

Overlooked Underground Spaces

ISOCARP x ITACUS CYBER AGORA

29 June 2021

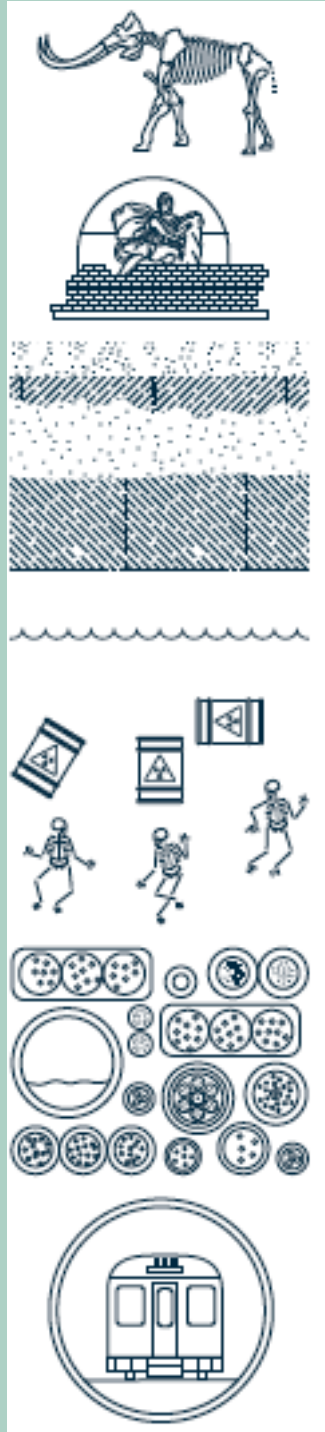
tapestry.



Definitions

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The Archaeosphere



- In almost all cities, what is considered ground level is often not geological, but rather artificial ground, created through successive waves of human settlement above natural geology.
- The Archaeosphere is a term used by Professor Edgeworth of Leicester University to describe the hybrid of natural geology and urban archaeology, gathered over hundreds of years to form layers of ground (Graham, 2016 p.290).

Underground Urbanism

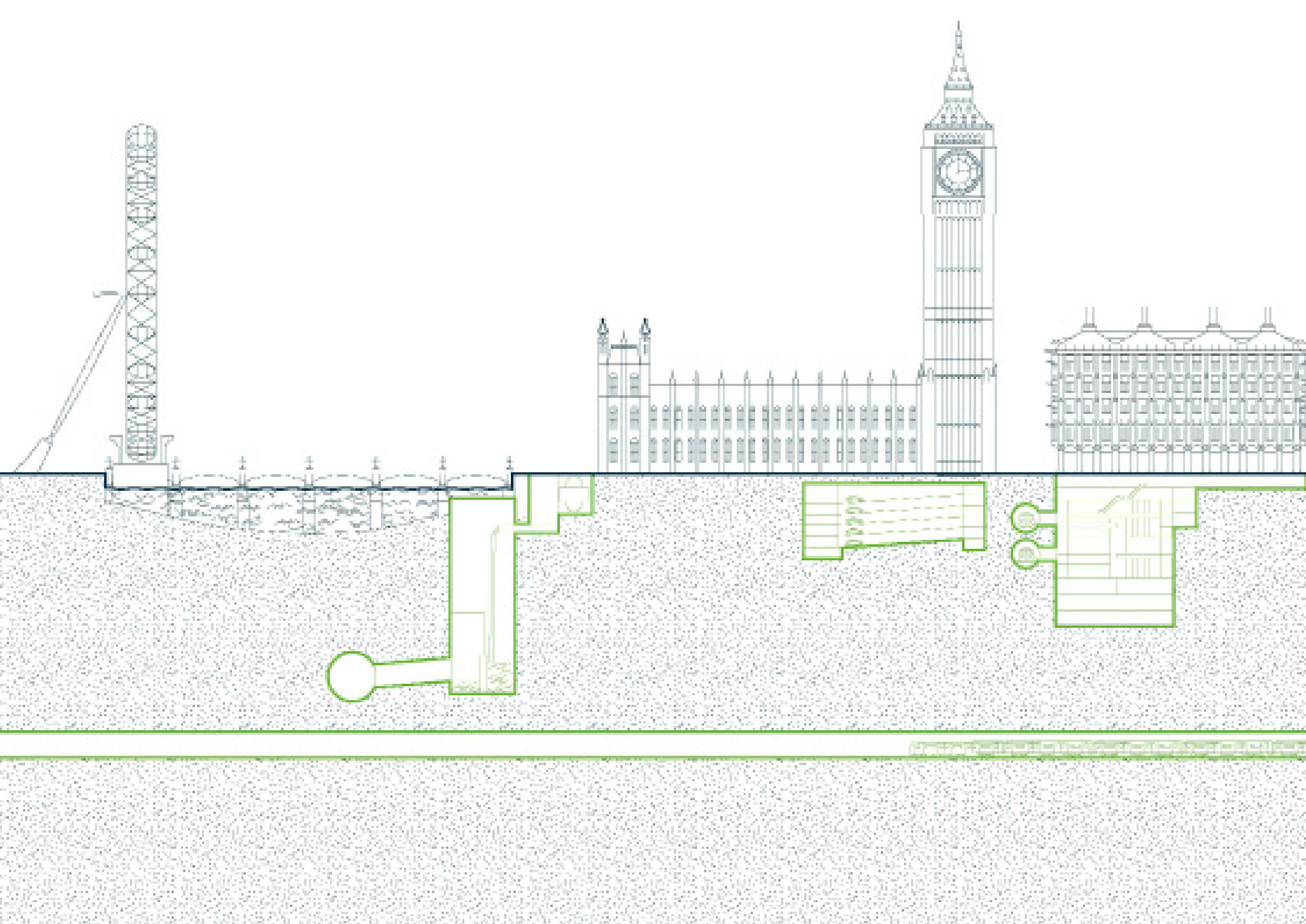
- **Underground:** includes undercroft, earth covered, sunken, underground, and tunnelled spaces.
- **Urbanism:** the study of the way of life, and physical needs of urban societies.
- **Underground Urbanism:** advocates a vertical stitching together of our urban environments, as well as the creation of more sustainable, useful and beautiful subsurface places.

The Big Picture

*What is your city seeking
to achieve & how can
the subsurface hinder or
enable that vision?*

London

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- 8,663 million population with 7% growth.
- National Planning Policy Framework (2018); New London Plan (2021); & Local Plans
- The London Plan has no clear strategy for the future of its subsurface, but includes policies on basement development (D10).
- London has geological conditions that are good for excavation and tunnelling; however, London is running out of “good” geology and areas free of obstructions such as building foundations.









Think Deep UK



IDUK

ACTIVITY

ENVIRONMENT

TECHNOLOGY

LEFT
HUMAN INTERFERENCE

FACTORY



Light & Heat
Environmental
Factors

Process
Flow
& Control

Energy
Requirements
& Storage

Material
Inputs

Waste
Outputs

Water
Resources

Air
Quality

Land
Use

Human
Interaction
Patterns

Resource
Allocation

Supply
Chain
Integration

Human
Resources
Management

Material
Logistics

Energy
Efficiency

Process
Optimization



Supply
Chain
Integration

www.tduk.org

- Think Deep UK is a group of built environment experts committed to creating resilient, sustainable and liveable cities through smart use of underground space.
- Aim to be a facilitator bringing together interested organisations and individuals.
- Workshops have been held on the social value of underground space, the future of transport, and planning cities in 3D.

