

Land.Arch.Infra:

Synergies between teaching and research

Dr Luca Csepely-Knorr and Dr Richard Brook – Manchester School of Architecture

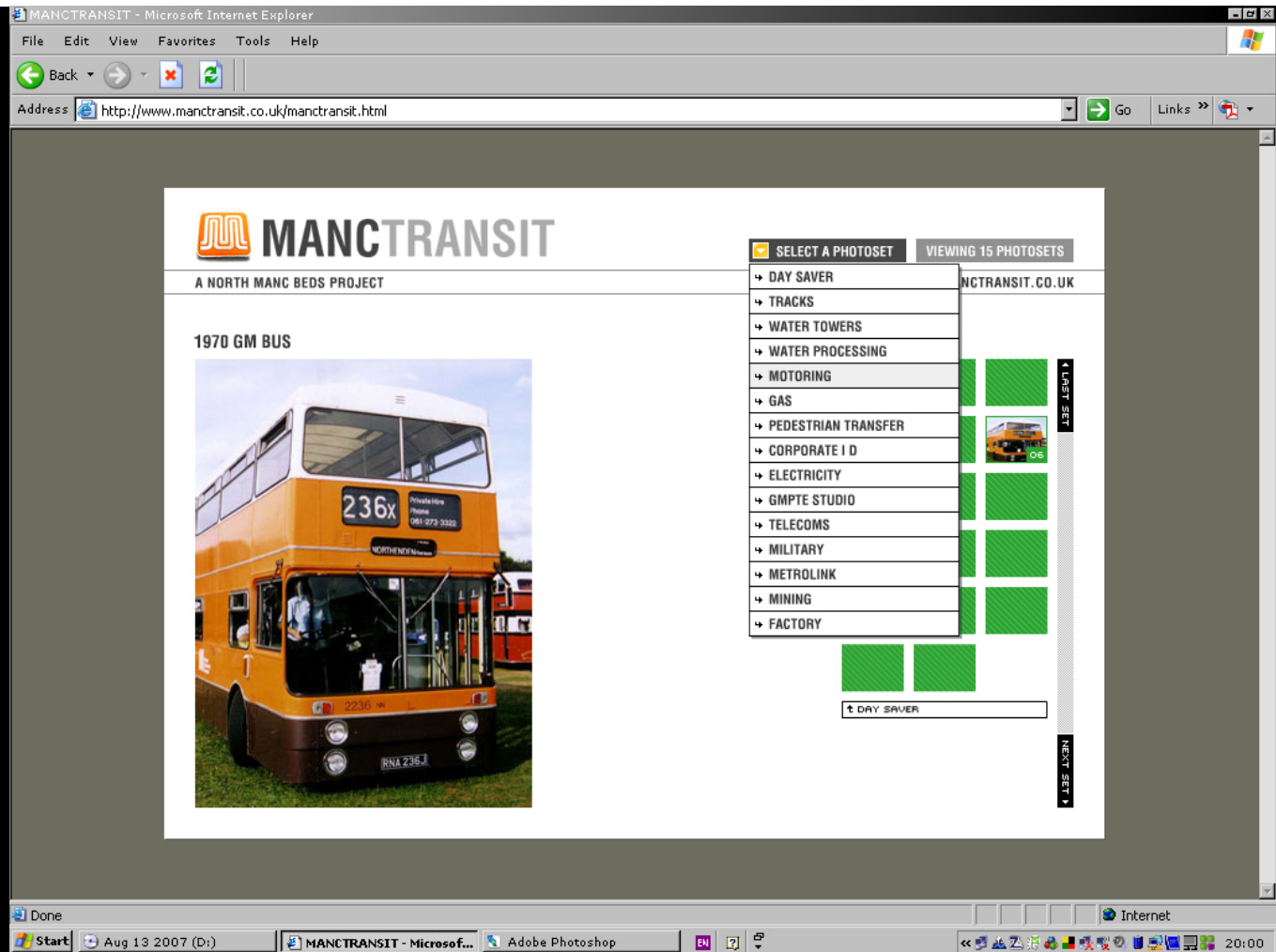
**Student Focussed
Students as Participants**

Emphasis on Research Content	<p>Research-tutored Students' activities are centred around the writing of essays and dissertations, and the consequent discussion with tutors.</p>	<p>Research-based Students themselves take on the role of researchers, and the curriculum is largely centred around inquiry based activities.</p>	Emphasis on Processes and Problems
	<p>Research-led Students learn about research findings. The curriculum may be based around staff research interests, and the principal mode of teaching is the transfer of information from teacher to student.</p>	<p>Research-oriented Staff try to engender a research ethos in their students, by placing emphasis upon the processes of knowledge creation, rather than the content itself. Key to this mode are the development of skills of enquiry by students.</p>	

**Teacher Focussed
Students as Audience**

The Link between Research and Teaching in Architecture, Andrew Roberts 2007, referencing Healey, M. & Jenkins, A. (2006). Strengthening the teaching-research linkage in undergraduate courses and programs. in Kreber, C. (Ed.). *Exploring research-based teaching: New directions for teaching and learning*, no. 107. Chichester: Jossey-Bass Wiley. pp 45-56.

MANTRANSIT website (2004)



cruckshank-and-seward, Mains... x

www.mainstreammodern.co.uk/casestudies.aspx/architects/cruckshank-and-seward

Most Visited Getting Started

MAINSTREAM MODERN

108 COLLECTED ARCHIVES
















Case studies [108] Bibliography What is Mainstream Modern?

