studies in British Art.