

CAIT BROCK

M.Arch - Urban Design

B.Env.D - Landscape + Urbanism

DESIGN PORTFOLIO

TABLE OF CONTENTS

PART I - EDUCATION	
THE BARTLETT SCHOOL OF ARCHITECTURE	
Perceptive Datascape	3
Thesis Project Visceral Cities	8
PART II - WORK EXPERIENCE	
THE [204] DESIGN COLLECTIVE	
Co-Founder and Creative Director	9
PART III - COMPETITIONS	
Doctoral Images as Research	10
Disobedient Spaces	10



Location | London, England



PART I - Education

THE BARTLETT SCHOOL OF ARCHITECTURE

PERCEPTIVE DATASCAPES

BPro Show The Bartlett School of Architecture
Awards | Computational Design Award + Distinction

Year | 2018

Duration | 1 Year

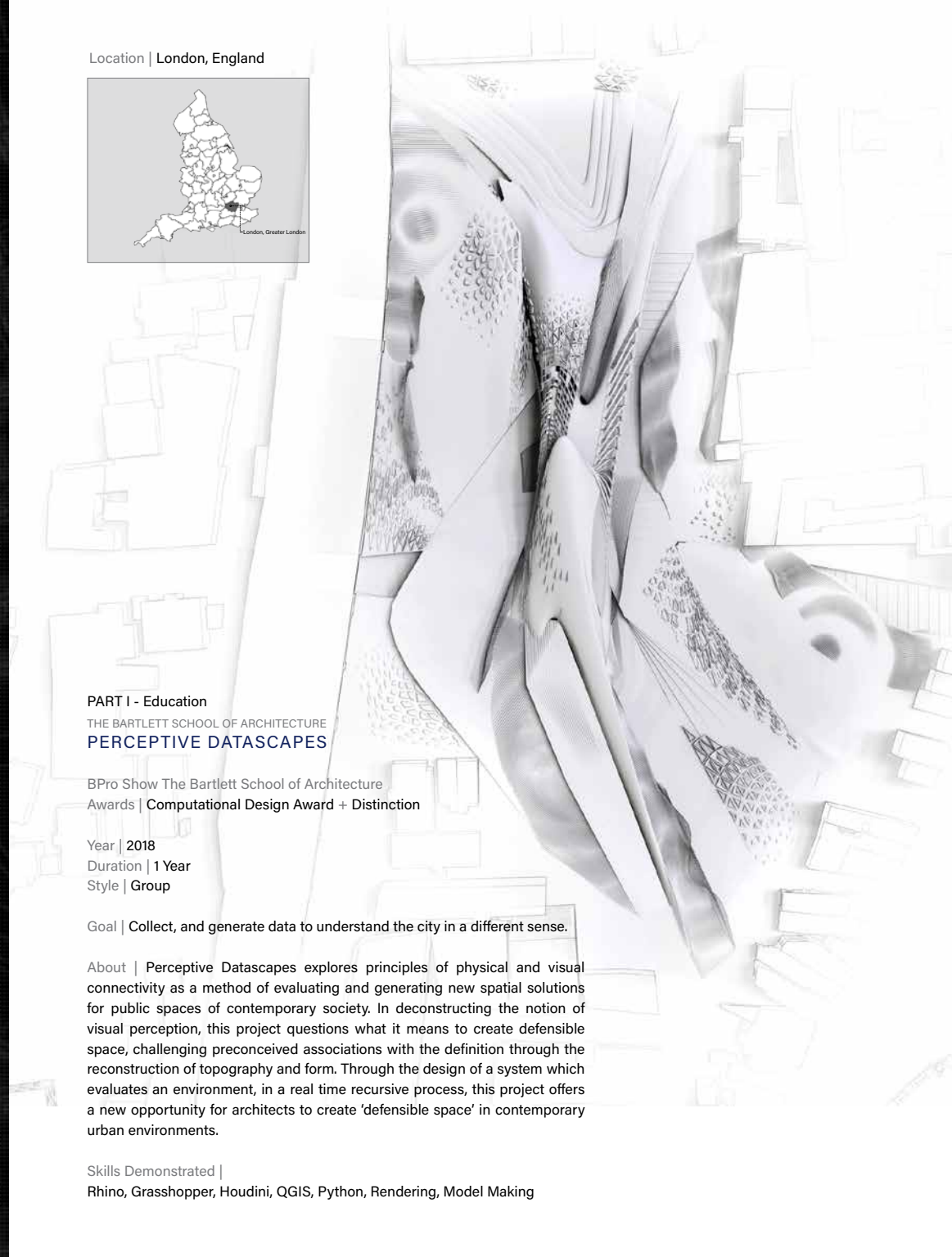
Style | Group

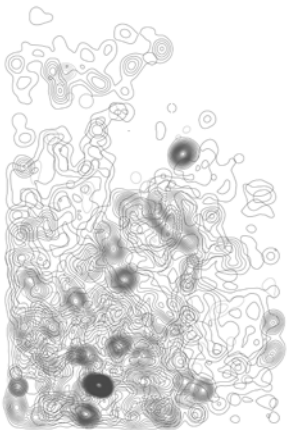
Goal | Collect, and generate data to understand the city in a different sense.

About | Perceptive Datascape explores principles of physical and visual connectivity as a method of evaluating and generating new spatial solutions for public spaces of contemporary society. In deconstructing the notion of visual perception, this project questions what it means to create defensible space, challenging preconceived associations with the definition through the reconstruction of topography and form. Through the design of a system which evaluates an environment, in a real time recursive process, this project offers a new opportunity for architects to create 'defensible space' in contemporary urban environments.