RSS Feed Contact

Residential [11] Commercial [30] Industrial [8] Educational [15] Civic [7] Religious [11] Health [1] Mixed use [5] Demolished [4] Transport [6] Leisure [9] Artwork [1]

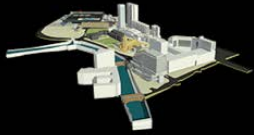
CRUCKSHANK-AND-SEWARD [15 case studies]

1928 - 1974 period 1 architects 5 locations

 RITZ BALLROOM 1928 Manchester	 SCHOLES'S FACTORY 1934 Wythenshawe	 RENOLD HOUSE 1954 Wythenshawe	 CANON GREEN COURT 1955 Salford	 CHANDOS HALL 1962 Manchester	 RENOLD BUILDING 1962 Manchester
 MARKS & SPENCER STORE AND OFFI... 1962 Manchester	 ARTHUR HOUSE 1963 Manchester	 ROSCOE BUILDING 1964 Manchester	 BARNES WALLIS BUILDING 1966 Manchester	 HULME HALL CHAPEL 1968 Rusholme	 MATHS AND SOCIAL SCIENCES BUIL... 1968 Manchester
 RENAISSANCE HOTEL 1972 Manchester	 SWINTON TOWN HALL EXTENSION 1973 Swinton	 NATIONAL COMPUTING CENTRE 1974 Manchester			

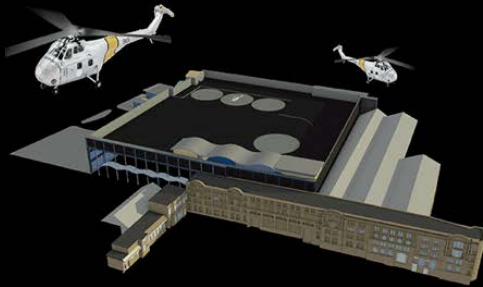
MAINSTREAM MODERN website (2014-)

Homepage



- 1940s 1945 Plan
- 1950s Manchester Heliport
- 1960s Buchanan Report
Ministry of Aviation Report
Marks and Spencer Store and Offices
Corn Exchange
Proposals and Exhibitions
Highland House
Manchester Cathedral Pedestrian Proposals
- 1970s Renaissance Hotel
- 1990s Manchester Bomb
- 2000s Irwell City Park and Premier House Proposals

1951
MANCHESTER HELIPORT



Post WWII intercity Helicopter travel became a popular future vision for major cities across the UK.

Discussions for a Manchester Heliport suggested a significant likelihood for an emergence of helicopter infrastructure in the city.

The sketch schemes produced by R. Nicholas, (a powerful city engineer), evoked the idea of technological progress for Manchester in a nationwide proposal "from which the city could hardly be excluded".

The British European Airlines suggested that by 1954 there could be a heliport in Manchester. At this time small 'copter flights from Birmingham to London cost around £4.



Images courtesy of: MMU archives and Richard Brook



Homepage



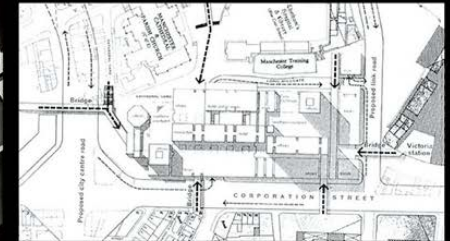
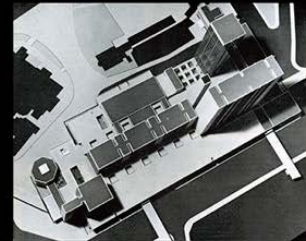
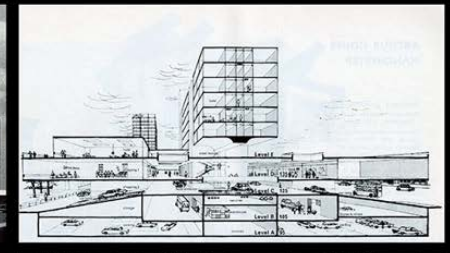
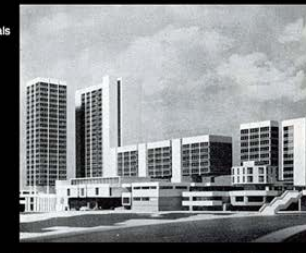
- 1940s 1945 Plan
- 1950s Manchester Heliport
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Ministry of Aviation Report
Marks and Spencer Store and Offices
Corn Exchange
Proposals and Exhibitions
Highland House
Manchester Cathedral Pedestrian Proposals
- 1970s Renaissance Hotel
- 1990s Manchester Bomb
- 2000s Irwell City Park and Premier House Proposals



First discussions to redevelop the Manchester Corn Exchange Precinct took place in 1961 where The London Company, Property Investments Consolidation make an offer to take over the the building for £680,000, which is commended by the Exchange shareholders. The company had recently bought Appleby Lodge, Manchester for £600,000.

By 1962, details for the £5 million scheme began to emerge. The proposal served as a solution to the "under-shopped" Manchester. It was described by the chairman M Bosman to be "[the] most important development yet to be announced in Manchester".

In 1963, W. S. Hatrell and Partners release proposals for the new Corn Exchange and Cathedral Precinct.



Images courtesy of: (Top left, top right and bottom left) A-NW; (Bottom right) The Builder 1963.

1965

PROPOSALS AND EXHIBITIONS

MAKING POST WAR MANCHESTER pages from website (2016)



MAKING POST WAR MANCHESTER still from promotional film (2016)



Making post-war Manchester: visions of an unmade city

Manchester School of Architecture, in collaboration with MMU SCMDT, University of Manchester SEED and The Modernist Society present a public exhibition of 3D game environments and archive material of 1960s visions for 5 sites in Manchester.

