## **Evidence-based planning and design** A new approach to urban development, masterplanning and the public realm



### Who are we?

Space Syntax provides a unique, evidence-based and industry-leading approach to the planning and design of buildings and urban areas. Combining technology, ability and extensive global experience, we target the social and economic value that good planning and design bring.

Our work shows how value can be created through the analysis, understanding and skilful manipulation of space. We are expert, independent and widely respected for the support we provide to public, private and community-based decision makers.

### What is the nature of our role?

We work through all design stages from analysis of existing conditions, to development of detailed design proposals. We are equally happy leading a design team, contributing as a specialist consultant or liaising with stakeholders.

### How do we meet your needs?

Space Syntax provides a suite of consulting products which can be tailored to address the unique issues of individual developments.

### Why are we different?

Our principal concern is for the way places work - not only how they look. We combine evidence and technology to objectively measure the key spatial design factors that influence patterns of space use:

### Location

How well does the surrounding spatial network facilitate access to social, economic and environmental infrastructure?

### Linkage

How well does the design connect into the surrounding urban spatial network?

#### Layout

How well does the layout create an effective internal movement network?

### Land use

How well located are the key attractors within the spatial network?

### Landscape

How well does the landscape and public realm design support social, economic and environmental performance?

Our unique approach to design is evidence-based, engaging and inspirational.

### What are the benefits?

We help to optimise investment by improving both the potential success and sustainability of development:

### **Economic**

Land use and density will be distributed where they will be exposed to suitable levels of footfall, retail units can command higher rental values in the short term while the likelihood that they will be empty in the long term is reduced

### **Environmental**

Spatial **layout**, and the relationship to land use and density distribution can be optimised to reduce and shorten journies by car, cutting down carbon emissions

### Social

Landscape and public realm design, and the interface with surrounding buildings can be developed to maximise personal safety, social inclusion and to develop an "urban buzz"

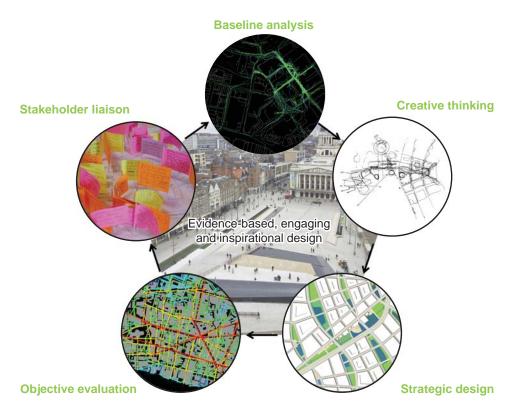
#### **Political**

Providing an objective evidence-base to the design improves the chances of gaining statutory development approvals.

# Space Syntax

## **Specialisms**

## Producing visionary planning and design ideas, leading and supporting multi-disciplinary teams



### Urban development

### City growth strategies Urban regeneration Development frameworks

We provide strategic urban development advice to public and private agencies, identifying the physical and spatial infrastructure needed to deliver social, economic and environmental regeneration across urban settlements.

We take a two-step approach to ideas development: first, using world-leading techniques of urban evaluation, we 'diagnose' existing patterns of movement, value and crime, and demonstrate how these are influenced by physical and spatial conditions; second, we develop planning concepts and run forecast models to show how these conditions will develop with the introduction of new urban infrastructure.

### Area action plans

Masterplanning

### Masterplans University/Hospital campuses

Fitting new developments into existing urban areas is our specialism. Working across scales, from the global to the local, our work spans what is often a divide between planning and architecture. We focus on masterplanning, either bringing together and leading multi-disciplinary teams or providing specialist design input to other lead consultants.

The tools we use to generate masterplan proposals are evidence-based and have been developed in partnership with the internationally renowned research programme at University College London.

Our approach is unique in the way that we take design inputs – in terms of layout, land use, density and transportation – and evaluate the combined effects of these on 'critical' outputs such as movement patterns, land value and urban safety.

### **Public realm**

### Public space design Landscape design Streetscape design

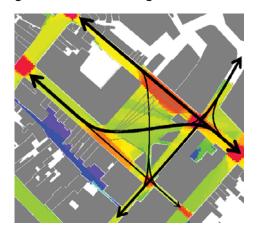
For over 25 years, Space Syntax has pioneered the development of new techniques for the quantitative and qualitative assessment of public spaces.