Skills Demonstrated |

Rhino, Grasshopper, Houdini, QGIS, Python, Rendering, Model Making

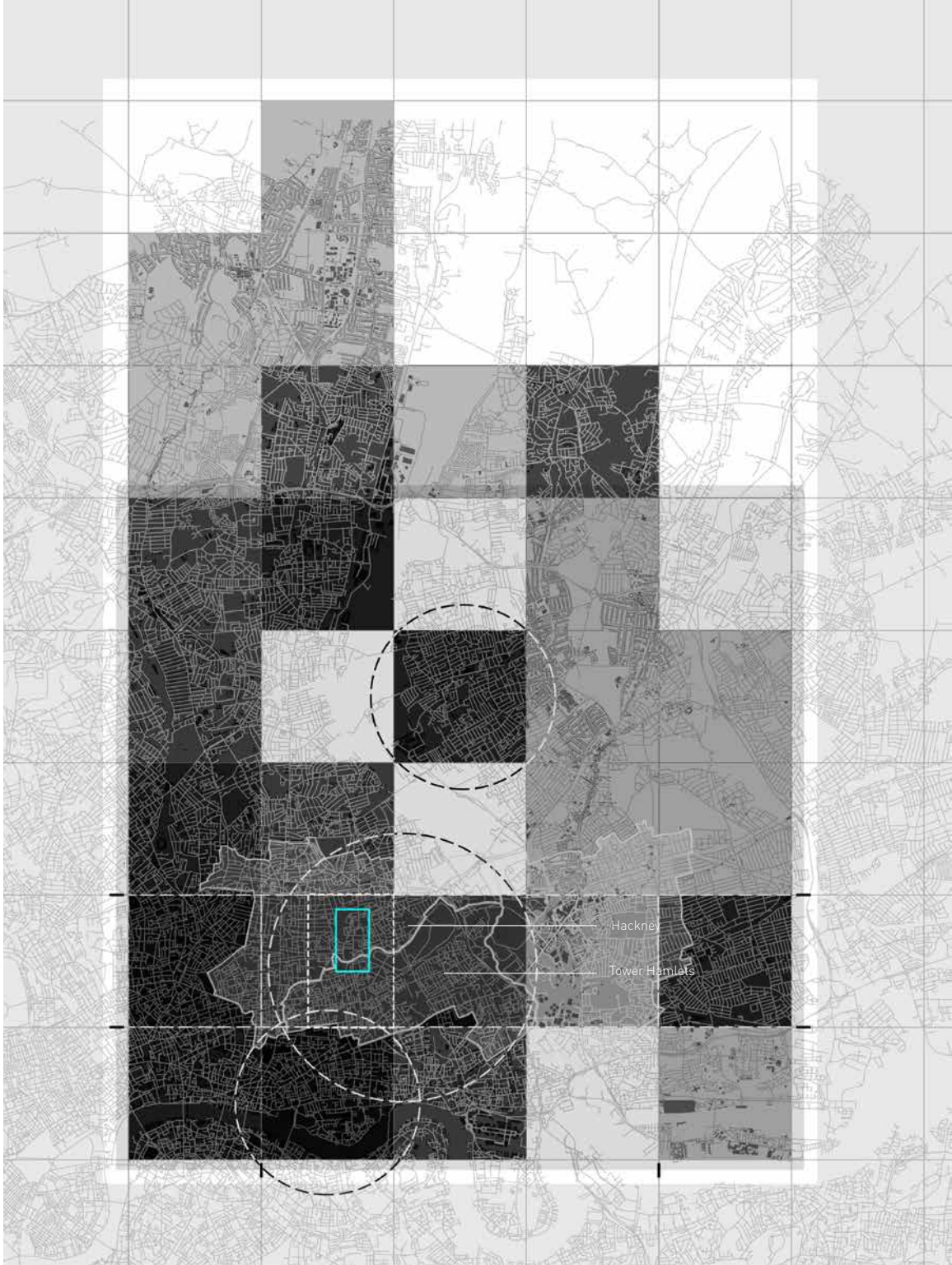


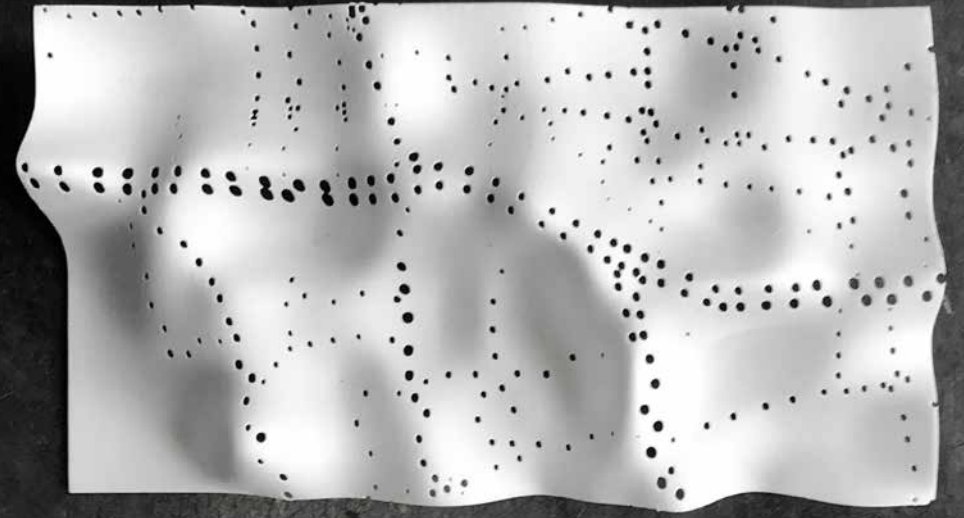
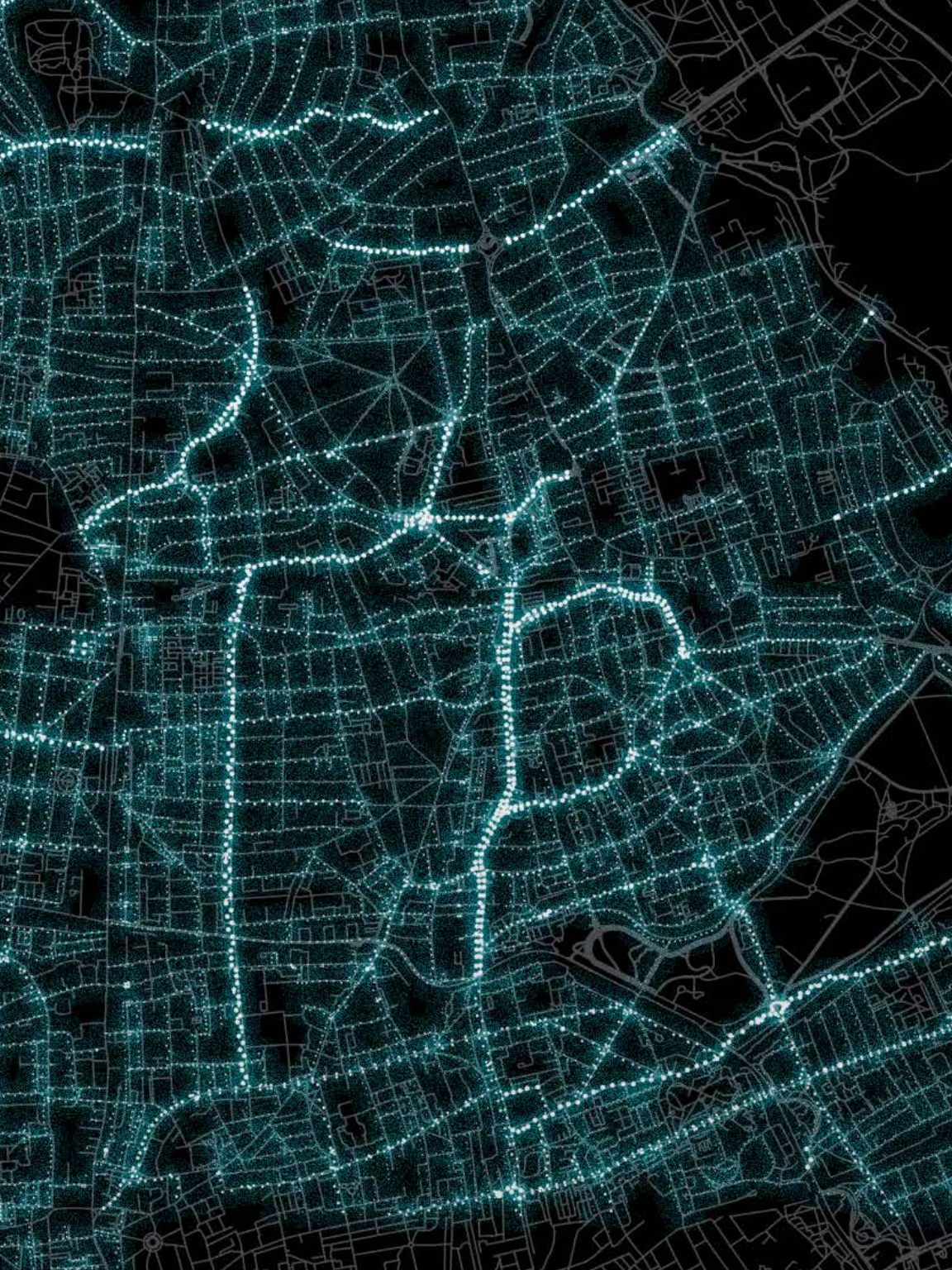


SYNTHESIZING DATA |
Site Selection

The following maps illustrate layers of analysis including an Angular Segment Analysis (Integration and Choice at a radius of 2000) as well as the land use density map. Additionally shown, are graphics demonstrating the correlation between these three layers through a multidimensional comparison.

- Legend
- Left Page:
- Integration - Radius 2000 | Quantile Breaks
 - Low Values
 - High Values
 - Choice - Radius 2000 | Natural Breaks
 - Low Values
 - High Values
 - Land Use Density
 - Low Variation
 - High Variation
- Right Page:
- Indicates areas overlap between the values from the three layers.
 - Selected Site