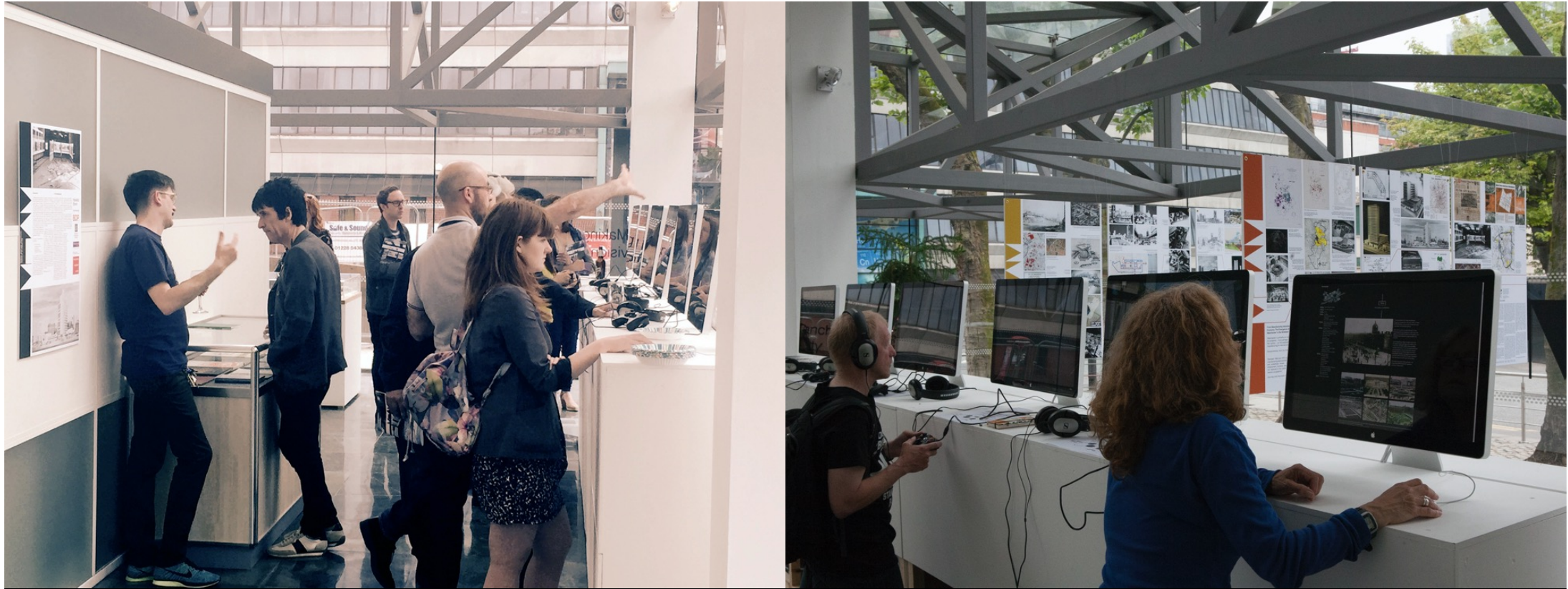
For further events attached to the exhibition please see www.modernist-society.org/events/making-mcr

6th June – 24th June 2016 (weekdays only) 09.00-18.00
Manchester Technology Centre, Oxford Road, Manchester, M1 7ED

Sketch by Peter Wright for Wilson Womersley

bruntwood • **BDP.**

MAKING POST WAR MANCHESTER exhibition catalogue and poster (2016)



MAKING POST WAR MANCHESTER exhibition. Johnny Marr, digital encounters and physical display (2016)

Arts

Lost horizons

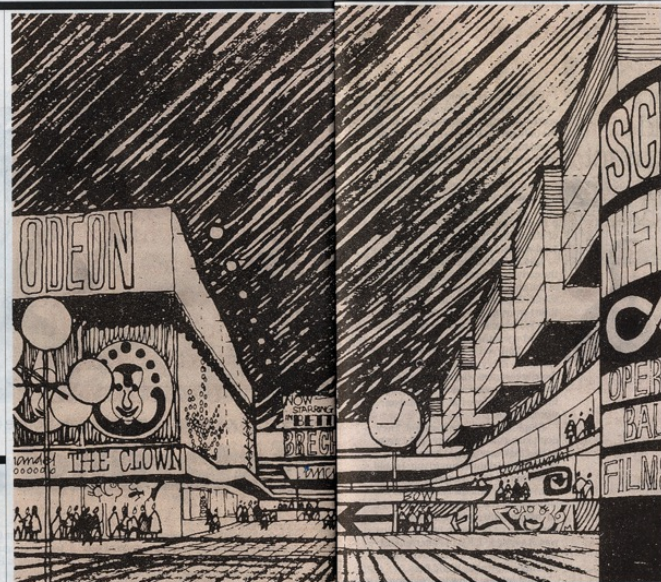
Amid the postwar rubble, designers dreamed of a gleaming new Manchester with moving pavements, monorails and highways in the sky. But austerity took their vision away - handing the future instead to 'gangster development'. **John Harris** reports

A handful of people are staring into a future that never came to pass. Holding gaming handsets connected to a row of computers, they wander virtually through Manchester's dazzling "entertainment district" to its main railway station where two elevated highways carry speeding traffic over hulking modernist buildings.

The overall effect is somewhere between Grand Theft Auto and Minecraft, with one key twist: back in the 1960s, these gleaming environments were not the stuff of fantasy, but everyday urban planning. Over the next 10 days, Manchester will be exploring its past in the annual Histories festival, taking in everything from the local wanderings of Karl Marx and Friedrich Engels to the lingering after-

shocks of the Sex Pistols' legendary 1976 gigs in the city. But the exhibition I am watching take shape might be the most fascinating thing of all. Visions of an Unmade City brings to life long-forgotten plans for Manchester's reinvention: a riot of moving pavements, monorails and rooftop heliports.

Richard Brook is principal lecturer at the Manchester School of Architecture, Martin Dodge works in the geography department at the university. Sitting down to talk through their show, conversation is full of forensic expertise - and wide-eyed enthusiasm. "I admire the chutzpah," says Dodge. "Today, urban development lacks ambition. You look at some of the stuff from the 1960s, and you think: 'Even if it didn't work, these people were really going to do something, weren't they?'"



