



MOUNTAINS & MEGASTRUCTURES

THE GALLERY, 1ST FLOOR ARCHITECTURE BUILDING
PROGRAMME & ABSTRACTS

PROGRAMME

Wednesday 16th March

17.30 EXHIBITION OPENING

18.00-18.15 *Josep-Maria Garcia-Fuentes,
Katie Lloyd Thomas & Matt Ozga-Lawn* Welcome

18.15-19.30 KEYNOTE LECTURE *Stéphane Degoutin* Fake Mountains Metaphysics

Thursday 17th March

10.00-10.20 *Josep-Maria Garcia-Fuentes* An Alternative History of Modern Architecture?

10.20-10.40 *Andrew Ballantyne* A Mountain Near Thebes

10.40-11.00 *Adam Sharr* Making a Mountain out of a Megastructure

11.00-11.15 DISCUSSION

11.15-11.30 COFFEE

11.30-11.50 *Martin Beattie* Beyond the Border: John Stapylton Grey Pemberton's expedition to Darjeeling and the "Snowy ranges"

11.50-12.10 *Rutter Carroll* Something Concrete and Modern: Megastructures Real and Imagined

12.10-12.30 *Steve Graham* Contemporary Megastructures: Multi-Level Cities as Contested Urbanism

12.30-12.45 DISCUSSION

12.45-13.45 LUNCH

Thursday 17th March (cont.)

13.45-14.45	KEYNOTE LECTURE <i>Jonathan Hill</i>	A Landscape of Architecture, History and Fiction
14.45-15.20	SHORT PRESENTATIONS I	
	<i>Rachel Armstrong</i>	Persephone: A megastructure of living dirt
	<i>Zeynep Kezer</i>	Violent Intersections: Modern Stage Ancient Land
	<i>Graham Farmer</i>	A Megastructure in Miniature?
15.20-15.30	COFFEE	
15.30-16.45	SHORT PRESENTATIONS II - EXHIBITORS	
	<i>Amy Butt</i>	Ascending the Urban: Climbing the Megastructures of Sci-Fi
	<i>Christos Kakalis</i>	Representing Mountains and Megastructures: Printmaking and the depiction of the Holy Mountain and Athonite Monastries
	<i>James A. Craig & Matt Ozga-Lawn</i>	Everest Death Zone
	<i>Matas Belevicius</i>	Excavation of the Anthropocene Mountain
	<i>Seva Karetnikov</i>	Tracing Whimsies of Wörlitz Vesuvius
	<i>Prue Chiles</i>	"A Jump Towards Brightness": Modernism and community in Park Hill
16.45-17.30	DEBATE AND FINAL REMARKS	Chairs: Mark Tewdwr-Jones, Matt Ozga-Lawn & Josep-Maria Garcia-Fuentes

ABSTRACTS

Keynote Speakers

Fake Mountains Metaphysics

Stéphane Degoutin

The history of architecture tends to elude the existence of artificial mountains. Stéphane Degoutin has conducted a survey of man-made realistic mountains across the world and invites you to a visual exploration of their metaphysical power, focusing on three occurrences: the Chinese concept of vital force (qi), the French Revolution religion of the supreme being (être suprême) and the domestication of this power in zoos and theme parks.

A Landscape of Architecture, History and Fiction

Jonathan Hill

Architecture can be analogous to a history, a fiction, and a landscape. We expect a history or a novel to be written in words, but they can also be cast in concrete or seeded in soil. The catalyst to this tradition was the simultaneous and interdependent emergence in the eighteenth century of new art forms: the picturesque landscape, analytical history, and English novel. Each of them instigated a creative and questioning response to empiricism's detailed investigation of subjective experience and the natural world, and together they stimulated a design practice and lyrical environmentalism that profoundly influenced subsequent centuries.

