

BSc UNIT 2

HIGH DENSITY

hybridised urban inhabitation

Aleksandrina Rizova & Soomeen Hahm

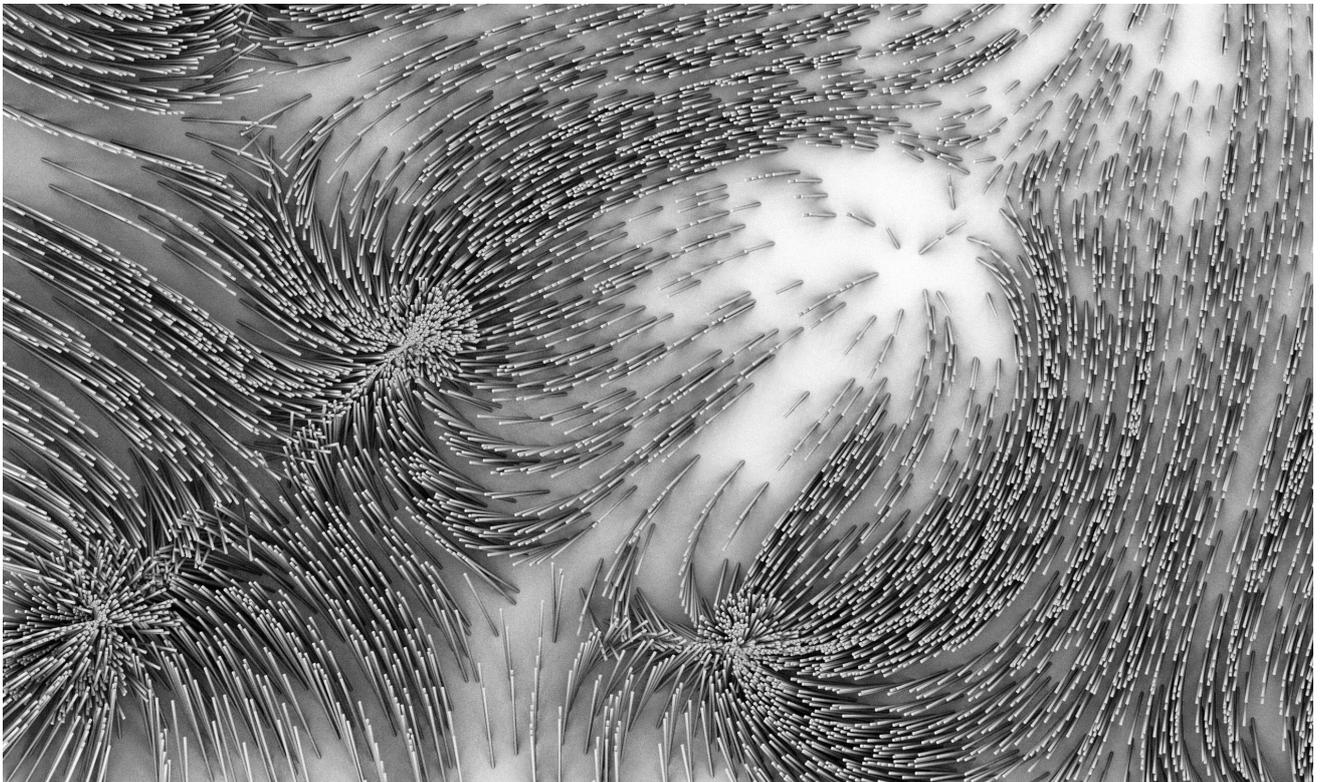


Image Credits: Top Image - Rory Noble-Turner Year 3, 'A Descent into Hallowed Strata', UG2 The Bartlett 2017; Bottom image: Samuel Martin Year 2, 'Mexico City Cinema Complex', UG2 The Bartlett 2017

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Unit Theme:

In Unit 2 we develop ideas through digital simulations, analogue prototypes, material tests and digital fabrication. We encourage digital and analogue making shifting quickly between the hand and the computer. We are inspired by local materials, textures, architectural and urban typologies and local context. This year UG2 will explore the notion of high density on a material, architectural and urban scale. Students will develop individual architectural projects utilising algorithmic design methodology, iterative process physical and digital models and installations. We will explore innovative materials, structural systems and building programmes.

Project 1 - Pavilion/ Prototype:

pavilion: 'a building or temporary structure, especially one that is open and ornamental'

Students will begin the year by designing a small scale architectural proposal - a pavilion. We will start with iterative physical prototypes which will be later on digitalised using a range of new digital design tools. Students will be encouraged to develop an individual design agenda that may be inspired by making and construction techniques, material studies or environmental performance. We are keen to go beyond the conventional and explore building prototypes that are innovative, adaptive and responsive to the programme, users and context. We will question how architecture relates to time by looking of states of transformation from temporal to permanent on a material and spatial scale. We will be running digital workshops to help students develop 2d and 3d modelling skills as well as get familiar with digital fabrication tools. We will be using hybridized analogue and digital design methods encouraging students to combine different techniques in order to achieve highly articulated spatial constructs. The pavilion project will inform the architectural language of the main building project whilst bringing in new parameters such as programme, context, local materials, etc.

Project 2 - Building Project:

At present we need to build 250,000 new homes a year to keep up with demand in the UK. In response to this year's theme 'high density' we will encourage students to explore multi-use/ multi-programmatic architectural typologies. In January we will visit Copenhagen known for years for its horizontal skyline broken only by the spires and towers of its churches and castles. Its mixed use centre is recognised as an example of best practice urban planning. In recent years there has been a boom in urban development and modern architecture with large scale high density projects being realised in the areas around the city centre. We will look at the juxtaposition between the inner city (the medieval city) of Copenhagen and the new residential boroughs in the outskirts featuring new types of urban planning and high density mixed use contemporary schemes by BIG amongst others. The sites for your main project will be in Copenhagen and may go beyond the centre to the periphery. How can we design for the future of co-working, co-living and co-habiting whilst improving the sense of community and relationship to nature? Can we create density without compromising space or quality? Can density improve the way we inhabit our cities?

Workshops:

Rhino, Grasshopper, Maya, Digital Fabrication, Portfolio Presentation

Readings:

1. Robert Kronenburg. "Flexible: Architecture that Responds to Change"
2. Tom Wiscombe, "Structural Ecologies"
3. Achim Menges, "Morpho-ecologies: Approaching Complex Environments" in "Emergence: Morphogenetic design strategies", AD, Wiley Academy, Vol. 74, No.3, 2004
4. Tom Verebes, "Masterplanning the Adaptive City: Computational Urbanism in the Twenty-First Century", Routledge, 2014
5. Neil Leach, "Digital Cities" in "Digital Cities", AD, Wiley Academy, Vol. 79, No.4, 2009