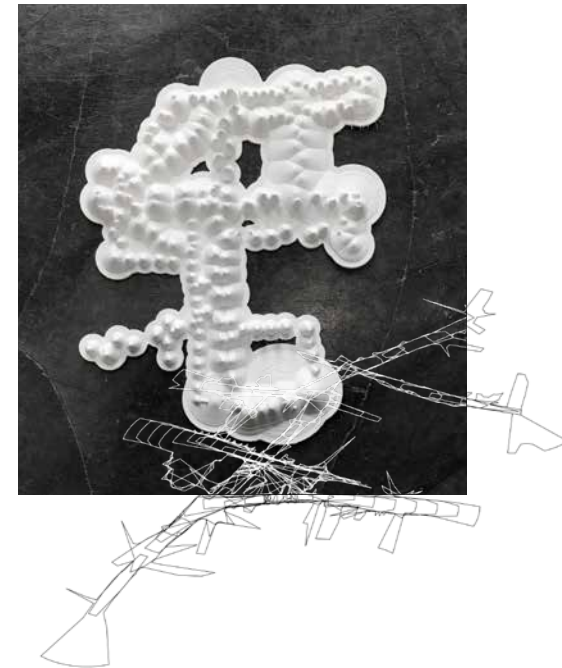
LIGHT I

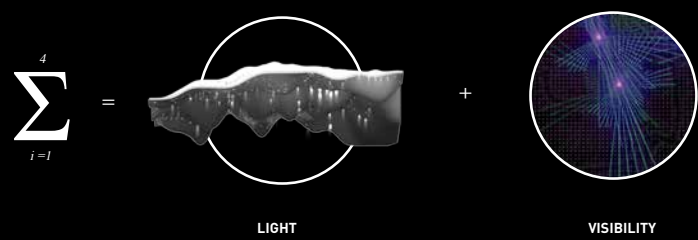
Illuminating the Shadows

Analyzing two rich datasets provided by the borough of Hackney and Tower Hamlets, this analysis explores methods of visualising and studying light to understand how visual perception may be affected by it.

In addition to lighting patterns, visual indicators on site also suggested that there were issues of crime within the area. Initial analysis sought to explore whether there was a correlation between crime and lighting within the area.

Studying lighting within these neighbourhoods has the potential to serve as a method of investigation into situating qualitative research (phenomenology: the interpretive study of human experience) within quantitative inquiry (big data) in order to explore the validity of affect in relation to environmental behavior. More specifically, considering the data to understand the relationship between light and crime may indicate how fear affects environmental interaction, and how affect and behavior is influenced by elements of visual perception.

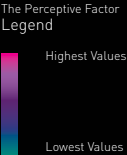
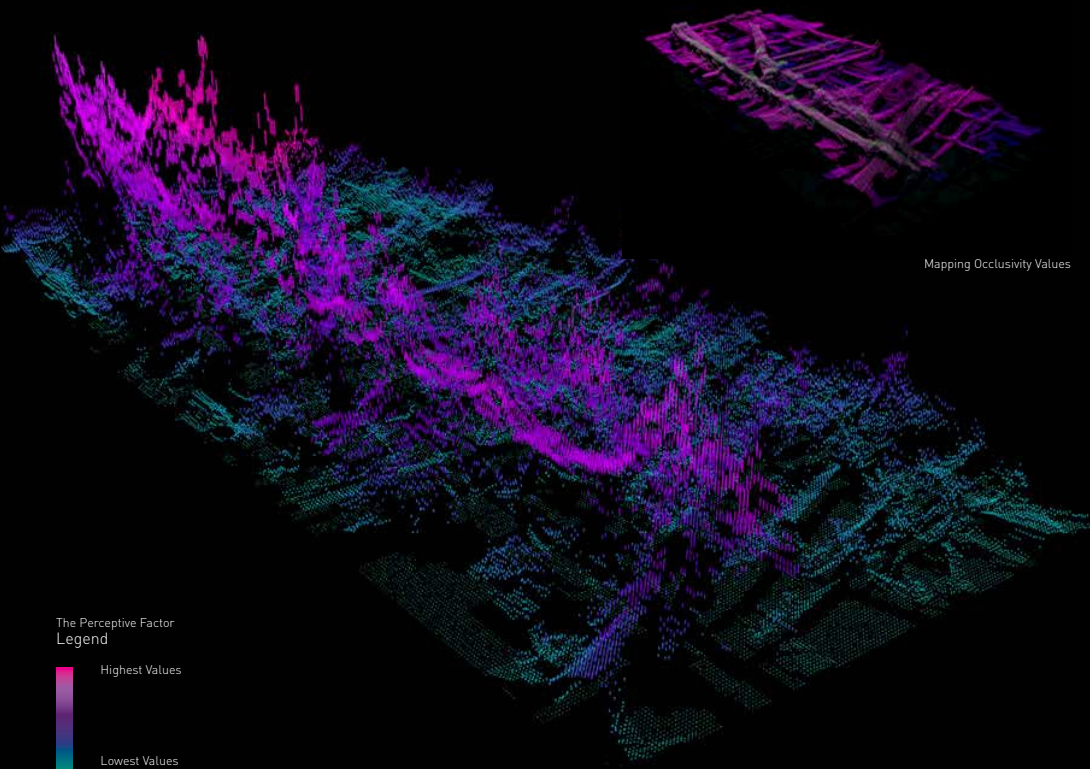