Associating the changing natural world with journeys in self-understanding, and the design process with a visual and spatial autobiography, this talk describes journeys between London and the North Sea in the eighteenth and twentieth centuries, analysing an enduring and evolving tradition from the picturesque and romanticism to modernism in which seas, mountains and megastructures were associated with the sublime. Creative architects have often looked to the past to understand the present and imagine the future. Twenty-first-century architects need to appreciate the shock of the old as well as the shock of the new.

ABSTRACTS

A-Z

Persephone: A megastructure of living dirt

Rachel Armstrong

Persephone is a real world project that is part of the Icarus Interstellar portfolio of work. It forms the living interior of a starship that is developed from first principles, through the construction of its soils. The production of this environment takes the form of an experimental series of investigations in which the nature of life itself is being choreographed into existence from primordial ingredients through the interactions of its bodies, spaces and the many potential relationships between them. These syntheses ultimately produce a living body - a megastructure which is not defined by discrete objects and their anatomical relationships but produced by countless prototypes and relationships between human and nonhuman agents. Just like terrestrial soils. However, it's experiments do not propose to mimic our existing earths or dirts but seek new questions in the production of its living space rather than particular affirmations or definitive answers. Persephone's experimental terrains encapsulate the bold explorations and inventions of scientific and artistic research practices whose myriad tumbling relationships challenge the nature of life, the environment, human inhabitation and how we shape the character of our present world.

A Mountain near Thebes

Andrew Ballantyne

The mountain as a heterotopia, used as a place for self-reinvention, presented here with reference to Michel Foucault's analysis of *The Temptation of Saint Anthony* by Gustave Flaubert. The body becoming matter. Matter becoming animate.

Beyond the Border: John Stapylton Grey Pemberton's expedition to Darjeeling and the "Snowy ranges"

Martin Beattie

This paper explores the entangled meanings of travel, exploration, empire, and the sublime in the late nineteenth century landscape of the Himalayas, through the family letters of John Stapylton Grey Pemberton (1860-1940). (The letters form part of a larger collection written whilst on an 18-month world trip, through South East Asia, Australia, Hong Kong, China, Japan and Canada.)

In particular, I focus on Pemberton's "expedition" in late February 1887, from Kolkata (formerly Calcutta) to the colonial hill station of Darjeeling, then on to the villages of Tonglu and Sandakphu, along the Nepalese border to view Kanchenjunga and Everest, or what were picturesquely referred to as the "snowy ranges." Even in the second half of the nineteenth century, the popular concept of the romantic sublime was a force to be reckoned with, in places like the Himalayas.

Pemberton's trip was anything but a sublime experience, involving a near twenty-four hour train trip from Kolkata to Darjeeling, followed by two days strenuous travel on pony and

foot, with “coolies,” from Darjeeling to Tonglu and Sandakphu, before returning early due to bad weather, poor roads, and “want of time.” The trip was conducted at a hectic pace, and at the wrong time of year. In the end, Pemberton caught only a few glimpses of the mountains between “the mists.”

This paper will begin to answer questions about why the Himalayas had such a draw during the late nineteenth century, and what made Pemberton endure much discomfort to see the mountains just a few times. In many ways, Pemberton’s trip from Calcutta, the heart of colonial power, to the distant Himalayan peaks, beyond what were the edges of British territory, is symbolic of how far that power sought to extend itself, but also indicative of how it was doomed to fail.

Excavation of the Anthropocene mountain

Matas Belevicius

Throughout many centuries mountains have captivated human imagination, whether directly or indirectly, in forming literal and metaphorical understandings of the world. The cultural significance and morphological interpretations of mountains differ amongst various groups of society, despite carrying the same underlying message as a source of knowledge. This long held fascination of great heights is manifested through a variety of different doctrines: art, literature, architecture, natural and social sciences as well as theology, all of which form very different in “form” but similar in “meaning” images associated with time, power, sanctity, fear, tranquillity, beauty, disaster and miracle. The work “Excavation of the Anthropocene mountain” traces the evolution of geological thinking and illustrates the dynamic relationship it has with our cultural understanding of the environment and how we interact with it.