Planners say history has been rewritten. 'I wanted to make the world a better place'

There was massive ambition there." The plot starts in 1945, when proposals to rebuild a bomb-damaged Manchester were drawn up by the city's corporation, forerunner of the modern-day council. Ambitions were so titanic they even included demolishing the celebrated Victorian town hall. But postwar austerity and stringent building regulators put everything on hold - until 1961, when central government belatedly

approved the plan ... with drastic updates. "Imagine the difference, socially and culturally, between 1945 and the early 1960s," says Brook. "The computer had been invented, atomic energy had come on stream, there was mass car ownership, and TV had really got going. Huge social change." The plans that came out of the office of Manchester's city planner - one John Miller - reflected this tumult, and the utopianism that Labour prime minister Harold Wilson saw in "the white heat of new technology".

The city centre was set for a complete rebuild, based on ideas that in retrospect suggest a kind of gigantist kitsch - but Brook and Dodge say the thinking was amazingly prescient. The planners had admirable ambitions for public transport and pedestrianised areas, a forward-looking idea of the city's "education economy" and a belief in something most cities now take for granted: that the urban environment is a set of connected zones, each serving a cultural purpose.

Some of the plans were realised - in the shopping zone around Market Street and the Arndale Centre, and the

modernist architecture of the universities district, much of which is now disappearing. But when the Opec oil shock of 1973 tipped the global economy into crisis and the British reorganisation of local government spelled the end of the old departments, most of the grand plans began to gather dust. By the end of the 1970s, the dream was pretty much dead. There would be no monorail linking Manchester Airport to Langley, on the city's

A retired architect in seaside Lytham had original drawings under his bed

northern edge, no moving pavements to carry people along Oxford Road and out of the station; the urban skyway that would ferry cars to the dizzy heights of the nearby Piccadilly Plaza would never be built.

When Brook and Dodge began their research, they discovered the relevant documents were surprisingly hard to come by. "Very little survives," says Brook. A couple of years ago, he visited a retired architect in the seaside town of Lytham St Annes about another project, only to find he'd once worked in Manchester's planning office and actually had the original drawings under his bed. Brook duly copied them, and added them to the ever-expanding collection that his clever masters students have turned into virtual environments for this show.

"A lot of the people who worked on the plans are still around and keen to tell their stories," says Dodge. "Some feel they've been misrepresented, in all the received opinion about architectural caruncles being the fault of the planners. You've got people saying: 'Look - we had good intentions. History's been rewritten: I was a good planner, and I wanted to make the world a better place.'" Much of that loathing of postwar architecture and planning, of course, lingers on. I wonder - given the persistent belief that Britain once teetered on the brink of some Sovietesque urban nightmare - what it is about this maligned period that impresses these two enthusiasts? Brook cracks a smile. "Well, I'm a bit of a concrete fetishist. And I like rare groove things: things other people dislike almost instantly. I appreciate why some people might find them ugly."

What about the common feeling that these lofty modernist visions often turned out to be oppressive and inhuman; that they could lead to the kind of disasters from which many cities - Birmingham for example - had to escape? "But you could say the same thing about the piecemeal development in London and Manchester now," Dodge insists. "At least in the 60s there was a strategic, grand vision. Now, it's just raw capitalism and gangster development: if someone can develop a site, they will." He thinks for a moment, and casts his eyes towards the row of computers, and their simulations of a 20th-century that never was. "They wanted a better city," he says.



The 1960s designs for an entertainment district, left, airy walkways, an education precinct, and a new ring road; below, today's thrusting skyline



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PHOTOGRAPHS PRIVATE COLLECTION; CHRISTOPHER THOMSON FOR THE GUARDIAN



Making Post-war Manchester: Visions of an Unmade City is at Manchester Technology Centre until 24 June; manchesterhistoriesfestival.org.uk

MAKING POST WAR MANCHESTER press (2016)



THE LIFE OF BUILDINGS Manchester Reform Synagogue digitally remade. Historic photograph positioned inside 3D VR model (video capture - 2018)



RESEARCH METHODS

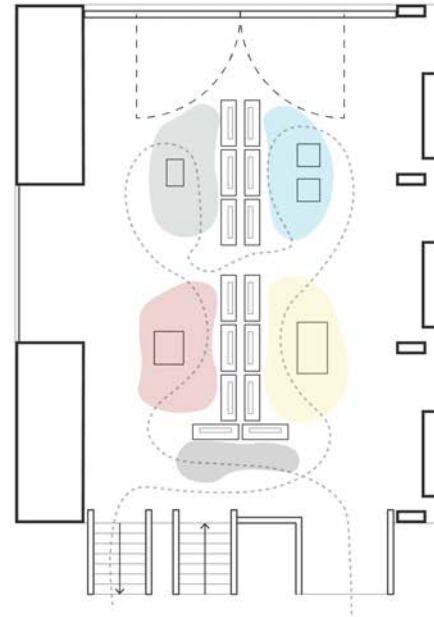


LAND.ARCH.INFRA. 2018-19 Landscapes of Power

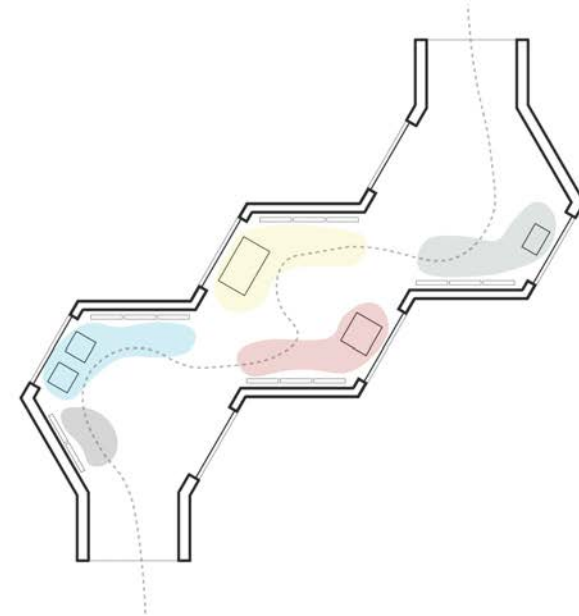
LAND.ARCH.INFRA. 2019-20 Landscapes of New Towns