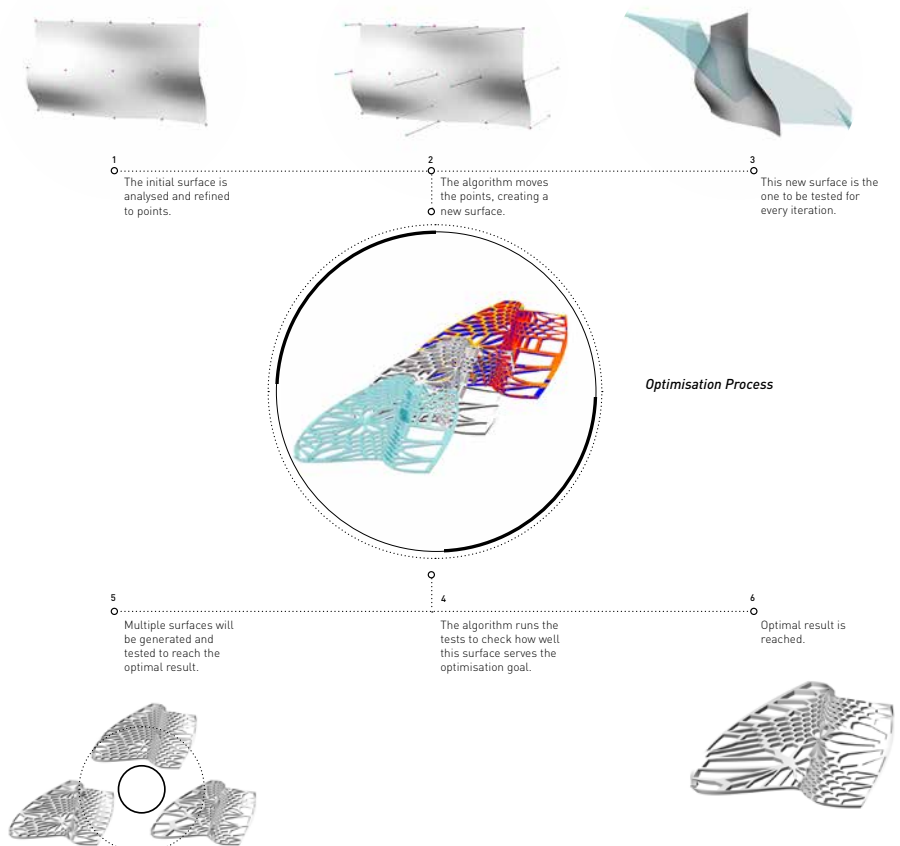
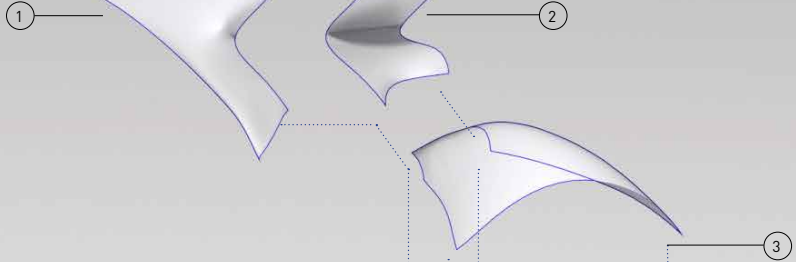
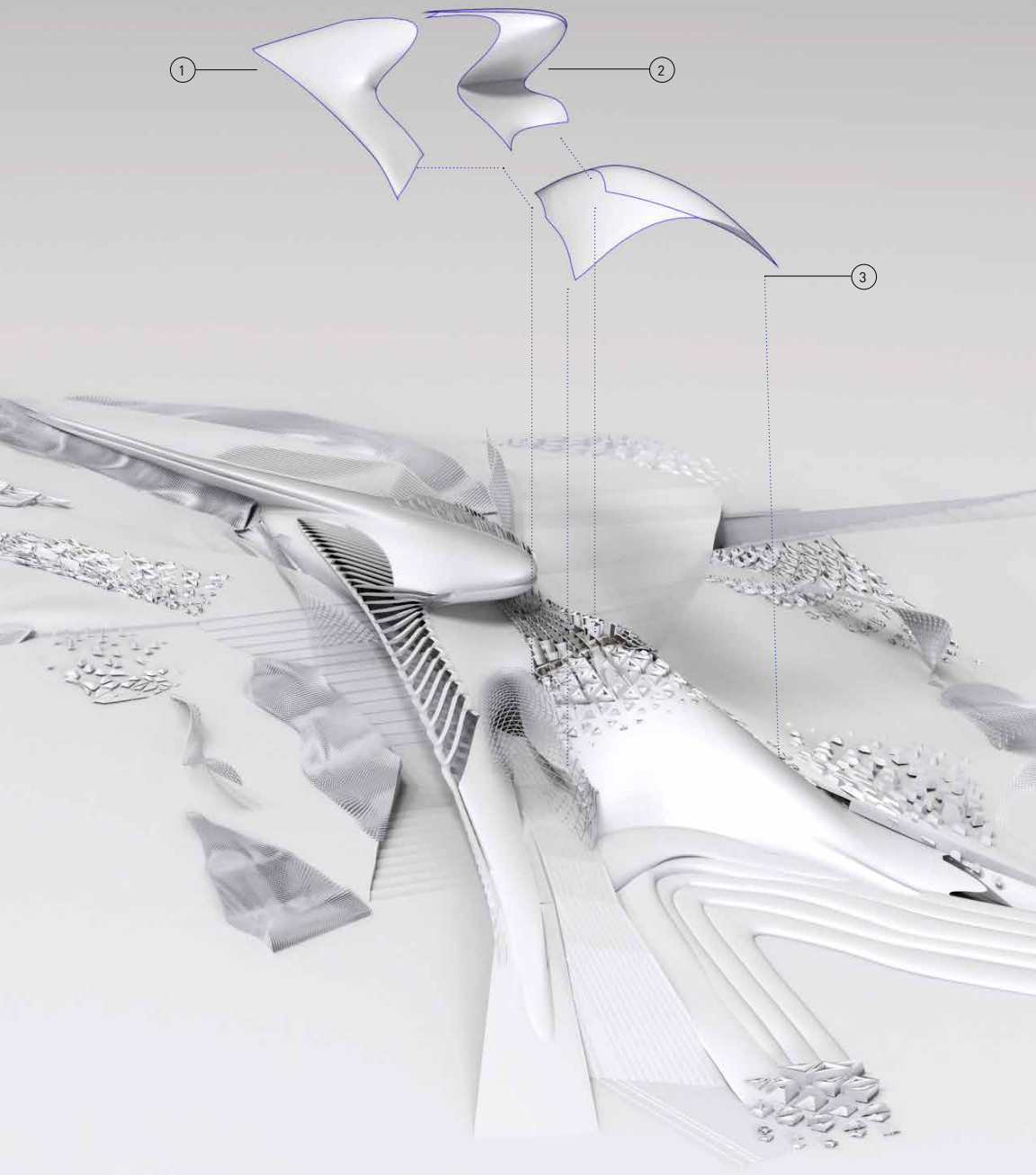