Ascending the Urban: Climbing the Mega-structures of Science Fiction

Amy Butt

“He was well aware of the disparity between the simple business of climbing to the roof ... and the mythologized version of this ascent that had taken over his mind.” JG Ballard, *High-Rise*

In the megastructures of science fiction, where the horizontal outside ceases to have relevance, what significance is placed on the notion of ascent? This paper will examine the role of narratives of climbing in a selection of science fiction texts that range from popular to pulp; JG Ballard’s *High Rise* (1976), Robert Silverberg’s *Tower of Glass* (1970) and *The World Inside* (1971) and a short story by Barrington Bailey *An Overload* featured in *New Worlds 6* (1973).

These texts explore the creation of urban vertical topographies, both as the extrapolation of current urban development and as monuments to the civilization they contain. In these visions of the future Ryan Sayre’s ‘colonisation of Up’ (2011) is ostensibly completed and Hewitt and Graham’s ‘uneven social geographies of vertical mobility’ (2012) have been built into its very fabric. Narrative development is dependent on a character’s movement along the z-axis, through the individual power struggle of literal social climbing, or the psychological implications of vertical displacement.

Within these societies ascent becomes a political or subversive act, and the elevator and stairwell the battleground of social change.

Something Concrete and Modern: Megastructures Real and Imagined

Rutter Carroll

This paper is intended as a contribution to the exploration of megastructures as part of the Mountains and Megastructures symposium organised by Newcastle University, and sets out to explore the North East of England's tradition of real and imaginary Megastructures. A megastructure is a concept which first entered the architectural debate in the 1950s and 1960s and by definition is simply an exceptionally large, man-made, self-supporting structure. Based on such criteria, this study can show that the region is host to a number of them, both real and imaginary.

In the north east real megastructures arguably began with Emperor Hadrian's Roman Wall in AD 122, which intersects the region west from Wallsend near the North Sea, to Bowness on Solway on the banks of the Irish Sea, a distance of 117 kilometres. Building on this scale was brought up to date with the construction of the Tyne & Wear Metro in 1980 by Consulting Architects Faulkner Browns, a 75 km transit system which traverses the local conurbation.

These real constructional colossi are joined by Dunston Staithes, built in 1893, and at 526 metres long and 20 metres high, the largest timber structure in Europe. Some architects in the 1960s saw the megastructure as a way to combine the vision of city planners and architects. Like-thinking planners and architects believed that planning should be viewed on a much larger scale, and megastructures could provide real solutions to sprawl and disorganized inefficient cities.

Among a series of imaginary concepts from this period in the northeast are Ryder and Yates' Tyne Deck, James Stirling's headquarters for the steel maker Dorman Long on Teesside and Nappers' Linear City.

There are no definitive requirements for a structure to be deemed a megastructure; just that it is unique in its size and engineering.

"A jump towards brightness" - Modernism and Community in Park Hill

Prue Chiles

"The apartments at Park Hill are more modernist than they ever were."

Andy-New resident

What it is like to live in a modernist mega-structure today? We illustrate here a process of co-production, working with some of the residents of the newly refurbished Park Hill and exploring through models and drawings of the apartments, how easy is it to live there. Are their homes perfect or are there restrictions to enjoying being there? Why did the residents choose to move in?

As architects we listened to their ideas and challenges. We drew on plans together,

offering suggestions and ways of doing things.

In a short presentation we argue that making is a creative impulse that creates opportunities to think about how things could be otherwise. We draw on a more materially situated, sensory and embodied form of co-design as a mode of thinking and doing.

This is part of Imagine an AHRC Connected Communities project In collaboration with Western Park Museum, Sheffield.

With thanks to Kate Pahl, Kim Streets, Alan Silvester, Anna Cumberland and Matt Clubbs-Coldron, with model-making from Tom Henderson-Schwartz, Alanah Honey, Wilson Kwan, Katherine Gomm.

A Megastructure in Miniature?