Our work focuses on the fundamental relationship between physical design and socio-economic outcomes. We have developed world-leading methods for observing patterns of space use, analysing spatial layouts and forecasting future pedestrian activity patterns. We assess both movement and stationary activity and we work equally with the public and private sectors to deliver our advice.

### Consultancy packages Space Syntax techniques can be used across all scales and stages of design by public- and private-sector clients

### Package one Urban Baseline Study and Spatial Design Strategy

How should a project relate to its surroundings, what are the impacts of nearby attractions, which direction will users access the site from and how much beneficial movement can be generated to and through the site?



Through analysis of the surrounding urban context we are able to analyse the **location** in terms of its inter-relationships between areas and across scales. This allows us to understand the emergent urban patterns of land use distribution, density distribution and land values across scales. Using these findings our model can be used to make strategic decisions such as identifying key **linkages**, shaping primary connections through the site, and testing the impact of these decisions.

By defining an existing baseline the Spatial Design Strategy can be shaped to respond to the specific conditions of the site, an objective design process is established which allows design performance to be bench-marked, and a stronger case can be established to support planning applications.

### **Deliverables**

Urban Baseline Study Spatial Design Strategy

- Full technical report

- Design workshops and stakeholder liaison as required

### Package two Concept Masterplan

How should a design incorporate the strategic requirements of a site, how should the spatial layout respond, how should land use and density be distributed within this layout and how can design developments be tested?



By applying our techniques of spatial analysis at the scale of the site we will optimise the relationship between proposals and the surrounding area to define a spatial **layout** and urban block structure. We will continue to refine the proposed layout and distribute public spaces, **land use** and density according to the fundamental processes which organise cities and where they will have the most chance of success.

Applying our analytic design process allows design iterations to be assessed against previous options, and to optimise the spatial relationships which influence urban sustainability: movement patterns, land use and density distribution, land value and crime.

### Deliverables

**Concept Masterplan** 

- Full technical report
- Full set of drawings in hard and e-formats
- 3d models
- Design workshops and stakeholder
- liaison as required

### Package three Schematic Masterplan and Planning Support Documentation

How can detailed design considerations such as landscape and building design ensure the over-arching aims of development are delivered consistently and how can this argument be used to strengthen a planning application.



By using increasingly sophisticated analyses we will develop the design to a more detailed level of resolution ensuring that considerations such as active building frontage, shading, massing, public realm and **landscape** respond to predicted patterns of movement and activity. These analyses can also predict levels of footfall and used to market the design to potential tenants.

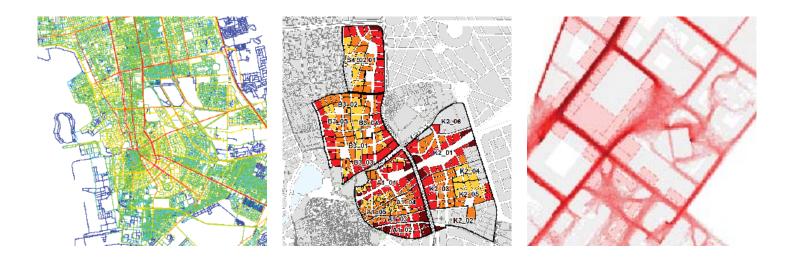
By continuing to work up to the schematic design, the smaller scale design of the public realm will be integrated with the wider scale strategic design issues. By following an iterative, evidence-based design process the chance of stakeholder buy in are increased, as are the chances of demonstrating the benefits of a design to a local planning authority.

### Deliverables

### Schematic Masterplan Planning Support Documentation

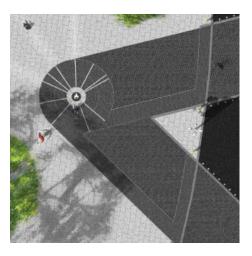
- Full technical report

- Full set of drawings in hard and e-formats
  3d models
- Design workshops and stakeholder liaison as required









### How do we add value?

We contribute to the design process in three key ways:

### **Expert evaluation**

We analyse design schemes, using our experience and expertise to evaluate how buildings and urban places are likely to work for the people that use them.

### Strategic design

We contribute design ideas aimed at making places work – making them better used, more convivial, safer and more economically prosperous.

### Stakeholder liaison

We meet with interested parties to describe the approach we have taken and explain the merits of the design proposals. Our evidence-based approach provides a point of common reference to guide discussions.

### **CONTACT DETAILS**

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