BUILDING A SYSTEM I
The Perceptive Machine

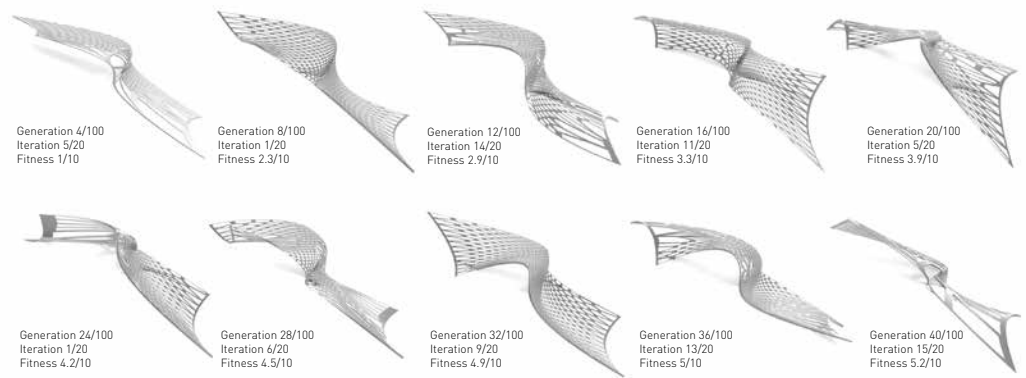
Perceptive Datascape introduces the design of a system, a machine, which evaluates an environment, in real time, so as to assist in the design process, offering a new opportunity for architects in designing public spaces in contemporary urban environments.

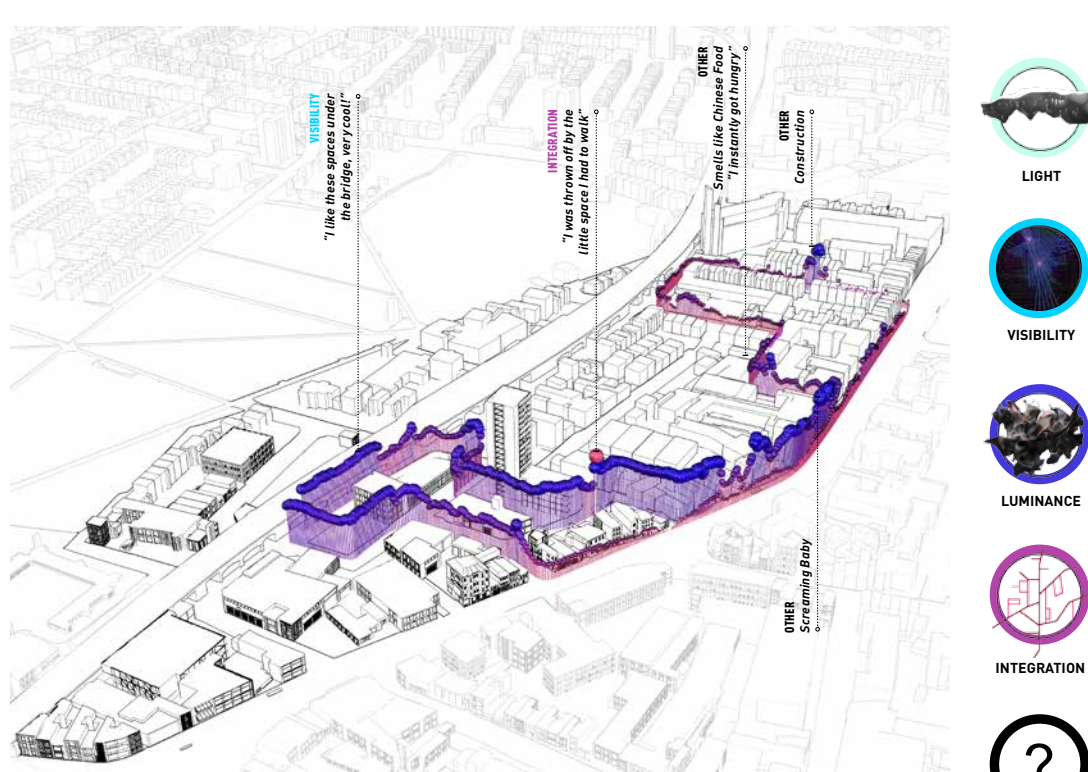
The following image represents the combined values of the four identified parameters and maps them in a 3-dimensional data cloud. This visualisation represents areas with high and low accessibility, permeability, and sense of security.