Graham Farmer

The Apollo Pavilion (1970), Peterlee, designed by artist Victor Pasmore is one of the few survivors of the recent lust for demolishing the post-war architectural heritage of the North-east. Always controversial and contested the Pavilion was part of an ambitious mega-scale urban design approach described by Pasmore as an “experiment in total environment.” This research suggests that the survival of the Pavilion can be attributed to its emblematic status within the local community as an embodiment of the principles (real and imagined) that underpinned the development of the new town. In short, the Pavilion can be understood as a miniature representation of wider political, social, formal and aesthetic values.

An Alternative History of Modern Architecture?

Josep-Maria Garcia-Fuentes

It would not be risky to suggest that histories of modern architecture only refer partially to the whole of modernity. Many modern architects and architectural works hardly fit within these histories and their established relates, as well as they are often self-referential to the field of architecture. The Catalan architects Antoni Gaudí and Enric Miralles could be considered between these non-orthodox modern architectures that are –and has been– difficult to approach –as Henry Russell-Hitchcock stated revealingly when acknowledging his limitation to face Gaudí’s works in 1957.

This is, indeed, partly because the interpretation of the past is always politically and culturally intentional and historic knowledge is mobilised to practical ends related to contemporary professional debates. Thus historians, like architects, are selective with the architectures and debates they deal with in their works. However, could be worth to review some of these processes and the works and architects that have been left aside in different degrees under a new light? A revision of these marginalised projects and in parallel to the political, cultural and ideological debates of long duration over the last two centuries could reshape our understanding of modern architecture?

Through the analysis of the design strategies and intellectual anxieties of Gaudí and Miralles, this paper reflects on the importance that the architectural interpretation of

mountains –and their associated megastructural understanding– has had in the shaping of modern debates of architecture since 18th century, in close relation to the modern emergence of landscape, the awareness on mountains and the shaping of modern scientific and architectural debates. Grounding on these reflections it is argued ultimately if it would be possible to trace an alternative or parallel History of Modern Architecture through this discussion?

Contemporary Megastructures: Multi-Level Cities as Contested Urbanism

Stephen Graham

Whilst the 20th century genealogy of megastructural urbanism is widely debated, its contemporary manifestations are startlingly neglected. To remedy this lacuna, this paper develops a global perspective of the politics of megastructural urbanism. Its particular emphasis falls on the multi-level and split grade megastructures influenced by Futurist such as Antonio Sant Elia, Le Corbusier's original ideas in Algiers, and the thinking of Archigram movement.

The paper falls into three parts. The first reflects on the rise of multi-level city planning in the UK after World War II and focuses especially on the 'layer-cake' city ideas that informed comprehensive redevelopment in Newcastle and the City of London. Emphasising the widespread dismantling of the legacies of these projects, the bulk of the paper then reviews the ways in which multi-level cities have since been generalised across a wide range of contemporary cities in the planning of internalised retail downtowns in North America ; raised edifices supporting new 'skytrain' public transport in Bangkok; premium pedestrian bypasses in Mumbai; and, most famously, through extraordinarily intricate multilevel megastructures in the core of Hong Kong.

Emphasising the startling politics of urban injustice which tend to surround contemporary megastructural urbanism, the paper closes by reflecting on the possibilities of connecting the forests of urban housing towers proliferating across many cities into more progressive megastructures through using horizontal connectors at levels beyond the ground, podium or subterranean levels.

Violent Intersections. Modern State | Ancient Land

Zeynep Kezer

This short presentation is a report about my research-in-progress on infrastructural expansion as a strategy for state penetration in East-Central Turkey. I focus on Turkey's first mega-dam, the Keban Hydroelectric Plant, which was widely acclaimed as a harbinger of high modernization. While Keban rationalized irrigation in the Harput Plateau and augmented national power generation exponentially, its large reservoir profoundly changed the region's cultural landscapes, flooding dozens of vilages, displacing thousands of people, disrupting agricultural patterns, and importantly helping bring several local paths of movement under state control.