EXHIBITION LAYOUT

Plans 1:100 @ A3



Exhibition 1: 4th Floor / Benzie Building



Exhibition 2: The Link Gallery

- West Burton
- Didcot
- Rugeley
- Trawsfynydd

LAND.ARCH.INFRA. possible exhibition layouts designed collectively by the students for two alternative locations (2019)

MANCHESTER SCHOOL
OF ARCHITECTURE

the
modernist
society

The Landscape and Architecture of Post-War British Infrastructure

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THE LANDSCAPE AND ARCHITECTURE OF POST-WAR BRITISH INFRASTRUCTURE conference (2019)



RESEARCH METHODS students at the Gibberd Archives (2019)



Katy Harvey

RESEARCH METHODS James O Davies (Historic England) delivering remote session on photographic recording (2020)



**NATIONAL
COAL MINING
MUSEUM**



RESEARCH METHODS Stephanie Thompson (NCMM) delivering remote archives introduction (2020)



LAND.ARCH.INFRA. analysis and synthesis. This model about the landscape of Rugeley power station – designed by Brenda Colvin – summarised the design decisions and represented the stage of the landscape at its height. Jessica Abbott, Florence Booth, Elly Mead and Kelvin Pang (2018)



LAND.ARCH.INFRA. Trawsfynydd nuclear power station. Ziwen Cai, Karolina Dudek, Erin Edmondson, Olivia Marshall and Ben Miller (2018)



Figure. 142



Figure. 143



Figure. 144

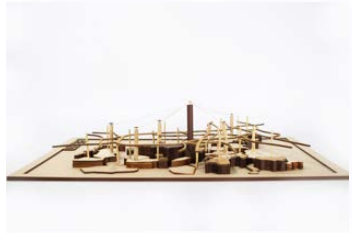


Figure. 145

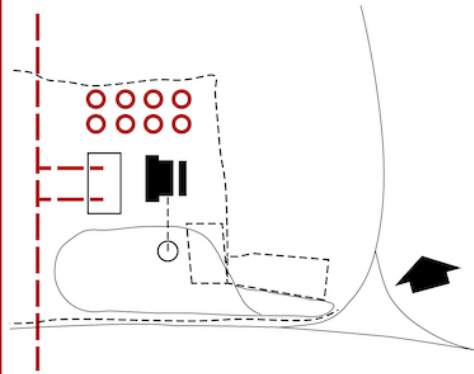
LAND.ARCH.INFRA. Skelmersdale New Town. Lucy Woodward, Joe Copley, Hayden Webster and Liam Costain (2019)



LAND.ARCH.INFRA. Redditch New Town – Koh Sung Jie, Silvio Lussana, Sophie Chappel, Szymon Milczarek (2019)

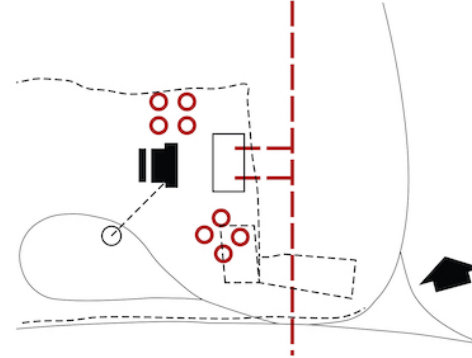


LAND.ARCH.INFRA. Telford New Town. Mona Tamaru, Montunrayo Soyannwo, Sally Lofthouse, Yeside Sobowale and Xinbo Wang (2019)



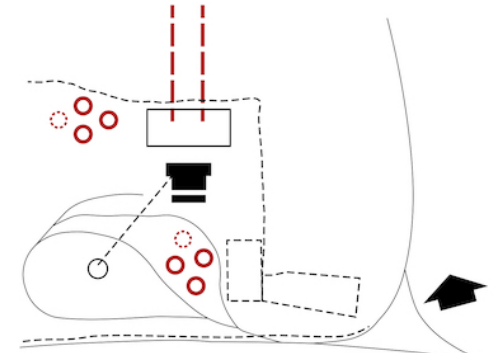
PROGRAMMATIC COMPOSITION

Gibberd's diagram showing the first functional layout for Didcot Power Station. This proposal was the starting point for the design process, based on the engineering study.



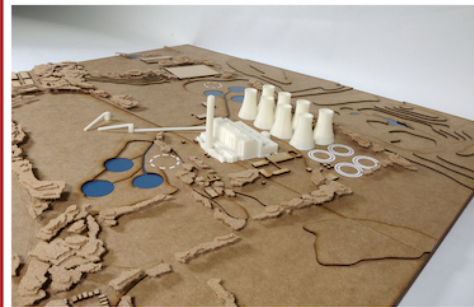
DESIGN DEVELOPMENT

Second design diagram showing the development of the layout with a different approach, based on the visual studies, for the location of the cooling towers and the main buildings.



FINAL AGREED LAYOUT

In this diagram it is shown the final agreed design, showing Gibberd's choice of reducing the number of the cooling towers from 8 to 6.



First programmatic layout designed by Gibberd for the Power Station.