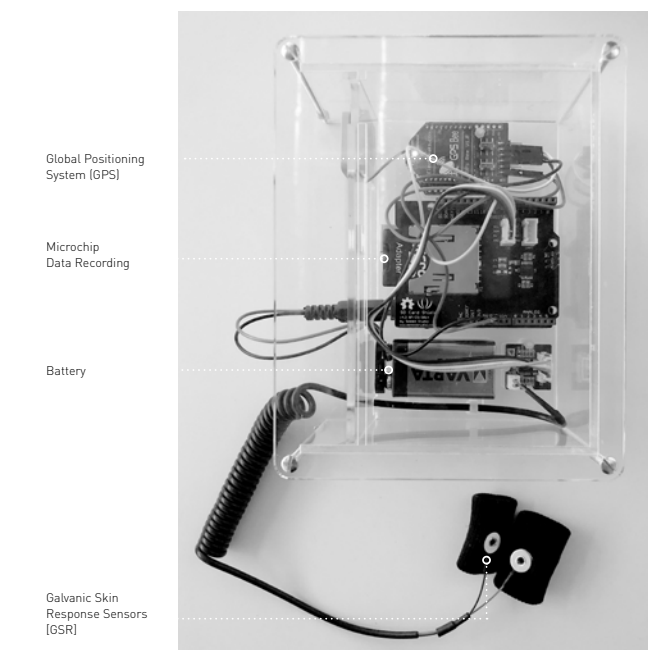
Optimisation Process
Visibility - Light - Integration





THE POTENTIALS OF QUALITATIVE DATA IN CITIES OF THE FUTURE

Skills Demonstrated |
Model Making, Arduino, and Writing



For the thesis project, this device was used on a group of people to map qualitative data, and compare and contrast the information to the quantitative information gathered in studio. The map above gives indication to the the way the information was used in realtion to the studio project. Notations are made at points on the site where participants identified a feeling or reaction to their surroundings.



PART II - Work Experience

www.the204designcollective.com

THE [204] DESIGN COLLECTIVE

About | The [204] Design Collective started in 2014, as a small group of university students who felt the work they were producing was not reflective of the ideas and projects that we were interested in. Feeling unrepresented and lacking the support and opportunities desired, The [204] was established as a collaborative design group to explore cities, politics, and culture through the lens of environmental design in pursuit of a design practice that reflected our communities, and our values.

Our work, in part, is fueled by our lived experiences and is shaped by the needs of our often underrepresented communities. In order to break down the power dynamics often encountered within the discipline, we work towards bridging the gap between theory and practice, connecting discourse with application and action. Through the medium of an online journal, which relies on contribution from the community, we explore ideas, concepts and theories that work to apply and feed into our designs. This journal lays the foundation for our projects, highlighting important and often unaddressed issues.

Skills Demonstrated |

Design, Graphic Design, Organizational Skills, Creative Thinking, and Planning.

As Co-Founder and Creative Director of The [204] Design Collective, my contribution includes website design and upkeep, content curation, design and graphics, and proposal composition.

Most recently The [204] hosted an event at **The London Festival of Architecture, 2018. Decolonizing Architecture**, consisted of five events over the course of the month of June. Following the success of this event, The [204] was contacted by **The Royal Institute of British Architects [RIBA]** and asked to co-curate and speak at the 25th annual **Stephen Lawrence Memorial Lecture** held at RIBA on September 20th, 2018.

For more information, samples of work may be provided.

PART II - Work Experience

Historic England

THE VOID

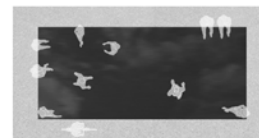
About | Design competition for a proposed memorial in London.

With The Void, we seek to move away from the glorification and worship of individuals and instead focus on collective reflection and remembrance. We propose a move away from monumentalising, and instead seek to exaggerate absence as a reminder of those who so often are left out of history and our memorial landscapes:

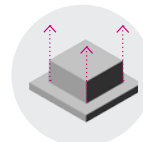
Our intervention proposes the inversion of the plinth, where the ground is excavated and fitted with black granite. The contrast of the stark black granite in the middle of the urban fabric immediately calls attention to this space, emphasizing forgotten narratives in British history. This literal cut in pavement acts as a physical reminder of the space that has never been given to minority and marginalized communities both in history and in cities. The proposed excavated space forces people to pause causing a physical interruption in the flow of city life, demanding consideration from the public.



Mapping Monuments in the Area

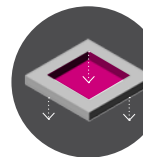


Plan View



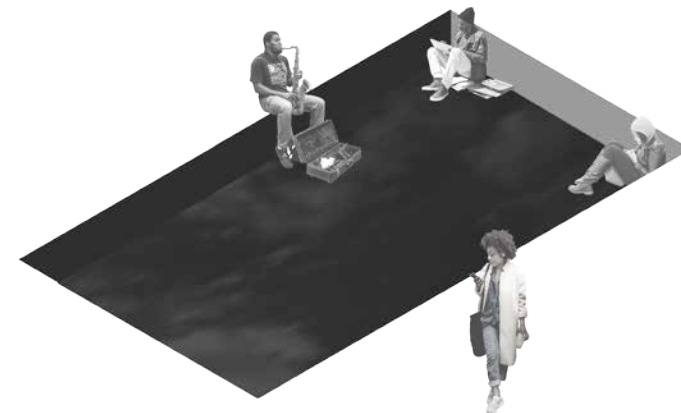
Traditional Monument

Our proposal stands in stark opposition to the traditional male and militaristic style and approach to monuments, and to the importance that is given to them in public spaces in the form of a plinth



Proposed Memorial

Our intervention proposes the inversion of the plinth. By excavating ground rather than elevating a statue we are changing the dynamic of the way people interact with and understand memorial. Rather than a looming figure, the public is provided a new space to occupy and activate.