Representing Mountains and Megastructures: Printmaking and the depiction of the Holy Mountain and the Athonite Monasteries

Christos Kakalis

The paper explores the printmaking tradition of Mount Athos, a semi-independent peninsula of North-eastern Greece in which a male monastic community is organised and one of the most famous pilgrimage destinations. Focus is on the printed representations of the Mountain of Athos and the Athonite monasteries (a kind of Byzantine megastructures) that were mainly created during the 18th and 19th centuries. Extensive historical research on the theme and the creation of a new printmaking workshop there during the 1990s reintroduced the importance of the interrelation between crafting and expressing religious meanings through the creation of religious images of the topography. Given the possibilities offered by the printmaking techniques, depictions of the Athonite landscape and monasteries were produced in great numbers during the 18th and 19th centuries. Mainly copper engravings, these prints became a means of international communication of the Athonite tradition, either offered as a “blessing” to visitors, or used to attract pilgrims and donations. The production of Athonite engravings in European countries with strong Greek or Orthodox communities (i.e. Venice or Vienna) was gradually taken over by printmaking workshops on Mount Athos, something that also affected the printed representation of the Athonite built and natural landscape. Through the lens of printmaking process, the paper analyses the particularities of these expressions to underline their symbolic and religious associations but also explore the way printmaking technique has contributed to these representations.

Different from the traditional two-dimensional cartographic translations of the peninsula, these prints are examined in the paper as narratives of places and events that communicate also elements of the embodied meanings of the topos. Besides adding to the meaning of these representational loci, the limitations of engraving technique in different cultural contexts (western and eastern European ones) has also affected their materiality suggesting an interesting interaction between making and narrating that this presentation aims to further unfold.

Tracing whimsies of Wörlitz Vesuvius

Seva Karetnikov

The volcano of Wörlitz Park located on the Island “Stein” is directly inspired by the legend of Pompeii. Constructed between 1788-1794, it was meant to be a reminiscence of Prince Franz’s trip to Italy that he shared with a British diplomat Sir William Hamilton. Prince was inspired by Roman Emperor Hadrian’s villa, who had copies of distinct places from around the empire in his garden (and through that he established a symbolic ownership over the actual object). Apart from that, the volcano of Wörlitz follows advice of “Dissertation in oriental Gardening” by Sir William Chambers, who advised to express the sublime qualities of nature through technical and artistic means. From these two artistic references it is obvious that Volcano can be seen as an early theme park installation, revealing primeval forces of nature through artificial means to serve as a way to entertain visitors.

In my short presentation I will trace connections between the artificial volcano and

some of the precedents which we collected and analysed during the course of our group research. By atomizing the structure into elements, I will show its historical and theoretical placement within the discussion about artificial mountains.

Making a Mountain out of a Megastructure

Adam Sharr

This paper investigates the attitudes to history present in a symbolic but un-built project from 1960s London. That project proposed to demolish the historic palazzi of Whitehall – Britain’s ‘Government Centre’ – and replace them with a stepped-section megastructure. Its architect was Leslie Martin, Cambridge University’s first Professor of Architecture. His Whitehall design was submitted to Harold Wilson’s Labour administration in 1965, a party which had pledged to remake Britain in the ‘white heat’ of scientific revolution. It emerged from theory that Martin developed with Lionel March, a graduate of the Harvard-MIT Joint Center for Urban Studies, which understood design as research towards the perfection of ideal building types. The project’s form was developed from graphs and early computer studies.

Martin’s project envisaged clearing six blocks including George Gilbert-Scott’s Foreign Office and other eighteenth and nineteenth century structures now listed in the UK. It proposed to spare from demolition Inigo Jones’ Palladian Banqueting House and Norman Shaw’s Arts-and-Crafts Scotland Yard. These were to be locked into the new megastructure. Martin’s Whitehall demonstrated a selective view of history in which exemplar buildings were isolated as objects for future contemplation. This is simultaneously the fulfilment of an art-historical view where buildings are artefacts to be classified in terms of styles, and of a scientific outlook where specimens are objects of research. It is also perhaps the fulfilment of the ideas of Nikolaus Pevsner’s Pioneers of Modern Design, accepting Jones and Shaw while rejecting the Gothic revival.