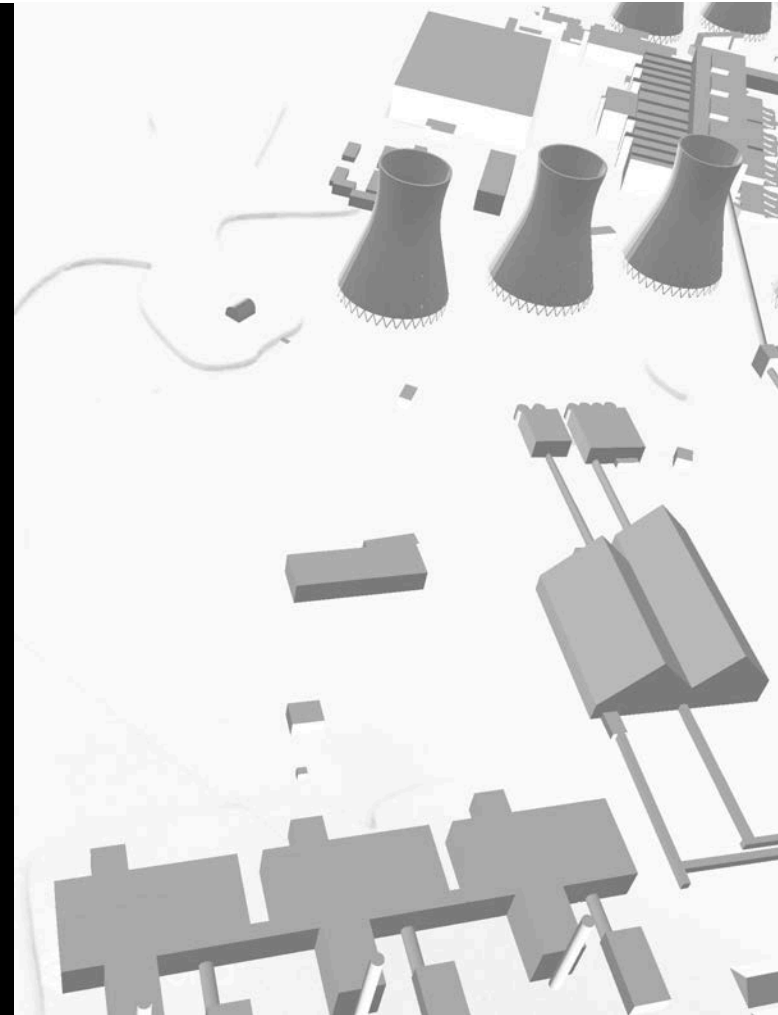
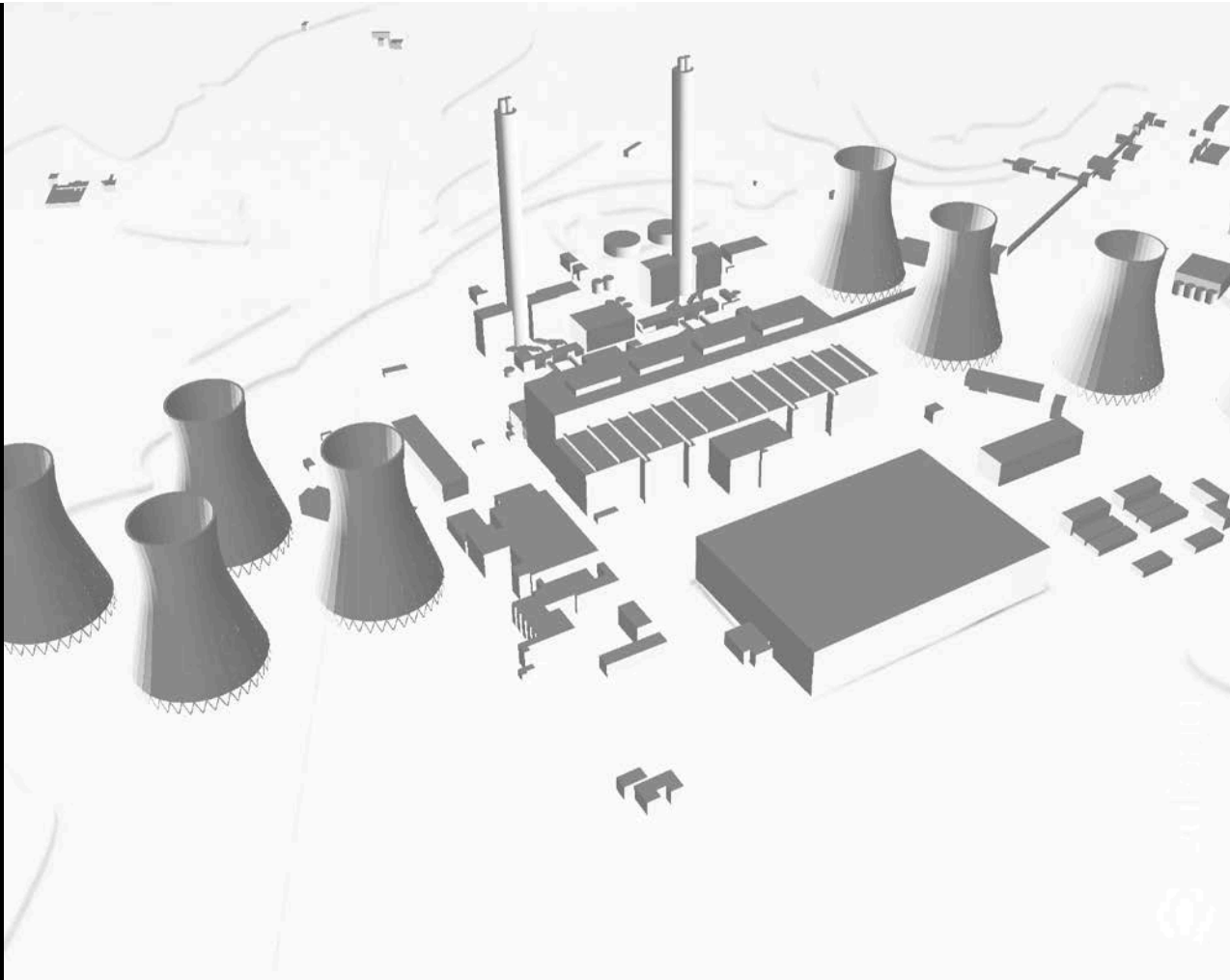


Second proposal designed by Gibberd for Didcot Power Station.