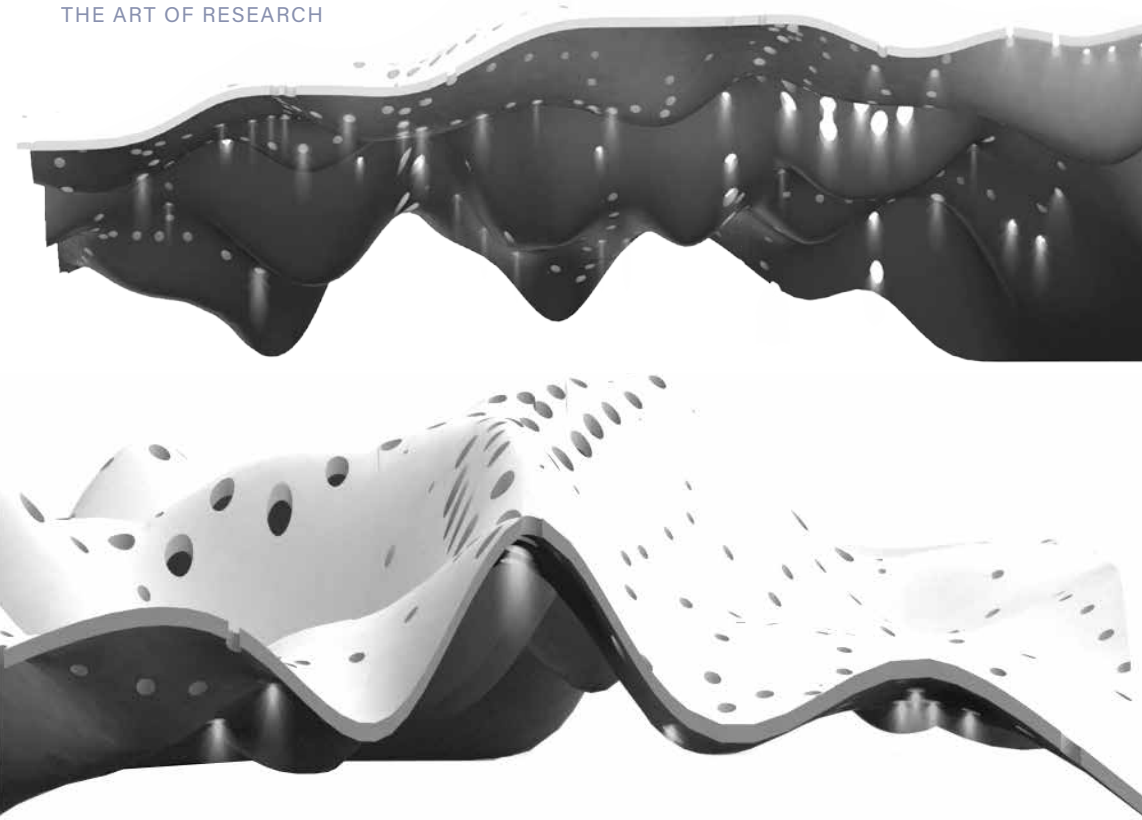


Perspective



Section

PART III - COMPETITIONS
THE ART OF RESEARCH



PART III - Competition

The Doctoral School - The Art of Research - University College London

3D LIGHT MESH

About | In exploring visual perception within the Tower Hamlets and Hackney area, I explored lighting as a parameter affecting our understanding of space. Through analyzing a rich dataset from the two boroughs, this mesh was created to understand the spatial relationship between street lights. The mesh connects points of light based on height, and an angled perforation is extracted based on lighting intensity at a given point. In order to explore the relationship between crime and light, this structure was 3D printed and used in a model to visualize the interaction between the two parameters.

Recognition |

Selected as one of the top 100 images submitted and exhibited in a display at the University College of London.

Skills Demonstrated |

Model Making, Photoshop, Keyshot

PART III - COMPETITIONS
ATMOSPHERE CONFERENCE



PART III - Competition

The University of Manitoba

ATMOSPHERE CONFERENCE

Year | 2015

Authors | S. Abdulrehman, S. Abdulrehman and C. Brock

About | With the theme *Emergence*, The [204] was invited to present a paper that was written titled **Disobedient Spaces, The Aesthetics of Civic Spaces During Times of Protest**. This project is part of an ongoing effort to initiate a 'rapid response' design culture whereby current events in politics and culture are reflected in both theory and design projects. It is about engaging with public spaces in the throes of political struggle, and also to politicize everyday architecture by actively engaging with it through architectural response. This idea was appropriated from the exhibition at the Victoria and Albert Museum in London, England titled 'Disobedient Objects.'

Abstract | This project interrogates the aesthetic and political transformation of civic spaces during times of citizen protest and civil unrest. When divested from their original designed function, these spaces become disobedient as they are used to advance a particular political platform. Disobedience in this case, emerges with the intersection between activist/policing bodies and the spaces that they occupy and appropriate. The architecture of civic spaces become integrated within a citizen's struggle for social change, to their benefit or their detriment. These spaces are instrumentalized as political agents either working in favor of social reform, or in favor of the state. The aesthetic change that these spaces take on become a reflection of human and spatial interaction, where the individual or collective lived experience of a space ultimately determines its broader social and political function. In exploring these ideas, this project uses specific instances of recent political protests such as the Arab Spring and Black Lives Matter movements as precedents in the generation of disobedient spaces. It also interrogates police kettling as a possible reactionary tactic to counter the power and agency of these spaces.

Skills Demonstrated |

Writing, Creative Thinking