The Whitehall plan can be viewed in relation to the philosophical trope which sees mountain landscapes as somehow primeval and transcendent; older, bigger and tougher than the people whose lives they touch. The plan’s authors understood their design not so much as a specific design for a specific site but, instead, as a timeless archetype. On one hand, it sought to inscribe in London’s city fabric a Pevsnerian historiography while, on the other, it envisaged an architectural theory which transcended human culture and history. As such, it can be argued that Martin and March were making a mountain out of a megastructure.

Everest Death Zone: Mallory

STASUS - James A. Craig & Matt Ozga-Lawn

The Everest Death Zone situates us in and around the body of the explorer George Mallory, who attempted the first documented summit of Mount Everest with his colleague Andrew Irvine in 1924, and whose frozen and preserved body was found 75 years later in 1999. It is a matter of speculation as to whether the endeavurers made it to the summit or not, and the installation (and associated drawings and text) reflect on the event.

With thanks to David Boyd, Joe Dent, Nik Ward & Ruochen Zhang.

EXHIBITION

A-Z

Artificial Mountains Linked Research

Matas Belevicius & Vsevolod Karetnikov

Model: Apollo's Rationalised Landscape

God of knowledge and rationality, Apollo, was the one who gave order to the world in Ancient Greece.

Illustrations: Collection of Artificial Mountains

An extract from a yearlong investigation into artificial mountains and their development throughout history of architecture and culture.

Imaginary Megastructures

Amy Butt

These books invite you to explore other worlds, to glimpse an imagined future. They contain visions of the urban megastructures conceived in the New Wave of SF, responses to radical change witnessed in the urban fabric of the city. They extrapolate from existing technologies to present an exaggerated and experiential reaction to the built environment. Through them we can explore an imagined future, and perhaps gain critical perspective on our urban present.

17 Science Fiction Novels and Anthologies from the personal collection of Amy Butt. Feel free to read but please do not remove from the exhibition.

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Architects in the 1960s saw the megastructure as a way to combine with the vision of city planners who believed that planning should be viewed on a much larger scale, and megastructures could provide real solutions to sprawl and disorganized inefficient cities. There are no definitive requirements for a structure to be deemed a megastructure; just that it is unique in its size and engineering.

“A Jump Towards Brightness” - Modernism and Community in Park Hill

Prue Chiles

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Andy-New resident

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Moving Mountains: A Travelling Landscape Object

Christos Kakalis

In June 2014 the Edinburgh School of Architecture and Landscape Architecture organised an International Symposium and parallel (architectural & artistic) Exhibition under the title ‘Moving Mountains: Studies in Place, Society and Cultural Representation’ (Organisers/ Curators: Christos Kakalis and Emily Goetsch). The cabinet has been designed as a moving archive of the Moving Mountains’ event, a ‘traveling landscape object’ that suggests a re-curating of the exhibited material. The cabinet includes works of STASUS, Maria Mitsoula, Miguel Paredes, Kostas Manolidis, Carlos Arroyo, Eugenio Fernandez, Christos Kakalis, Kim W. Wilson, Claire Breen, IC-98, Jessica Ramm, Kevin Raines, Akshaya Narsimhan.

With thanks to Paul Diamond.

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Because It's There

Ray Verrall

Through a series of painted repetitions, each informed exclusively by the previous iteration, the presumed permanence and phenomenal presence of the original subject become both exaggerated in detail and eroded in meaning, while the transcriptive weaknesses of technique and medium are deliberately exposed.



Organisers

Architecture Research Collaborative (ARC), Newcastle University

Symposium: Josep-Maria Garcia-Fuentes, Katie Lloyd Thomas

Exhibition: Matt Ozga-Lawn

With thanks to: Mark Halpin, Sean Mallen, Kim McCartney, Karen Ritchie, Elaine Watt

ARC
architecture research collaborative