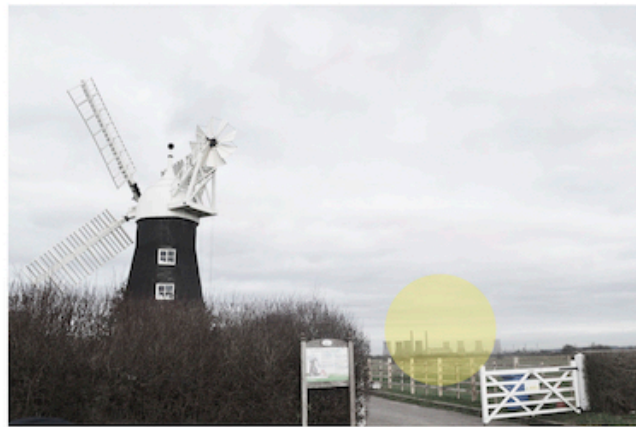


Final agreed layout by Gibberd for Didcot Power Station.

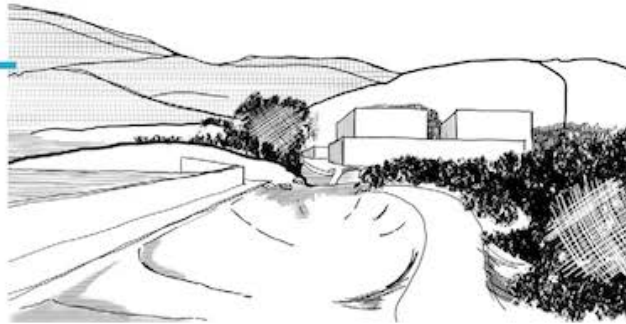
LAND.ARCH.INFRA. analysis and synthesis. Exploring the design process of Frederick Gibberd at Didcot, in the disposition of cooling towers in the landscape through diagrams and corresponding models. Abbas Afsar, Connor Forecast, Caterina Emma Pini, David Wilkinson and George Sims (2018)



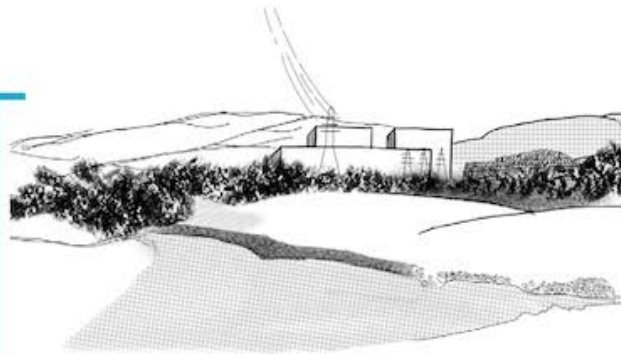
LAND.ARCH.INFRA. analysis and synthesis. Screen captures of VR model of West Burton Power Station. Thomas Brunyard, Sahachai Kumalwisai, Tillman Pospischil and Annette Sibthorp (2018)



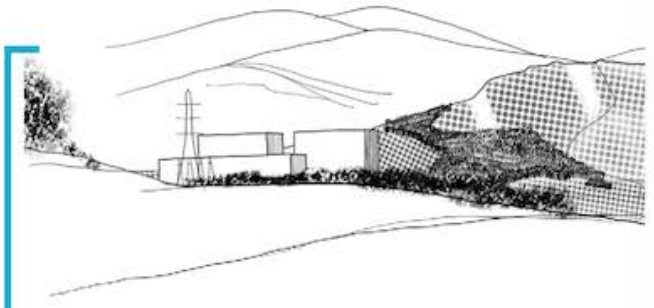
LAND.ARCH.INFRA. fieldwork. Retrieving views of West Burton power station based on Derek Lovejoy's original sketches of 1965 and 1973. Thomas Brunyard, Sahachai Kumalwisai, Tillman Pospischil and Annette Sibthorp (2018)



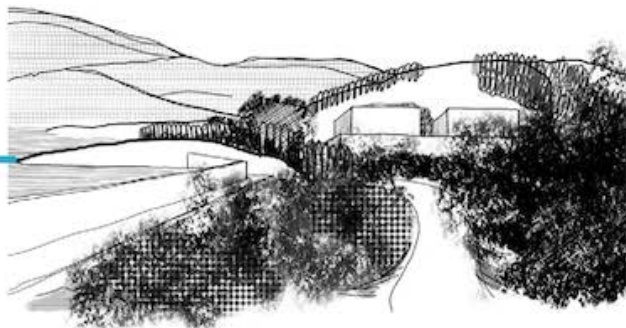
View A From Main Approach Road



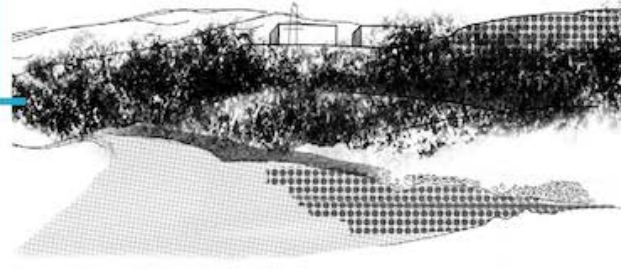
View B View from road at Tyddyn Y Gareg



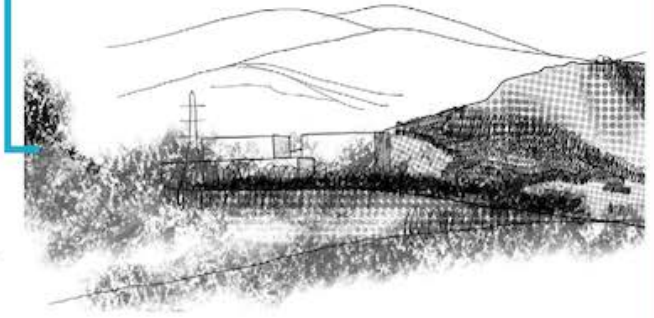
View C View from road at Utica



View A - Current View (2018) From Main Approach Road



View B - Current View (2018) from road at Tyddyn Y Gareg



View C - Current View (2018) from road at Utica

LAND.ARCH.INFRA. fieldwork. Revisiting and redrawing views originally composed by Sylvia Crowe of Trawsfynydd nuclear power station. Ziwen Cai, Karolina Dudek, Erin Edmondson, Olivia Marshall and Ben Miller (2018)

abstract model

abstract model showing oak-wood neighbourhood landscape structure

scale 1:2500

materials used :
-> 3 mm plywood base with etched housing and (part of) industrial neighbourhoods
-> 3 mm plywood laser cut green infrastructure (stained and then painted with watercolours)



The aim of this model was to create a representation of the landscapes interaction with the houses. The model consists of an etched base with various typologies and a separate element to represent the forest.

The model illustrates the landscapers aim to add a 'wild' aspect to the housing estate. It's clear from the model the extent the forests reaches into the road network. Described by the landscapers as 'fingers' that span out into Oakwood.



diagram showing model location on site map



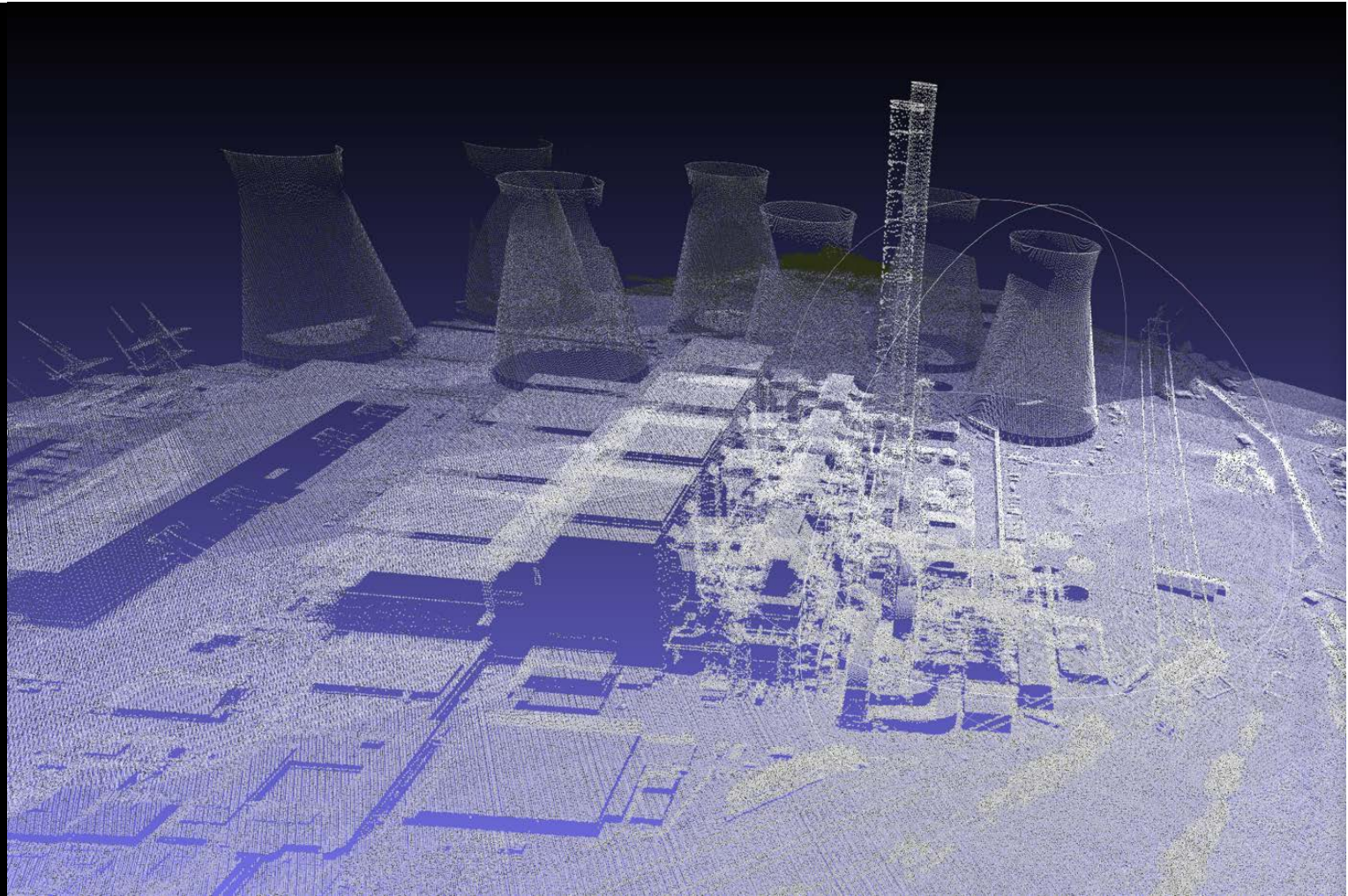
This model intends to depict the atmosphere of a typical junction between Oakwood and the surrounding Risley Moss nature reserve.

The model consists of an etched road and path network. At 1:250 it was necessary to sand the pitches into the houses to help give a sense of scale to the dwellings. To depict the tree heights and densities modelling trees were used at varying heights. This is to show directly the strategies set out by the landscape designers.

The green spine within the centre of the model shows the infiltration of the forest and the stepping of the trees from low near the paths to full height towards the centre of the forest.



LAND.ARCH.INFRA. Warrington New Town. Aifa Binti Muthuraman, Jack Carter, Alexander Hughes and Cezara Misca (2019)



LAND.ARCH.INFRA. Ferrybridge C power station LIDAR point cloud aerial scan (2020)



LAND.ARCH.INFRA. film making experiments in projection mapping (2020)



LAND.ARCH.INFRA. games in development using online resource, Tabletopia (2020)

LINKS

mainstreammodern.co.uk

mpwm.msa.ac.uk

thelifeofbuildings.org.uk

postwarinfrastructure.org

msa.ac.uk/postwarinfrastructure

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Land.Arch.Infra:

Synergies between teaching and research

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